



# CONTINUOUS GLUCOSE MONITORING SYSTEM

User Guide



Emergency Phone Number: \_\_\_\_\_

Your Healthcare Professional: \_\_\_\_\_

Your Receiver Serial Number: \_\_\_\_\_

Your Transmitter Serial Number: \_\_\_\_\_

Dexcom® Technical Support/Patient Care Team: **1.877.738.3646** \_\_\_\_\_

Dexcom Website: [dexcom.com](http://dexcom.com) \_\_\_\_\_

Nearest Hospital: \_\_\_\_\_

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**Dexcom®**

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# 1

## GETTING STARTED

- Glossary
- Getting Started
- Indications for Use and Safety Statement
- Risks and Benefits

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# Glossary

<b>A1C</b>	Blood test used to diagnose type 1 or 2 diabetes and to gauge how well you're managing your diabetes. The A1C test result reflects your average blood sugar level for the past two to three months.
<b>Accessory Device (Accessory)</b>	A device meant to connect to a smart device, to add or extend features. For example, a smart watch or headphones.
<b>Alternative Site Testing</b>	Using a blood sample from non-fingertip (alternative) sites such as the palm, forearm, or upper arm for meter readings.  Do not use alternative site testing to calibrate the Dexcom G5. Only use fingerstick measurement.
<b>App</b>	A software application on a smart device.  The G5 Mobile app was developed as a display for continuous glucose monitoring. It may also be referred to as the Dexcom CGM app, or the app.
<b>Blood Glucose (BG) Value</b>	BG is an abbreviation of blood glucose. Blood glucose value is the amount of glucose in the blood measured by a BG meter.
<b>Blood Glucose Meter/ Meter/BG Meter</b>	A medical device used to measure how much glucose is in the blood.
<b>Calibration</b>	A comparison or measurement between your meter's fingerstick BG values, and the sensor's interstitial fluid glucose readings. Although blood and interstitial fluids are similar, glucose concentration is higher in your blood. Calibration allows alignment between your sensor and meter readings.  When you calibrate, you take a fingerstick measurement from your meter then enter the value into your receiver or smart device. The system uses that value to verify that the sensor glucose reading is on track.
<b>Continuous Glucose Monitoring (CGM)</b>	A system that uses a sensor inserted under the skin to check glucose levels in interstitial fluid. A transmitter sends sensor glucose readings to a display device.

<b>Contraindication</b>	A safety statement outlining specific situations where the Dexcom G5 should not be used because it may be harmful to you. The risk of use clearly outweighs any possible benefit.
<b>eBook</b>	A digital book.
<b>Hyperglycemia</b>	<p>High blood glucose. Same as “high” or high blood sugar. Hyperglycemia is characterized by an excess of glucose in the bloodstream.</p> <p>It’s important to treat hyperglycemia. If left untreated, hyperglycemia can lead to serious complications.</p> <p>The default high alert in the Dexcom G5 is set to 200 mg/dL. Consult your healthcare professional to determine the appropriate hyperglycemia setting for you.</p>
<b>Hypoglycemia</b>	<p>Low blood glucose. Same as “low” or low blood sugar. Hypoglycemia is characterized by a low level of glucose in the bloodstream.</p> <p>It’s important to treat hypoglycemia. If left untreated, hypoglycemia can lead to serious complications.</p> <p>The default low alert in the Dexcom G5 is set to 80 mg/dL. Consult your healthcare professional to determine the appropriate hypoglycemia setting for you.</p>
<b>Indication</b>	A condition making a particular treatment or procedure advisable. How, for what purposes, and under what circumstances you should use the Dexcom G5. Indications let you know who should use the Dexcom G5 and when.
<b>IP</b>	<p>The International Electrotechnical Commission (IEC) is a nonprofit, non-governmental, international organization created to produce safety standards for electronics. One of the safety standards is the Ingress Protection (IP) Marking, which classifies and rates how protected an electronic device is against dust, water, accidental contact, etc.</p> <p>IP ratings are numerical, with the number based on the conditions the electronic device comes across.</p> <p>An IP22 rating lets you know your electronic device won’t allow you to stick your fingers in it and won’t get damaged or be unsafe during specific testing with water dripping down.</p>

<b>Jailbreak, Root</b>	<p>The removal of limitations and security measures set by the manufacturer on a smart device. The removal poses a security risk, and data may become vulnerable.</p> <p>Do not use, install, or run the G5 Mobile app on a jailbroken or rooted smart device. The app may not work correctly on such a device.</p>
<b>Landscape</b>	When your smart device is oriented sideways.
<b>mg/dL</b>	Milligrams per deciliter. The standard unit of measure for glucose readings in the United States.
<b>Portrait</b>	When your smart device is oriented vertically.
<b>Precaution</b>	A safety statement regarding any special care to be exercised by you or your healthcare professional for the safe and effective use of the Dexcom G5.
<b>Safety Statement</b>	A statement of the intended uses of Dexcom G5 and relevant warnings, precautions, and contraindications.
<b>Sensor Session</b>	The seven-day monitoring period after inserting a new sensor. During this time frame, your glucose is being monitored and reported every five minutes, with data being sent to your display device(s).
<b>Smart Device</b>	<p>A mobile device that can wirelessly connect to networks over Wi-Fi or a cellular data connection (3G, 4G, etc.).</p> <p>Examples of smart devices are smartphones and tablets.</p>
<b>Smart Watch</b>	A watch with wireless connectivity, typically designed to pair with a smart device. An example is the Apple Watch.
<b>Stacking Insulin</b>	<p>Taking a dose of insulin soon after your most recent dose. This can result in low blood sugar.</p> <p>Doesn't apply to taking insulin doses to cover what you just ate.</p>
<b>Warning</b>	A safety statement letting you know the following feature has important hazard information. Describes serious and life-threatening circumstances of using the Dexcom G5, their consequences, and how to avoid the hazard.

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# | Chapter 1

*Getting Started:*

## Beginning Your Dexcom G5 Mobile® Continuous Glucose Monitoring System Journey

### 1.1 Introduction

Welcome to the Dexcom G5 family!

We are excited you chose us as a partner in your journey to manage your diabetes. As a continuous glucose monitoring (CGM) device, the Dexcom G5 Mobile® CGM System (Dexcom G5) allows you to break free from constant fingersticks. But how do you use the Dexcom G5? What are its features? Do you need to avoid anything?

Where do you even begin?

This chapter is the first step to answering these and many other questions.

After this chapter, you will be able to:

- Describe different training resources
- Locate tutorials about using the Dexcom G5
- Find step-by-step instructions for the Dexcom G5
- Recall how to use the User Guide
- Explain why you need a Dexcom® account

We have numerous resources available to help you get the most out of your Dexcom G5. Between our self-paced training resources and our friendly and knowledgeable Dexcom customer support teams, help is always available.

### First Things First—Learning How to Learn

Knowing about the Dexcom G5 is your first step in creating a successful CGM experience. Before using it, learn about it.

You have numerous self-paced resources, helping you get to know the Dexcom G5:

1. Tutorials
2. Getting Started Guide
3. User Guide

No matter which resource(s) you select, make sure you review them prior to using your new CGM system.

## 1.2 Self-Paced Resources

### Tutorials

Along with step-by-step instructions, our tutorials illustrate how real-time CGM can assist in your daily diabetes management. The following is a list of tutorials and how to access them.

#### Online Tutorials

##### First Steps With Your CGM

Designed for those who have never used a Dexcom CGM, this tutorial covers what to expect in your first week and includes links to step-by-step videos on how to insert your sensor, calibrations, ending a sensor session, etc.

##### Next Steps With Your Dexcom CGM

Just finished First Steps or already familiar with how a CGM can benefit you? This tutorial covers looking at trends and introduces some advanced features including our reporting tools.

#### Accessing Online Tutorials:

From dexcom.com homepage, **click** *Support*, **click** *Tutorials*.

Once you have viewed the online tutorials you should be pretty comfortable with what CGMs do and how the Dexcom G5 can help you.

#### Offline Tutorials

You don't need to be tied to the Internet to view our instructional tutorials, they're also available offline.

#### Accessing Offline Tutorials:

- USB Card in the receiver package

## Paper Based Resources

### Getting Started Guide

The Dexcom G5 Getting Started Guide (GSG) complements the tutorials by providing in a booklet form the same step-by-step instructions seen in the app.

One of the great things about the GSG is you can use it with the videos, taking notes as you go!

### Accessing the GSG:

- Booklet in the receiver package

Both the tutorial and the GSG give you the basics in getting started with your Dexcom G5. But what if you want more detailed information?

### User Guide

Your Dexcom G5 encyclopedia!

This user guide gives you the most extensive overview of the system, detailing features, important safety information and so much more.

To download an eBook of the user guide visit [dexcom.com/guides](https://dexcom.com/guides)

The Dexcom G5 User Guide is grouped into six separate parts:

#### **Part 1: *Getting Started***

- Glossary
- Getting Started
- Indications for Use and Safety Statement
- Risks and Benefits

#### **Part 2: *Let's G5! The Basics***

- Introduction to the Dexcom G5 Mobile CGM System
- Initial Setup
- Starting a Sensor Session: Inserting the Sensor and Attaching the Transmitter
- Calibration
- Ending a Sensor Session and Transmitter Session

### **Part 3: Next Steps: Getting the Most out of Your Dexcom G5**

Once you are up and running, how you can maximize the Dexcom G5 features:

- Reading Trend Graph Screens and Recognizing Trends
- Events
- Alarm and Alerts
- Sounds for Alarm, Alerts, and System Messages
- Using Dexcom G5 for Treatment Decisions

### **Part 4: Everything Else G5**

- Warranty
- Maintenance
- Travel Tips
- Customer Service Contacts
- Technical Information
- Troubleshooting
- Package Symbols

At the end of your Dexcom G5 user guide is the user guide for Dexcom Share®, a remote monitoring system.

### **Part 5: Sharing Is Caring**

- Dexcom Share

### **Part 6**

- Index for Dexcom G5 and Dexcom Share

## ***How to Use Your User Guide***

All chapters in the Dexcom G5 user guide are laid out the same way:

The beginning of each chapter lists what you'll be able to do after you have finished. After that, it shows any applicable safety statements you need to know, followed by the chapter's content. At the end, there's a recap of what was covered and what's in the next chapter.

## 1.3 Your Dexcom Account

You'll need a username and password to set up the G5 Mobile app and for reordering supplies.

If you haven't already done so, go to [dexcom.com](https://dexcom.com) and set up your own account.

Or, if you prefer, the G5 Mobile app walks you through creating your log-in credentials as part of your initial app setup.

### Summary

#### Now You Can:

- Describe different training resources
- Locate tutorials about using real-time CGM in your diabetes management
- Find step-by-step instructions for the Dexcom G5
- Recall how to use the user guide
- Explain why you need a Dexcom account

#### What's Next?

Now you are familiar with how to use this user guide and where to go for help.

Throughout the user guide you'll see color-coded boxes containing Safety Statements. The next chapter, Indications for Use and Safety Statement, lists all Safety Statements along with how to read and interpret them.

Next you'll learn about when and how to use the Dexcom G5 safely.

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# | Chapter 2

## *Getting Started:*

## Indications for Use and Safety Statement

### 2.1 Introduction

We want the Dexcom G5 to be a valuable tool in your diabetes management. Like any system, there are steps to take to get the most out of it. As excited as you are about getting started, did you know that if you just took Tylenol®, maybe you should wait? Did you know taking Tylenol is contraindicated?

In this chapter, you'll learn about some key areas that might prevent you from having the best CGM experience or if you're not careful might even harm you or the system. You'll even learn what a contraindication is!

### 2.2 Important User Information

Please review the instructions before using the Dexcom G5 System. This chapter is important to read. It helps you use the Dexcom G5 safely and covers:

- What is a Safety Statement?
  - Telling the difference between an indication and a contraindication
  - Explaining why warnings are so important
  - Defining precautions
- How to read a chapter's Safety Statement
- Overview of Safety Statements

Let's start with definitions, then look at a Safety Statement example used throughout the user guide, and then review the Safety Statements.

## Safety Statement

A Safety Statement is a brief statement of the Dexcom G5 indications, relevant warnings, precautions, or its contraindications (when to avoid using it). The Safety Statements are meant to keep you and the system safe while using the Dexcom G5:

### ***Indications***

How, for what purposes, and under what circumstances you should use the Dexcom G5. Indications let you know who should use the Dexcom G5 System and when.

### ***Contraindications***

Contraindications let you know when not to use the Dexcom G5. If used during these situations, you may hurt yourself or the system; the risk of use clearly outweighs the benefit.

### ***Warning***

Important hazard information: Describes serious or life threatening circumstances to stay away from while using the Dexcom G5, their consequences, and how to avoid danger.

### ***Precaution***

Special steps you need to take while using the Dexcom G5, preventing minor or moderate injury to either you or the system.

## 2.3 Safety Statements

This user guide presents Safety Statements two ways:

1. In this chapter's Overview of Safety Statements
  - Lists all Safety Statements
  - Includes a section reviewing how the statements are formatted
2. Within each chapter
  - Lists only those statements applicable to that specific chapter

## Chapter's Safety Statements

Each chapter will list all applicable indications, contraindications, warnings, and precautions. Some chapters will have multiple Safety Statements; others have none. Safety Statements are located toward the beginning so you can keep them in mind as you learn about that chapter's topic. The same statement may be repeated throughout the user guide. It's

important to recognize which factors could prevent the system from working correctly or even harm you.

Within chapters, each color-coded Safety Statement is in a box, broken down into four sections:

### 1. Type of statement

- a. **Bold** and color-coded
  - **Indication-Green**
  - **Contraindication-Purple**
  - **Warning-Red**
  - **Precaution-Blue**

### 2. Do's/Don'ts

- a. An action you should or should not take
- b. *Italicized*

### 3. Why

- a. A statement of the potential harm

### 4. Consequences

- a. What could happen if you don't follow the instructions

The following is an example of a chapter's Safety Statement and how to read it.

#### **Warning**

**Do:** *Calibrate at least once every 12 hours.*

**Why:** Calibrating less often than every 12 hours might cause inaccurate sensor glucose readings.

**Consequences:** Missing a severe low or high glucose event or making a treatment decision that results in injury.

Since this is a **WARNING**, you know it covers important safety information. Italics are the **Do/Don't** steps to follow: *Calibrate at least once every 12 hours*. Below the italics is a statement explaining **Why** you need to follow the steps: Calibrating less often than every 12 hours might cause inaccurate sensor glucose readings. And finally what happens, or the **Consequences**, if you don't: Missing a severe low (hypoglycemia) or high (hyperglycemia) glucose event.

## 2.4 Overview of Safety Statements

This section provides a review of Safety Statements containing the same elements described above (type of Safety Statement, an action, a statement of potential harm, and consequences) but listed in a narrative, not boxed, format. Here you'll learn what indications and contraindications are and what to do to keep you safe and the system in proper working order.

### Indications and Contraindications

#### *Indications for Use*

The Dexcom G5 Mobile Continuous Glucose Monitoring System (Dexcom G5) is a glucose monitoring system indicated for the management of diabetes in persons age 2 years and older. The Dexcom G5 is designed to replace fingerstick blood glucose testing for diabetes treatment decisions.

Interpretation of the Dexcom G5 results should be based on the glucose trends and several sequential readings over time. The Dexcom G5 also aids in the detection of episodes of hyperglycemia and hypoglycemia, facilitating both acute and long-term therapy adjustments.

The Dexcom G5 is intended for single patient use and requires a prescription.

#### *Important User Information*

Failure to use the Dexcom G5 and its components according to the instructions for use and all indications, contraindications, warnings, precautions, and cautions may result in you missing a severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) occurrence and/or making a treatment decision that may result in injury. If your glucose alerts and readings from your Dexcom G5 do not match your symptoms or expectations, use a fingerstick blood glucose value from your blood glucose meter to make diabetes treatment decisions. Seek medical attention when appropriate.

Please review the product instructions before using the Dexcom G5. Indications, contraindications, warnings, precautions, cautions, and other important user information can be found in the product instructions that are included with, or accompany, the Dexcom G5. Discuss with your healthcare professional how you should use the information displayed on the Dexcom G5 to help manage your diabetes. The product instructions contain important information on troubleshooting the Dexcom G5 and on the performance characteristics of the system.

## Contraindications



### **MRI/CT/ Diathermy**

Remove the Dexcom G5 sensor, transmitter, and receiver before Magnetic Resonance Imaging (MRI), Computed Tomography (CT) scan, or high-frequency electrical heat (diathermy) treatment.

The Dexcom G5 has not been tested during MRI or CT scans or with diathermy treatment. The magnetic fields and heat could damage the components of the Dexcom G5, which may cause it to display inaccurate blood glucose readings or may prevent alerts.

## Medications

Taking medications with acetaminophen while wearing the Dexcom G5 may inaccurately raise the glucose readings generated by the Dexcom G5. The level of inaccuracy depends on the amount of acetaminophen active in your body and is different for each person. Do not rely on continuous glucose monitoring (CGM) data produced by the Dexcom G5 if you have recently taken acetaminophen.

## Warnings

### **Sensor Fractures**

Do not ignore sensor fractures. Sensors may fracture or detach from the sensor pod on rare occasions. If a sensor breaks and no portion of it is visible above the skin, do not attempt to remove it. Seek professional medical help if you have symptoms of infection or inflammation—redness, swelling, or pain—at the insertion site. If you experience a broken sensor, please report this to our Technical Support department at **1.888.738.3646** (toll free) or **1.858.200.0200**.

### **Do Not Use Damaged Goods**

If the Dexcom G5 receiver or Dexcom G5 transmitter is damaged or cracked, do not use it. This could create an electrical safety hazard causing possible electrical shocks resulting in injury. In addition, a damaged or cracked Dexcom G5 receiver or Dexcom G5 transmitter may cause the Dexcom G5 System not to function properly.

### **Choking**

Do not allow young children to hold the sensor or transmitter without adult supervision. The sensor and transmitter include small parts that may pose a choking hazard.

## **Warnings (continued)**

*The following warnings may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

### **Review Training Materials**

Thoroughly review the training materials included with your Dexcom G5 before use. Incorrect use of the Dexcom G5 could lead you to misunderstand information produced by the system or might affect the system's performance.

### **Diabetes Treatment Decisions**

If your Dexcom G5 does not display a sensor glucose reading and an arrow or if you are getting inaccurate or inconsistent readings, use a fingerstick blood glucose value from your blood glucose meter to make diabetes treatment decisions.

### **Do Not Ignore Low/High Symptoms**

Do not ignore symptoms of low or high glucose. If your glucose alerts and readings do not match your symptoms or expectations, you should obtain a fingerstick blood glucose value from your blood glucose meter to make diabetes treatment decisions or seek immediate medical attention.

### **Who Should Not Use**

The Dexcom G5 was not evaluated or approved for the following persons:

- Pregnant women
- Persons on dialysis

Do not use the Dexcom G5 Mobile CGM System in critically ill patients. It is not known how different conditions or medications common to the critically ill population may affect performance of the system. Sensor glucose readings may be inaccurate in critically ill patients.

The Dexcom G5's accuracy has not been tested in people within these groups and the system's glucose readings may be inaccurate.

### **Calibrate on Schedule**

Calibrate the Dexcom G5 at least once every 12 hours. The Dexcom G5 needs to be calibrated in order to provide accurate readings. Do not use the Dexcom G5 for diabetes treatment decisions unless you have followed the prompts from the device and calibrated every 12 hours after the initial calibration.

## **Warnings** *(continued)*

*The following warnings may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

### **Placement**

Do not insert the sensor component of the Dexcom G5 in a site other than the belly/abdomen (ages 2 years and older) or the upper buttocks (ages 2 to 17 years). The placement and insertion of the sensor component of the Dexcom G5 is not approved for other sites. If placed in other areas, the Dexcom G5 may not function properly.

### **Initial Calibration: Data/Alarm/Alert**

Do not expect sensor glucose readings or Alarms/Alerts from the Dexcom G5 until after the 2-hour startup. The Dexcom G5 will NOT provide any sensor glucose readings or Alarms/Alerts until after the 2-hour startup ends AND you complete the startup calibration. Use fingerstick glucose values from your blood glucose meter during the 2-hour startup.

### **Sensor Storage**

Store the sensor at temperatures between 36° F – 77° F for the length of the sensor's shelf life. You may store the sensor in the refrigerator if it is within this temperature range. The sensor should not be stored in the freezer.

Storing the sensor improperly might cause the sensor glucose readings to be inaccurate.

### **Smart Device Settings**

Your smart device's internal settings override any G5 Mobile app setting. In addition, accessory devices (like a smart watch or other wearable smart devices) might override your smart device's Alarm, Alert, and notification settings.

To receive Alarm or Alerts you must:

- Make sure the notifications for the G5 Mobile app are turned on in the setting's menu of your smart device
- Check that the G5 Mobile app hasn't been shut down by your smart device
- Turn on *Bluetooth* on your smart device
- Turn off the Do Not Disturb feature on your smart device (if available)

## Warnings (continued)

*The following warnings may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

- Restart the G5 Mobile app after your smart device is restarted
- Set the volume on your smart device at a level you can hear
- Always run the app in the background; do not close the G5 Mobile app
- Make sure accessory devices do not override your smart device settings

If the settings on your smart device are incorrect, your Dexcom G5 may not function properly.

The Dexcom G5 Alarm/Alert vibrations are not any different from other vibrating apps on your smart device. Medical device apps, like the G5 Mobile app, do not have any special priorities over your smart device's features. You cannot determine if a vibration is a notification from your G5 Mobile app or another app. The only way to know is to look at the screen.

### **Missed an Alarm or Alert?**

An Alarm or Alert from the G5 Mobile app cannot be heard through your smart device's speakers if headphones are plugged in. Make sure you unplug your headphones when you are done using them, otherwise you might not hear an Alarm or Alert from the Dexcom G5.

## **Precautions**

### **Sensor Package**

Do not use the Dexcom G5 sensor if its sterile package has been damaged or opened. Using a non-sterile sensor might cause infection.

### **Clean and Dry Before Using**

Do not open the sensor package until you have washed your hands with soap and water, and let them dry. You may contaminate the insertion site and suffer an infection if you have dirty hands while inserting the sensor.

Do not insert the sensor until you have cleaned the skin near the insertion site with a topical antimicrobial solution, such as isopropyl alcohol, and allowed the skin to dry. Inserting into

## **Precautions** *(continued)*

*The following precautions may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

unclean skin might lead to infection. Do not insert the sensor until the cleaned area is dry so the sensor adhesive will stick better.

### **Reusable: Don't Throw Away**

Do not discard your transmitter. It is reusable. The same transmitter is used for each session until you have reached the end of the transmitter's battery life.

### **Be Accurate, Be Quick**

To calibrate the system, enter the exact blood glucose value displayed on your blood glucose meter within five minutes of a carefully performed fingerstick glucose measurement.

Do not enter Dexcom G5 sensor glucose readings for calibration. Entering incorrect blood glucose values, blood glucose values obtained more than 5 minutes before entry, or sensor glucose readings might affect sensor performance.

### **Treatment Decisions**

Make diabetes treatment decisions based on the combination of the sensor glucose reading, trend arrow, and/or actionable alerts generated by the Dexcom G5.

### **Expiration Date**

Do not use Dexcom G5 sensors beyond their expiration date. Before inserting a sensor, confirm the expiration date that is listed on the package label in the following format: YYYY-MM-DD.

Do not use sensors that are beyond their expiration date, because the sensor glucose readings might not be accurate.

### **Sensor Placement**

Avoid using the same spot repeatedly for sensor insertion. Rotate your sensor placement sites, and do not use the same site for two sensor sessions in a row. Using the same site might cause scarring or skin irritation.

Avoid inserting the sensor in areas that are likely to be bumped, pushed, or compressed or areas of skin with scarring, tattoos, or irritation as these are

## **Precautions** *(continued)*

*The following precautions may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

not ideal sites to measure glucose. Insertion in these areas might affect sensor accuracy.

Avoid injecting insulin or placing an insulin pump infusion set within three inches of the sensor. The insulin might affect sensor performance.

### **Use Correct Transmitter, Receiver, and Sensor**

Different generations of Dexcom CGM System transmitters and receivers are not interchangeable with each other.

The Dexcom G5 transmitter and receiver are not compatible with the Dexcom G4® PLATINUM CGM System transmitter and receiver. The Dexcom G5 will not work if you mix the transmitter and receiver from different generations.

You can use a Dexcom G4 PLATINUM sensor with the Dexcom G5 System.

Before using the sensor, make sure the sensor label says “Dexcom G5 Mobile/G4 PLATINUM Sensor” or “Dexcom G4 PLATINUM Sensor.”

### **Communication Range**

Avoid separating the transmitter and receiver by more than 20 feet. The transmission range from the transmitter to the receiver is up to 20 feet without obstruction. Wireless communication does not work well through water so the range is much less if you are in a pool, shower, etc.

Types of obstruction differ and have not been tested. If your transmitter and receiver are farther than 20 feet apart or are separated by an obstruction, they might not communicate or the communication distance may be shorter.

### **Setting Alarm/Alert Notifications**

When using both a receiver and a smart device with your Dexcom G5, you must set your settings separately in each. If you set up one device and then use another, you might not get an Alarm or Alert.

Using an accessory device (like a smart watch) might override your smart device sounds. Alarm or Alerts might vibrate or be heard on the accessory instead of your smart device. After connecting any accessories, make sure that the smart device settings allow you to continue receiving Alarm or Alerts on the smart device.

## **Precautions** *(continued)*

*The following precautions may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

### **Is It On?**

If the receiver or smart device is turned off (Shut Down), it will not display sensor data, information, Alarm or Alerts generated by the Dexcom G5. Make sure the display devices are turned on; otherwise you won't get sensor glucose readings or Alarm or Alerts.

### **Keep Receiver Dry**

Keep the USB port cover on the receiver closed whenever the USB cable is not attached. Do not submerge the receiver in water.

If water gets into the USB port, the receiver could become damaged and stop displaying readings or providing alerts.

### **No Alternative Site Testing**

Do not use alternative site blood glucose testing (blood from your palm or forearm, etc.) for calibration. Alternative site blood glucose values may be different from those taken from a fingerstick blood glucose test and may not represent the timeliest blood glucose value. Use a blood glucose value taken only from a fingerstick for calibration. Using alternative site blood glucose values for calibration might affect Dexcom G5 accuracy.

### **When Not to Calibrate**

Do not calibrate if your blood glucose is changing at a significant rate, typically more than 2 mg/dL per minute. Do not calibrate when your receiver screen is showing the rising or falling single arrow or double arrow, which indicates that your blood glucose is rapidly rising or falling. Calibrating during rapid rise or fall of blood glucose may affect sensor accuracy.

## Precautions *(continued)*

*The following precautions may result in the consequence of missing severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) or making a treatment decision that results in injury:*

### **Don't Share Your Transmitter**

Do not share your transmitter with another person or use a transmitter from another person. The Dexcom G5 is a prescription-only medical device and is meant, or indicated, for individual use only.

The transmitter is tied to the sensor glucose readings. If the transmitter is used by more than one person, the glucose readings, alerts, and reports may be wrong.

## Caution

U.S. law restricts the sale of the Dexcom G5 to sale by or on order of a physician.

## Summary

Now You Can:

- Define a Safety Statement
- Explain the difference between an indication and a contraindication
- Describe the importance of warnings
- Describe what a precaution is
- Correctly read a chapter's Safety Statement
- Provide an overview of Safety Statements by category

## What's Next?

In our next chapter, you will learn about the risks and benefits of using the Dexcom G5.

# Chapter 3

## *Getting Started:*

## Risks and Benefits

When using any medical device, there are risks and benefits. In this chapter, you'll learn what they are, helping you decide if Dexcom G5 is right for you.

First, let's review some possible risks.

### 3.1 Risks

There are some risks with using real-time CGM.

#### Not Receiving Alarm/Alerts

If you aren't getting your CGM Alarm/Alerts, you run the risk of not knowing you are having a severe low or high glucose event.

Some hardware issues preventing Alarm/Alerts:

- Alert function is turned off
- Transmitter and display device are out of range
- Receiver or smart device isn't showing sensor glucose readings. For example, when there are data gaps due to being out of range or "???"
- Receiver or smart device battery is dead
- Unable to hear Alarm/Alerts or feel vibration
- App not running in the background
- On Apple devices, Signal Loss Alert won't be heard if device is in Do Not Disturb

See recommended settings in Chapter 19, Troubleshooting, for more information.

## Using CGM for Treatment Decisions

If you are taking acetaminophen, your sensor glucose readings may be falsely high, causing you to potentially miss a low glucose event or treat a high glucose event with insulin. Do not make any treatment decision based on your CGM when acetaminophen is active in your body.

In order to use CGM for your treatment decisions, you must calibrate a minimum of once every 12 hours to help keep your CGM system accurate. If you do not calibrate at this minimum frequency and make treatment decisions based on your CGM, you may not be getting the most accurate information and could miss a high or low glucose event.

In order to use CGM for your treatment decisions, you must have:

1. Sensor glucose reading
2. Trend arrow

For more information on how to make treatment decisions using your Dexcom G5, see Chapter 13.

If you have symptoms of low or high glucose, but your CGM is not showing low or high glucose sensor readings, take a fingerstick blood glucose measurement with your BG meter. If you are a caregiver of someone using the Dexcom G5, watch how they act. If their symptoms don't match the CGM, take a fingerstick BG measurement.

Your BG meter is your backup when/if your CGM is not showing a sensor glucose reading or your symptoms do not match your sensor readings. Remember to wash your hands before taking a fingerstick.

## Sensor Glucose Reading Different From Your Expectations or Symptoms

The sensor glucose reading can be different from your expectations and symptoms. In this case, wash your hands and take a fingerstick blood glucose measurement with your BG meter to confirm your expectations and symptoms. If your sensor readings and BG meter values are different, you can calibrate your CGM system. Wash and dry your hands, repeat the BG measurement, and, if still different, recalibrate.

If you're not receiving an Alarm/Alert, and not taking fingerstick BG measurements, you may be unaware of low or high glucose levels.

## Sensor Insertion Risks

Inserting the sensor and wearing the adhesive patch might cause infection, bleeding, pain, or skin irritations (e.g., redness, swelling, bruising, itching, scarring, or skin discoloration). The chance of this happening is low.

The Dexcom G5 uses the same sensor as the previous CGM system—the Dexcom G4 PLATINUM. The Dexcom G4 PLATINUM System clinical studies and complaint data showed slight redness and swelling occurring only in a small percentage of Dexcom's total patient population.

During the Dexcom G4 PLATINUM System clinical study, no sensor wires broke; however, there is a remote chance a sensor wire could break or detach and remain under your skin. Sterile broken sensor wires don't pose a significant medical risk.

If a sensor wire breaks off or detaches and remains under your skin, contact your healthcare professional and call Dexcom Technical Support toll free, 24/7, at 1. 888.738.3646 or toll at 1.858.200.0200 within 24 hours.

Those are the risks; now let's review the benefits!

## 3.2 Benefits

Daily habits impact your BG levels. With the Dexcom G5, you can track how your exercise, carbs, stress levels, medication, or illness, influence your glucose levels.

## Knowing Your Trends

Providing sensor glucose readings every five minutes, for up to seven days, the Dexcom G5 helps you detect trends and patterns. Trend information as well as the trend arrow reveals where your glucose is now, where it has been, where it is heading, and how fast it's changing. This provides you with a more complete picture of your glucose.

## Making Treatment Decisions Based on Your CGM

With Dexcom G5, you can now use the sensor glucose readings to make your diabetes treatment decisions (like how much insulin to take, when to treat a low glucose, etc.) when you have the key pieces of CGM information: your trend arrow and sensor glucose reading. If you are using the G5 Mobile to make treatment decisions, make sure your Alerts are on. Talk to your healthcare professional to determine your best Alert levels.

## Helping Your Diabetes Management

The Alarm/Alerts features (see Chapter 11) keep you aware of your glucose levels. Alerts notify you when your glucose goes outside your target range or is rapidly falling or rising, letting you take action before you get too low or too high. The Urgent Low Glucose Alarm lets you know when you are dangerously or urgently low, going below 55 mg/dL. By taking corrective measures, you lessen the time spent in your low/high range, while increasing time in your targeted range (Battelino, 2011; Garg, 2005). If you are using the G5 Mobile to make treatment decisions, make sure your Alerts are on. See Chapter 13 for Treatment Decisions.

Real-time CGM can help improve your A1C as well as improve the quality of your glucose control. If your A1C is at or below 7%, using a CGM such as the Dexcom G5 helps reduce hypoglycemia (Juvenile Diabetes Research Foundation Continuous Glucose Monitoring Study Group, 2008).

Lowering your A1C, increasing your time in your target range while decreasing time in low/high BG range is believed to reduce your risk of diabetes-related complications (Ohkubo, 1995).

Some people perceive an increase in their quality of life and peace of mind when using real-time CGM (Juvenile Diabetes Research Foundation Continuous Glucose Monitoring Study Group, 2010).

### References:

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Garg, S., Zisser, H., Schwartz, S., Bailey, T., Kaplan, R., Ellis, S., & Jovanovic, L. (2005). Improvement in Glycemic Excursions With a Transcutaneous, Real-Time Continuous Glucose Sensor: A randomized controlled trial. *Diabetes Care*, 29(1), 44-50.

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Juvenile Diabetes Research Foundation Continuous Glucose Monitoring Study Group (2010). Quality-of-Life Measures in Children and Adults with Type 1 Diabetes. *Diabetes Care*, 33(10), 2175-2177.

Ohkubo, Y., Kishikawa, H., Araki, E., Miyata, T., Isami, S., Motoyoshi, S., & Shichiri, M. (1995). Intensive Insulin Therapy Prevents the Progression of Diabetic Microvascular Complications in Japanese Patients with Non-insulin-dependent Diabetes Mellitus: A Randomized Prospective 6-year Study. *Diabetes Research and Clinical Practice*, 28(2), 103-117.

## **What's Next?**

You've read the Safety Statements, reviewed the risks and benefits; now let's take a look at the Dexcom G5!

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# 2

## LET'S G5! THE BASICS

- Introduction to the Dexcom G5
- Initial Setup
- Starting a Sensor Session: Inserting the Sensor & Attaching the Transmitter
- Calibration
- Ending a Sensor Session & Transmitter Session

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# Chapter 4

*Let's G5! The Basics:*

## What Is the Dexcom G5?

### 4.1 System Description

Now it's time to get an overview of the Dexcom G5 System. After this chapter, you'll be able to:

- Explain what Dexcom G5 does
- Describe options to view trends
- Locate your historical readings
- Recognize system components
- Explain each part's function

### 4.2 Safety Statement

If you've used the Dexcom G4 PLATINUM CGM System, you might still have its transmitter or receiver. While you can use the sensors across the different generations (look for "G5" or "G4 PLATINUM" on the sensor's package), you can't mix the transmitter or receiver between the two systems.

## Warning

**Don't:** *The Dexcom G5 was not evaluated or approved for the following persons:*

- Pregnant women
- Persons on dialysis

*Do not use the Dexcom G5 Mobile CGM System in critically ill patients. It is not known how different conditions or medications common to the critically ill population may affect performance of the system. Sensor glucose readings may be inaccurate in critically ill patients.*

**Consequences:** The system's accuracy hasn't been tested in people falling into these groups and sensor glucose readings may be inaccurate, resulting in missing a severe low or high event.

## Precaution

**Don't:** *Never mix the Dexcom G5 transmitter or receiver with the Dexcom G4 PLATINUM transmitter or receiver.*

**Why:** The Dexcom G5 transmitter and receiver are not compatible with the Dexcom G4® PLATINUM CGM System transmitter and receiver. The Dexcom G5 won't work if you mix receiver and transmitter components from different generations.

**Consequences:** Missing severe low or high blood glucose event or making a treatment decision that results in injury.

## 4.3 The Dexcom G5 System

### CGM

The Dexcom G5 is a medical device you use on yourself. It allows you to continually see your sensor glucose readings, updated every five minutes for up to seven days, without the bother of taking constant fingerstick measurement.

For more information on reading your trend screen, go to Chapter 9.

The Dexcom G5 provides personalized trend Alerts, prompting you to proactively react when your glucose levels are getting too low or too high. Dexcom provides web-based reports reflecting your glucose trends and patterns. Share the reports with your healthcare professional when developing your diabetes management treatment plans.

## Options to View Your Trends

The Dexcom G5 transmitter works with a number of display devices, giving you flexibility to use what's best for you, your situation, or your lifestyle:

- Dexcom G5 receiver (receiver)
- G5 Mobile app (app) on your smart device

While the system works with different smart devices, they're not interchangeable during a sensor session. Before starting one, select which smart device you want to use and stick with it throughout your session. You can't use multiple smart devices at the same time, but you can combine the receiver with a smart device during a session.

For a list of current compatible smart devices and operating systems go to:

**[dexcom.com/compatibility](https://dexcom.com/compatibility)**

Chapter 5 covers how to set up your smart device with the G5 Mobile app.

The primary difference between the receiver and app is not the information they give you, but how that information is presented. The following are some of the shared CGM data and system information features.

## Tracking Real-Time CGM Data

The receiver and app give you the ability to track your glucose trends in a number of different ways. Each device's home screen opens to your glucose trend screen.

### *View Glucose Levels*

The receiver and app share many of the same glucose-monitoring features. Your glucose values are color-coded to highlight what zone you are in, allowing you, at a glance, to see what your levels are.

- Color coded glucose levels:
  - **Red** - Low
  - **Gray** - Within your target range
  - **Yellow** - High

### *Trend Arrows*

Glucose levels are not just about the numbers. The Dexcom G5 includes trend arrows so you know the speed and direction of your glucose, allowing you to proactively act before your

glucose gets too high or too low. See Chapter 13 and learn how to make treatment decisions based on your Dexcom G5.

## Alarm/Alerts

Being warned when your glucose value is too high or too low, falling or rising too quickly, or trending toward a severe low or high is very important. Warnings in the form of Alerts or an Alarm help you avoid getting too low or high. Alarm and Alert prompts help keep you aware of your glucose trends and are made up of a combination of sounds, vibrations, and screens.

There are a number of Alerts, but only one Alarm: when your glucose level dips below 55 mg/dL. Some customization options are available and are part of the setup process for the receiver and smart device.

In Chapter 11, you can learn more about the Alarm and Alerts feature.

## Viewing Your Glucose Values

The Dexcom G5 allows you to see the last 1-3-6-12-24 hours of your sensor glucose readings. On the receiver, from the home screen, press up/down arrows to view. On a smart device, hold upright in portrait mode to see the most recent three hours; turn sideways to landscape mode to view your glucose levels over the last 1-3-6-12-24 hours.

Go to Chapter 9 to learn more about viewing your glucose trends.

## 4.4 What's New to the Dexcom G5?

Features of the Dexcom G5 include:

- Ability to make treatment decisions based on your sensor glucose readings
- G5 Mobile app
  - Dexcom Share
  - Smart watches

## Treatment Decisions

The Dexcom G5 allows you to make treatment decisions, including help in determining your insulin doses.

With the Dexcom G5 glucose readings and trend (trend arrow and trend graph), you can determine the speed and direction of your glucose changes. These help you determine if any treatment or management decision is needed without having to take a fingerstick BG

meter reading. Based on your Dexcom G5, you determine if you should dose, eat carbs, or do nothing.

You still need your BG meter to calibrate the Dexcom G5 and as a backup when your CGM data does not reflect how you feel or if you don't have enough information on your trend screen.

For more information on how to use your sensor readings combined with your trend arrows, sensor readings, and Alarm and Alerts to make your treatment decisions, go to Chapter 13.

## G5 Mobile App

You now have an option for how you view your information and enter data. After downloading the app, you can monitor your glucose and enter information from your smart device.

## "Share" Your App Data

Through secure wireless connections, Dexcom Share™ allows remote viewing of your sensor glucose readings, trends, and data by your loved ones from a smart device. Activate Dexcom Share by tapping on the Share icon in the G5 Mobile app, follow a few simple steps, and then invite up to five people to connect with you.

After downloading the Dexcom Follow™ app, each of the five people becomes your Follower. As a Follower, he or she can watch your sensor glucose readings and trends and receive Alarm/Alerts when your glucose is low or high.

You determine what your Follower can see. Based on what you allow, your Followers can receive your Alarm or Alerts and view your trends. Followers can pick and choose, or turn off, the data they receive, including the Alarm/Alerts, trends, and messages. The Share remote monitoring feature in the G5 Mobile app is different from the Dexcom Share app used with other systems.

For more information about Dexcom Share and instructions for use, go to Chapter 21.

## Smart Watches

Check your glucose discreetly on a smart watch. For watches that work with our app, see [dexcom.com/compatibility](https://dexcom.com/compatibility).

**NOTE:** Review all Dexcom Share System indications, contraindications, precautions, warnings, and detailed procedures in Chapter 21.

## 4.5 System Information



The receiver and app also keep you informed on the system's status. Technical notifications provide information about your sensor session and about the system's hardware. Each chapter provides a table of the prompts, system, and error messages applicable to its subject. As an example, the calibration chapter will review all calibration messages you may see.

Now that you know what the Dexcom G5 does and what's new, let's open your Dexcom G5 packages, see what's inside, and review each item.

## 4.6 System Components




### Package

The Dexcom G5 comes to you in a number of boxes; after opening keep each box until you are no longer using its contents. Please Note: Images are representational only. Your packaging may look different.

Sensor	
	Sensor package
	Single use sensor(s)






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Sensor	
	Sensor package insert
Transmitter	
	Transmitter package
	Reusable transmitter



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Receiver	
	Receiver package
	Receiver
	Receiver's USB charging and download cable
	AC power adapter
	Welcome card

(Continued on next page)

(Continued from previous page)

Receiver	
	Getting Started Guide
	Training Tutorial USB card

## Overview of System Components

### Overview of System Components

This section is meant as a quick overview of each part; specifics for each are found in following chapters. For detailed product specifications and technical information, please go to Chapter 18.

The Dexcom G5 is comprised of four key parts:

1. Single use sensor
2. Reusable transmitter
3. Rechargeable receiver
4. G5 Mobile app
  - a. Downloaded to your smart device
  - b. Dexcom G5 optional:
    - i. Dexcom Share

## Sensor Overview

For your safety, the sensor is packaged in a sterile sealed pack. When you first open the pack, your sensor looks like one item; however, it's actually three: sensor applicator, sensor pod, and sensor wire.

The applicator helps you insert the sensor wire inside the sensor pod under your skin. After inserting the sensor wire, remove the applicator. The sensor wire stays in the sensor pod with the pod attached to your skin by adhesive; the sensor wire is made of silver and platinum with polymer membranes. Once inserted, the thin and flexible wire measures your glucose levels in the fluid between your cells (interstitial fluid) for up to seven days.

This section is meant as a quick overview. More information on using the applicator to insert the sensor wire can be found in Chapter 6.

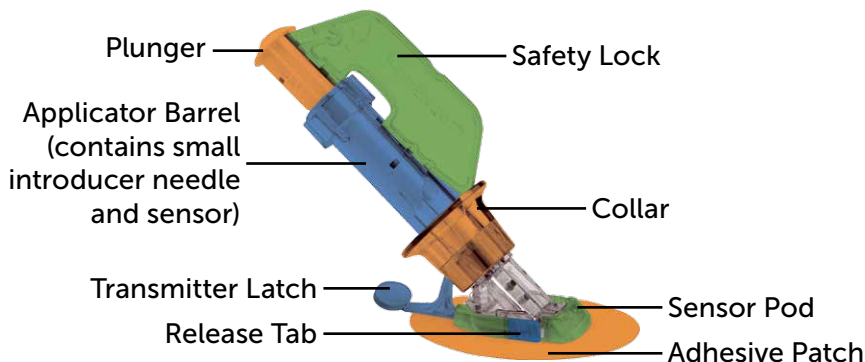


Figure 1. Dexcom G5 Sensor Applicator and Pod

## Applicator and Sensor Pod

What it's called	What it does
<b>Applicator</b>	
<b>Applicator Barrel</b>	Contains small insertion needle and sensor wire. Inserts sensor wire under the skin. Disposable, for single use only. Removed after insertion.
<b>Safety Lock</b>	Keeps all moving parts in place before insertion. Prevents accidental sensor insertion.  Tool to remove transmitter after sensor session. Put in transmitter box after removal to use later.
<b>Collar</b>	Collar removes insertion needle.
<b>Plunger</b>	Inserts sensor wire into your body.
<b>Transmitter Latch</b>	Securely snaps transmitter into sensor pod.
<b>Sensor Pod</b>	
<b>Sensor Pod</b>	Holds transmitter and sensor wire.  Water resistant when transmitter is properly installed.  Discarded after sensor session.
<b>Adhesive Patch</b>	Keeps sensor pod attached to your skin.
<b>Transmitter Cradle</b>	Holds transmitter in place during sensor session.
<b>Sensor Wire</b>	Wire measures glucose levels in fluid in between your cells.  Attached to sensor pod.  Discarded with pod after session.

## Transmitter Overview



Figure 2. Dexcom G5 Transmitter Front and Back

Please Note: Pictures above are representational only; your transmitter may look different

Snapping into the sensor pod, the transmitter wirelessly sends your glucose information to your display devices—receiver and/or smart device. If you have a new transmitter, only open the package when you are ready to use it.

Transmitter features:

- Reusable
  - Do not discard after sensor session
  - Only for you, don't share transmitter
- Water resistant
- Can transmit data to your display devices for up to 20 feet
  - Range is less if you are in or under water
- Battery lasts approximately three months
  - Receiver or smart devices prompts you when battery is running low
- Serial number is on the back

More transmitter features and insertion information is in Chapter 6.

Now that you are familiar with the sensor and transmitter, let's review the Dexcom G5 receiver.

## Receiver Overview

Your receiver, as well as your smart device, shows your sensor glucose readings, trend graphs, and trend arrows. They alert you when your glucose is too high or too low or if there is something you should be aware of or need to do.



*The receiver is neither water resistant nor waterproof* and can get damaged if moisture gets inside, so keep it away from any liquids and very high humidity as well as dirt and dust. Keeping the micro USB port closed helps prevent damaging fluids and dust from getting inside the receiver. If your receiver does get wet or dirty, test it to make sure the speaker and vibrations still work (see Chapter 12).

If your receiver isn't charged, see Chapter 15 for charging your receiver's battery.

If you want to use the receiver along with a smart device, you need to set them up separately.





Remember, you can't use a combination of smart devices during a sensor session; select just one.

### Receiver Overview

What you see	What it is called	What it does
	Receiver	Provides data about your glucose trends via screen display, sounds, and vibration.
	Micro USB Port	<b>Plug</b> <i>USB cable</i> into port for recharging.







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What you see	What it is called	What it does
	USB Port Door	<b>Close</b> <i>USB</i> port door after removing <i>USB</i> cable to keep receiver clean and dry.
	Micro USB Cable	<b>Plug</b> <i>USB</i> cable into <i>receiver</i> to charge battery. Don't plug into a computer port to charge. Battery can only be charged using the adapter/wall charger.
	Wall Charger	<b>Plug</b> <i>USB</i> cable into <i>adapter/wall</i> charger. <b>Plug</b> <i>wall</i> charger into an <i>electrical outlet</i> to charge receiver's battery. Don't block access to the charger. Please Note: Your adapter/charger may look different.
	Display Screen	Shows sensor glucose readings, trend graphs and arrows, Alarm/Alerts, sensor session status. Change settings on Menu screen.

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What you see	What it is called	What it does
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange arrow points to the top right corner of the device.	Speaker	Allows you to hear your Alarm/Alerts sounds.
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange circle highlights the central area of the knob.	Navigation Wheel	Arrows and button to help you navigate through the receiver's menu options and choose features.
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange circle highlights the central button of the knob.	Select Button	Press to select menu option.
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange arrow points to the left arrow on the knob.	Left Arrow	Press to go back to last item/screen or home screen.
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange arrow points to the right arrow on the knob.	Right Arrow	Press to highlight next item.
 A black rectangular device with a screen on the left and a circular control knob on the right. An orange arrow points to the up/down arrow on the knob.	Up/Down Arrows	Press to scroll up or down to select menu items or set values. Press to scroll back and forth beyond from the 3-hour trend graph to the 1-6-12-24 views.

## 4.7 Smart Device Overview

The G5 Mobile app was created to work with your smart device, giving you even more options in monitoring your glucose trends and patterns. The app is similar to all other apps.

This user guide is not meant to show you how to use your smart device. Please contact your smart device support or read your smart device's user guide for assistance.

### Summary

#### Now You Can:

- Explain what Dexcom G5 does
- Describe options to view trends
- Locate your historical readings
- Recognize system components
- Explain each part's function

#### What's Next

Your next step in getting started with the Dexcom G5 is selecting how to continuously receive your sensor glucose readings: the G5 Mobile app, the Dexcom G5 receiver, or a combination.

Our next chapter helps you set up both!

# Chapter 5

*Let's G5! The Basics:*

## Set Up Your Display Devices

### 5.1 Introduction

In the previous chapter, you received a high level overview of the Dexcom G5 and learned you can monitor your glucose levels with different display devices. Now it's time to set up your G5 Mobile app and your receiver.

After this chapter, you will be able to:

- Create a Dexcom username and password
- Download the G5 Mobile app
- Set up the G5 Mobile app with the recommended settings
- Successfully set up your Dexcom G5 receiver

### 5.2 Safety Statement

If you've used the Dexcom G4 PLATINUM CGM System, you might still have its transmitter or receiver. While you can use the sensors across the different generations (look for the Dexcom G5/G4 PLATINUM sensor package), you can't mix the transmitter or receiver between the two systems.

### Precaution

**Don't:** *Never mix the Dexcom G5 transmitter or Dexcom G5 receiver with the Dexcom G4 PLATINUM transmitter or receiver.*

**Why:** The Dexcom G5 transmitter and receiver are not compatible with the Dexcom G4 PLATINUM transmitter and receiver. The Dexcom G5 won't work if you mix receiver and transmitter components from different generations.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## 5.3 Why Different Monitoring Methods?

### Your convenience!

By offering two separate monitoring systems, the app or receiver, you can choose to monitor your glucose levels in the handiest method at that moment. Forgot your receiver at home? Use your smart device! Battery died on your smart device? Smart device memory full or out of storage space? Your receiver has you covered!

With the exception of Dexcom Share, the primary difference between the two monitoring systems is not the data itself, but how it's presented.

The next section walks you through the initial setup for the app. To set up the receiver, go to Section 5.5. If you want to use both the G5 Mobile app and the receiver, you need to set up each individually.

Once you have completed the initial setup, you're one step closer to beginning your sensor session!

## 5.4 G5 Mobile App

Before starting your first sensor session, pick which smart device you want to use. As mentioned in the previous chapter, you can use the receiver with one smart device during a session; however, you can't use multiple smart devices during the same session.

While your smart device can have the app installed, part of your initial setup is entering the transmitter's serial number (SN). If by accident you enter the SN into more than one smart device, the system warns you and you won't be able to complete the setup process.

## Suggested Smart Device Settings

The app allows your Alarm and most important Alerts to notify you when your volume is set too low to hear. If you have your Silent or Do Not Disturb on, no need to worry. You'll still get your Alarm and Alerts.

An exception on Apple devices is the Signal Loss Alert. It can't override Silent or Do Not Disturb.

- In these cases you may not hear sound on your first notification. You still get a visual notification, and a vibration if your device has a vibration feature
- If not confirmed after five minutes, the Alarm/Alert repeats at half volume, and at full volume after ten minutes

See your smart device instructions to learn how to change its settings. Use the following with your CGM system:

- **Bluetooth:** Your transmitter talks to your G5 Mobile app with *Bluetooth* wireless technology. Make sure your smart device *Bluetooth* is on. If not, you will not get Alarm/Alerts or CGM information
- **Notifications:**
  - If you don't enable app notifications during setup, you won't get any Alarm/Alerts
  - Allow notifications to show on your lock screen
- **Battery:** The app must always be running in the background and may drain your smart device battery. Keep the battery charged. Avoid using power saving modes that could turn off *Bluetooth* or vibration
- **Update manually:** Automatic updates of the app or your device operating system can change settings or shut down the app. Always update manually and verify correct device settings afterwards
- **Compatibility:** Before upgrading your smart device or its operating system, check [dexcom.com/compatibility](https://dexcom.com/compatibility)
- **Time:** Don't change your smart device time because it can make the time on the trend screen wrong and the app may stop displaying data

The receiver is a stand-alone medical device and used solely to monitor your glucose trends. If you are concerned about missing an Alarm/Alert (for example, due to smart device

settings, app shutting off due to lack of storage, low smart device battery, etc.), bring your receiver with you. If your smart device is broken or lost, use the receiver.

## G5 Mobile App Installation

Installing the app is easy! Simply download the G5 Mobile app from your smart device app store. Don't use or install the G5 Mobile app on a jailbroken or rooted smart device. The app may not work correctly or remain secure on a such a device.

For information on how to install an app, see your smart device instructions.

## Initial G5 Mobile App Setup

Setting up your app is easy! You'll need your Dexcom account username and password, along with your transmitter box. Once inside, simply follow the setup wizard instructions. The setup wizard walks you through safety information, recommended settings, entering transmitter SN, setting your high/low glucose levels, and receiving CGM notifications.

Your initial setup will require a Dexcom username and password. You can create them by tapping Sign Up within the app, or by going to [dexcom.com](https://dexcom.com).



### From Your Web Browser:

1. **Go** to *[dexcom.com](https://dexcom.com)*.
2. **Click** *My Account*.
3. **Click** *Create Account*.

But what if you are unclear about a step?


If you're unsure of something during your initial setup process, look at the screen for additional informational prompts like I Don't Understand, Learn More, or a question mark. Tap for more information.

## Initial App Setup

Step	What you see	What you do
Introductory Screens		
1		Tap <i>G5 Mobile app icon</i> to open app.
2		Tap <i>Log In</i> .



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Step	What you see	What you do
Introductory Screens		
3	 The image shows the Dexcom G5 mobile login screen. At the top, the 'dexcom' logo is in green, followed by a vertical line and 'G5™ mobile' in grey. Below this are two input fields: 'Username' and 'Password'. Under the 'Username' field is a link that says 'Forgot Username', and under the 'Password' field is a link that says 'Forgot Password'. At the bottom of the screen is a large green button with the word 'LOGIN' in white capital letters. Below the 'LOGIN' button is a smaller link that says 'Sign Up'.	<p><b>Enter</b> existing <i>username</i> and <i>password</i></p> <p>OR</p> <p>Need a Dexcom username and password?</p> <p><b>Tap</b> <i>Sign Up</i>.</p> <p><b>Complete</b> <i>username/password</i> fields.</p> <p><b>Tap</b> <i>Login</i> once.</p>


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Step	What you see	What you do
Introductory Screens		
4	 	Tap <i>Let's Get Started</i> .

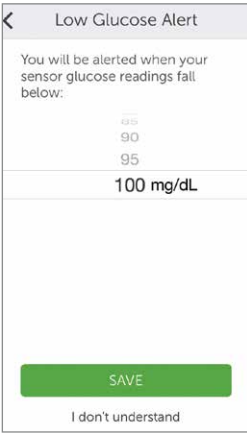
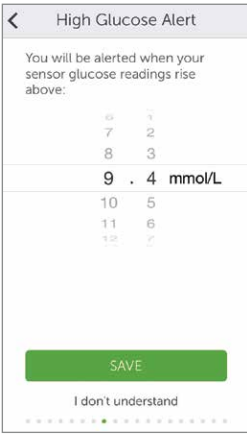
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Step	What you see	What you do
Introductory Screens		
5		<p>The next screens are the terms of use, safety warnings, contraindications, and the recommended settings.</p> <p>Once each screen is read, tap appropriate answer to move forward.</p> <p>Tap <b>Full Safety Statement</b> or, when applicable, <b>I don't understand</b> to get more information.</p>


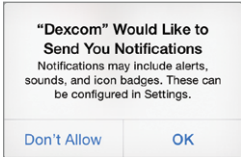
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Step	What you see	What you do
<b>Setting Up Your App Alarm/Alerts and Basic Settings</b>		
6		<p><b>Set your <i>Low Glucose Alert</i>.</b> Default is 80 mg/dL.</p> <p><b>Scroll</b> to select another amount.</p> <p><b>Tap Save</b> to move forward.</p> <p>Once your Low Glucose Alert is set, you'll receive an Alert if your glucose dips below your set amount.</p>
7		<p><b>Set your <i>High Glucose Alert</i>.</b> Default is 200 mg/dL.</p> <p><b>Scroll</b> to select another amount.</p> <p><b>Tap Save</b> to move forward.</p> <p>Once your High Glucose Alert is set, you'll receive an Alert if your glucose rises above your set amount.</p>


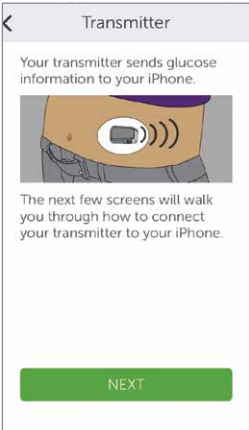
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Step	What you see	What you do
Setting up Your App Alarm/Alerts and Basic Settings		
8a		<p><b>Apple:</b> Make sure you get your Alarm/Alert notifications. <b>Tap <i>I Understand</i>.</b></p>
8b		<p><b>Apple:</b> <b>Tap <i>OK</i> or <i>Allow</i></b> to get Alarm and Alerts.</p>



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Step	What you see	What you do
9		The next screens provide suggestions for device volume, <i>Do Not Disturb</i> , and other basic settings. <b>Tap appropriate answer</b> to move forward.
Connecting/Pairing Transmitter With App		
10		<b>Tap Next.</b>

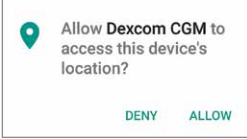


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Step	What you see	What you do
Connecting/Pairing Transmitter With App		
11a		<p><b>Verify <i>Bluetooth</i> is on.</b></p> <p>The app checks <i>Bluetooth</i> is turned on.</p>
11b		<p><b>Android 6+:</b></p> <p>To use <i>Bluetooth</i>, you must let the app use your location.</p>



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Step	What you see	What you do
<b>Connecting/Pairing Transmitter With App</b>		
11c		<b>Android 6+:</b> To use <i>Bluetooth</i> , <b>tap Allow</b> .
12a		<b>Get your transmitter box.</b> <b>Tap Take Photo.</b>
12b		<b>Tap Allow or OK</b> to use the camera, if asked.



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Step	What you see	What you do
<b>Connecting/Pairing Transmitter With App</b>		
12c		<p><b>Turn</b> <i>transmitter box</i> upside down on a flat surface with barcodes facing up.</p> <p><b>Center</b> <i>longest barcode</i> within green brackets.</p> <p>For information on how to pair transmitter after initial setup, see Chapter 8.</p> <p><b>Please Note:</b> Picture is representational only; the back of your transmitter box may not look the same.</p>
12d		<p>Check mark confirms successful transmitter SN scan.</p>

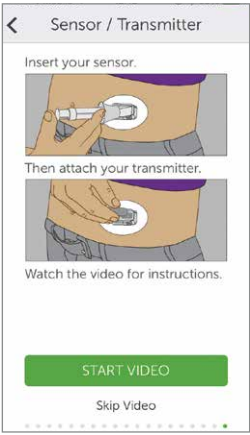

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Step	What you see	What you do
Connecting/Pairing Transmitter With App		
12e		<p>If unable to use app's scanning device: <b>Tap</b> <i>Enter transmitter SN by hand.</i></p>
12f		<p>Use keyboard to enter transmitter SN. Confirm correct SN. <b>Tap</b> <i>Save.</i></p>

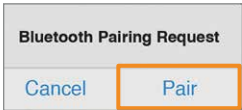

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Step	What you see	What you do
Connecting/Pairing Transmitter With App		
13		<p><b>Insert <i>sensor</i> and <i>attach transmitter</i></b> following video's instructions.</p> <p>See Chapter 6 for more information.</p>
14		<p><b>Wait</b> up to 30 minutes for smart device and transmitter to connect.</p>

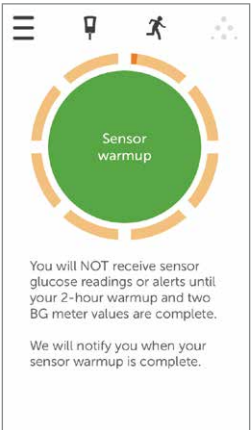
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Step	What you see	What you do
Connecting/Pairing Transmitter With App		
15	 A dialog box titled "Bluetooth Pairing Request" with two buttons: "Cancel" and "Pair". The "Pair" button is highlighted with an orange border.	<b>Apple:</b> At prompt, <b>tap</b> <i>Pair</i> to pair app with transmitter.
16	 A screen with a green circle in the center containing the text "Tap to start 2-hour sensor warmup". Above the circle are four icons: a menu icon, a sensor icon, a person icon, and a refresh icon. Below the circle is a link with a question mark icon and the text "Sensor insertion video".	<b>Tap</b> green circle to start your sensor session.

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Step	What you see	What you do
Connecting/Pairing Transmitter With App		
17		<p><b>Tap</b> <i>Sensor warmup</i> circle to start your two-hour sensor warmup.</p> <p><b>Congratulations!</b></p> <p>When you see the sensor warmup timer, your initial setup is complete.</p>

If you have any issues setting up the G5 Mobile app, always contact Technical Support (available 24/7):

- TechSupport@dexcom.com
- Toll free: **1.888.738.3646**
- Toll call: **1.858.200.0200**

If you are having problems with your smart device, contact your smart device's support line.

After completing your initial app setup, set up the receiver or go to Chapter 6 to start your initial sensor session.

## 5.5 Dexcom G5 Receiver

In the previous chapter, you learned about the receiver's components. The following is a refresher to help in your initial setup.

### Display Screen

- Trend screen
- Menu selection screen

### Navigation Wheel

- Select Button
  - Button in the middle of the navigation wheel
  - Center button does not say “Select”
  - Press to
    - Turn on receiver
    - Select options/features
    - Accept changes
    - Move forward through menus/features
- Up/Down Arrows
  - Scroll through trend screens
  - Highlight menu items
  - Change values
- Left Arrow
  - Go back to last item or screen
- Right Arrow
  - Go forward to next item or screen

## Initial Setup of the Dexcom G5 Receiver

Press the select button to turn receiver on.

The first screen is the startup screen with progressing green bars. Once complete, a setup wizard guides you through the initial setup steps. Don't be alarmed if your receiver buzzes or makes other sounds during this process.

After your initial setup is complete, you won't see the setup wizard again. Your settings can always be adjusted using menu options.



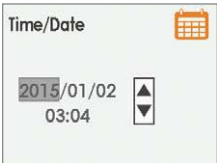
How you complete your initial setup differs between the receiver and your smart device; however, the data is the same.

Setup Wizard Prompts:

- Time/Date
- Transmitter Serial Number
  - Back of transmitter
  - Back of transmitter's box
- Setting Low Alert
- Setting High Alert

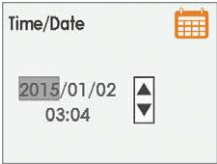


Before starting a session, you may want to check the receiver's battery level. If it is less than half, go to Chapter 15 for charging instructions.

## Initial Receiver Setup

Step	What you see	What you do
Initial Screens		
1		<b>Press <i>select button</i></b> to turn receiver on.
2		Wait.
Time/Date		
3a		<p><b>Press <i>up/down arrows</i></b> to change year.</p> <p><b>Press <i>right arrow</i></b> to move forward.</p> <p><b>Press <i>up/down arrows</i></b> to change month.</p> <p><b>Press <i>right arrow</i></b>.</p> <p><b>Press <i>up/down arrows</i></b> to change day.</p> <p><b>Press <i>right arrow</i></b> to move to time.</p>





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Step	What you see	What you do
<b>Transmitter</b>		
3b		<p><b>Press up/down arrows</b> to change hour.</p> <p><b>Press right arrow.</b></p> <p><b>Press up/down arrows</b> to change minutes.</p> <p><b>Press right arrow.</b></p> <p><b>Press up/down arrows</b> to select AM/PM.</p> <p><b>Press select button</b> to save and close.</p> <p><b>NOTE:</b> After initial setup, if battery is drained, receiver will vibrate once and you will need to reset date and time.</p>
4a		<p><b>Turn transmitter box upside down</b> to locate SN number.</p> <p>For information on how to pair transmitter after initial setup, see Chapter 8.</p> <p><b>Please Note:</b> Image is representational only; your box label may look different.</p>
4b		<p>If transmitter box isn't available: SN is on transmitter's back</p>


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Step	What you see	What you do
<b>Time/Date</b>		
4c		<p><b>Press</b> <i>up/down arrows</i> to select and enter transmitter SN.</p> <p><b>Press</b> <i>right arrow</i> to move to next digit.</p> <p><b>Press</b> <i>select button</i> to save and close.</p>
<b>Setting Low Alert</b>		
5a		<p>System default is set at 80 mg/dL.</p> <p><b>Press</b> <i>select button</i> to save at present levels and close.</p>
5b		<p>To change value:</p> <p><b>Press</b> <i>up/down arrows</i> to change value at 5 mg/dL increments.</p> <p><b>Press</b> <i>select button</i> to save and close.</p>
<b>Setting High Alert</b>		
6a		<p>System default is set at 200 mg/dL.</p> <p><b>Press</b> <i>select button</i> to save at present levels and close.</p>

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Step	What you see	What you do
Setting High Alert		
6b		<p>To change value:</p> <p><b>Press</b> <i>up/down arrows</i> to change value at 10 mg/dL increments.</p> <p><b>Press</b> <i>select button</i> to save and close.</p>

These steps are enough to get you going; now you can start your sensor session!

## Summary

Now You Can:

- Create a Dexcom username and password
- Download the G5 Mobile app
- Set up app with the recommended settings
- Successfully set up your Dexcom G5 receiver

## What's Next?

Now that you have completed setting up your app and/or the receiver, your next step is starting a sensor session.

No matter what monitoring method you choose, starting a sensor session is the same:

- Inserting the sensor
- Attaching the transmitter
- Pairing the transmitter to your device
- Two-hour sensor warmup
- Initial calibrations

# Chapter 6

## *Let's G5! The Basics:*

# Starting a Sensor Session: Inserting Sensor, Attaching Transmitter, and Starting Your Session

## 6.1 Overview

Now that your display devices are set up, you're ready to begin a sensor session. If this is your first time inserting a sensor, you may want to watch the Dexcom G5 sensor insertion video to get a better understanding of the steps.

The Dexcom G5 sensor insertion video is available three ways:

1. Through the app
2. Via the USB card in your Dexcom G5 receiver package
3. Online at [dexcom.com](https://dexcom.com):
  - a. Click Support tab at top of page
  - b. Click Education

After inserting the sensor, start the sensor warmup on your smart device and receiver. The sensor warmup takes approximately two hours, during which time your body is getting used to the new sensor, allowing for more accurate sensor glucose readings. Once the two-hour sensor warmup has passed, you enter two back-to-back fingerstick measurements to calibrate the sensor's glucose readings with your fingerstick measurements (Calibration is covered in the next chapter).

Make sure you give yourself enough time to finish the startup session. Remember that your smart device's *Bluetooth* needs to pair with the transmitter, which may add up to 30 minutes to your wait time. Good news is you don't need to sit around waiting—as long as you have your display device near, you can go about your day running errands, gardening, personalizing the Dexcom G5 settings, whatever you choose during that time frame.

Keep your display device(s) handy during the warmup period—it shows how much time has passed, notifying you with beeps and an icon when your sensor session is ready for its initial calibrations.

After this chapter you will be able to:

- Identify sensor applicator features
- Properly prepare for sensor insertion
- Choose the best location to insert your sensor
- Correctly insert your sensor
- Prepare transmitter for placement
- Correctly attach transmitter to sensor
- Outline what happens during the sensor warmup
- Identify countdown icon

## 6.2 Safety Statements

Following are some important warnings and precautions to review; we want to make sure you and the system are safe before starting a sensor session.

### Warning

**Don't:** *If a sensor breaks under the skin with no portion visible above the skin, don't remove it.*

**Do:** *Seek professional medical help if you have symptoms of infection or inflammation (e.g., redness, swelling, or pain) at the insertion site.*

*Always report a broken sensor to Technical Support (available 24/7) as soon as possible:*

- *TechSupport@dexcom.com*
- *Toll free: 1.888.738.3646*
- *Toll call: 1.858.200.0200*

**Why:** Sensors may fracture on rare occasions.

### MRI with broken wire:

If you have experienced a broken sensor and are planning to undergo an MRI, please discuss the following with your doctor or technician.

Laboratory (in vitro) MRI tests did not detect any safety hazards for a broken sensor that remains in the body.

There was no significant movement or heating of the wire. Imaging artifacts were limited to the area around the wire.

### Warning

**Do:** *Store sensor between 36° F-77° F during its shelf life. Never store sensors in the freezer.*

**Why:** Storing the sensor incorrectly might cause the sensor glucose readings to be inaccurate.

**Consequences:** If stored outside of 36° F-77° F, your sensor glucose readings may not be accurate, resulting in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Warning

**Do:** Use BG values from your BG meter for treatment decisions (e.g., how much insulin to take) if your Dexcom G5 does not display a sensor glucose reading or if you are getting inconsistent readings.

**Why:** Inconsistent readings may indicate that your sensor glucose readings are inaccurate.

**Consequences:** Using inconsistent sensor glucose readings for treatment decisions could result in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Precaution

**Do:** Select sensor insertion site with care.

- Avoid:
  - Areas likely to be bumped, pushed or squeezed
  - Areas of skin with scarring, tattoos, or irritation
  - Injecting insulin within 3 inches of sensor
  - Placing an insulin pump infusion set within 3 inches of sensor

**Why:** Inserting sensor in these areas may affect sensor glucose readings.

**Consequences:** Inaccurate sensor glucose readings may result in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Precaution

**Do:** Check sensor package before opening.

**Why:** Make sure the sterilize sensor pack has not been damaged or previously opened. If opened or damaged, sensor may be unsterile.

**Consequences:** Using an unsterile sensor may cause an infection.

## 6.3 Prepping for Sensor Insertion



Before inserting a sensor, make sure you have everything you need. Some items are included in the Dexcom G5 packages, others are not.

### Items Included in Your Dexcom G5 Packages

For sensor insertion, you need the sensor and transmitter.

#### Sensor Applicator

##### Inside Sensor Box

What you see	What it is
	Sterilized sensor pouch with important label information. <b>Check</b> <i>expiration date</i> .
	Single use sensor applicator.

Knowing what each applicator piece does helps you successfully insert your sensor. Chapter 4, Section 4.6 gave you an overview of the sensor applicator.

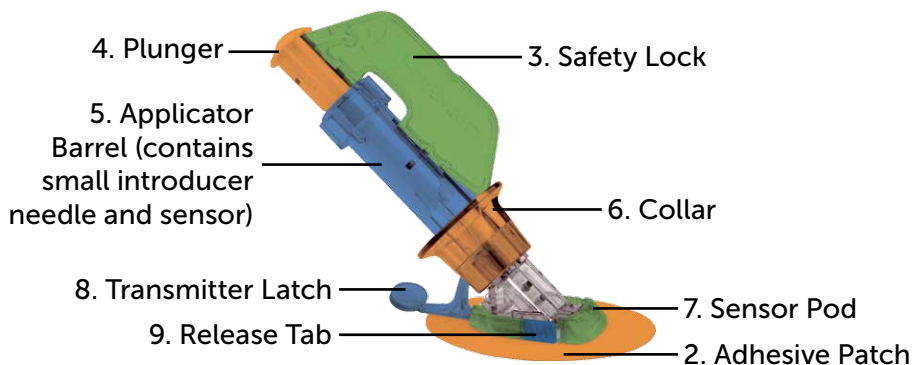


Figure 3. Dexcom G5 Sensor Applicator and Pod

The following table reviews the sensor applicator components in order of use.

### Applicator Components

Order of use	Name	What it does
1	<b>Sensor Pouch</b>	Sterilized for your protection. Open to remove applicator and sensor.
2	<b>Adhesive Patch</b>	Holds the sensor/transmitter in place on your skin.
3	<b>Safety Lock</b>	Prevents plunger from inserting sensor until you are ready.
4	<b>Plunger</b>	Inserts sensor wire into your body.
5	<b>Applicator Barrel</b>	Contains small insertion needle and sensor wire. Disposable, for single use only.



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Order of use	Name	What it does
6	<b>Collar</b>	Collar removes insertion needle. Helps remove applicator barrel once sensor wire is inserted.
7	<b>Sensor Pod</b>	Holds sensor wire in place under skin. Holds transmitter.
8	<b>Transmitter Latch</b>	Locks transmitter into sensor pod.
9	<b>Release Tab</b>	Allows you to remove applicator barrel from sensor pod.

## Transmitter

### Transmitter Box

What you see	What it is
	Bottom of box with important label information. Keep box until transmitter battery dies.
	Reusable transmitter. <b>Please Note:</b> Picture is representative only; your transmitter may look different.

In the previous chapter, you entered your transmitter SN into your display devices and made sure your smart device and/or receiver connected with the transmitter. You won't be able to start a sensor session if your transmitter isn't paired with your receiver and/or smart device.

### **Not included in packages:**

- Alcohol wipes
- Your BG meter
- Your test strips

Before starting, check your BG meter; make sure it's in good working order following manufacturer's directions and the meter's date and time match your display device's date and time.

Make sure test strips haven't expired and work with your BG meter.

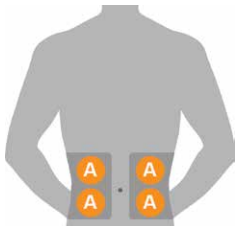
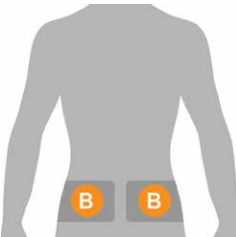
Before removing the sensor applicator out of its sterile pouch, determine the best place to insert your sensor.

## **6.4 Choosing Your Insertion Site**

Choose a place on your belly (or if user is between the ages of 2 and 17, upper buttocks) to insert the sensor; the site should be either above or below your belt line. The best areas are usually flat, "pinchable," and free from where rubbing can occur (along the waistband, seat belt strap or where you lie when sleeping).

For more help on ideal sensor insertion sites, contact your healthcare professional.

## Insertion Sites

Location	Where it is
	Front of body (belly area) for ages 2 years and above.
	Back of body (upper buttocks) if user is between the ages of 2 and 17 years:

### Do:

- Remove the sensor and applicator from its sterile pouch only at time of use
- Place at least 3 inches from your insulin pump infusion set or injection site
- If needed, shave the area so adhesive patch sticks securely
- Make sure area is clean and free of lotions, perfumes, and medications

### Don't:

- Use same site repeatedly for sensor insertion
- Use same site for 2 sensor sessions in a row
- Use sites where bones are close to the surface of your skin (e.g.; ribs or hip bones)
- Use sites where sensor can be rubbed against

If you have concerns about the sensor pod not sticking, before inserting your sensor, you can make the sensor site stickier to help ensure the sensor pod does not peel.

## Optional Site Preparation

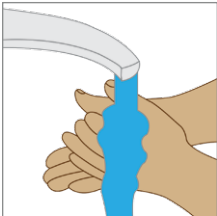
Use optional skin adhesives (Mastisol™, SkinTac™) as part of your insertion site preparation to help keep your sensor pod attached. Apply the skin adhesive after you selected and cleaned your insertion site. Create an empty sideways oval, making sure you don't get any skin adhesive inside the oval. Let the oval dry based on skin adhesive manufacturer's instructions. Once dry, your skin may feel slightly sticky.

**NOTE:** Contact your healthcare professional for specific questions regarding the use of medical tape, barrier wipes and/or other adhesives as it relates to your use of Dexcom CGM.

## 6.5 Inserting Your Sensor

You've collected all of the needed items to begin a sensor session, viewed the tutorials, reviewed the sensor applicator, and prepped the sensor pod site. You're now ready to insert your sensor!

### Sensor Insertion

Step	Picture	What you do
Preparation		
1		<b>Wash</b> and <b>dry</b> your hands.

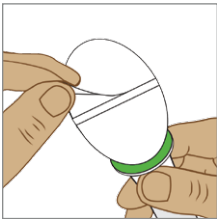
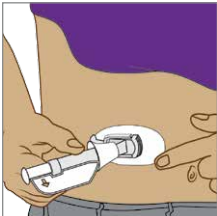

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Step	Picture	What you do
<b>Preparation</b>		
2		<p><b>Clean</b> insertion site with alcohol wipe. Let dry.</p>
3		<p><b>Optional Step:</b> Skin Adhesive</p> <ul style="list-style-type: none"> <li>• <b>Create</b> an <i>empty sideways</i> oval on the skin</li> <li>• Do not get any skin adhesive inside the oval</li> <li>• Let skin adhesive dry (see manufacturer's instructions)</li> <li>• Insert sensor on clean skin in center of oval</li> </ul>
4		<p><b>Check</b> pouch: Is it damaged or already opened?</p> <p><b>Remove</b> <i>sensor applicator</i> from sterile pouch.</p> <p><b>Closely inspect</b> <i>sensor</i>, check it hasn't been damaged.</p> <p><b>Keep</b> <i>sensor packaging</i> until sensor session is complete.</p>

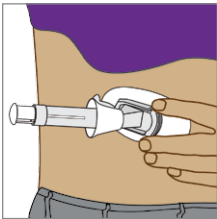
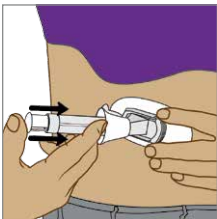
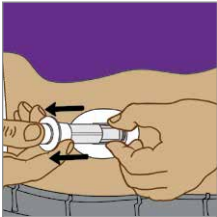
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Step	Picture	What you do
Attaching Sensor Pod		
5		<p><b>Pull off</b> <i>adhesive backing tabs</i>.</p> <p><b>Don't touch</b> <i>sticky adhesive patch</i>.</p>
6		<p><b>Place</b> <i>sensor</i> horizontally, not vertically, on skin.</p> <p><b>Move</b> fingers around top of adhesive patch several times to secure tape.</p>
Inserting Sensor Wire		
7		<p><b>Hold</b> <i>applicator barrel</i>.</p> <p><b>Pull out</b> <i>safety lock</i>.</p>

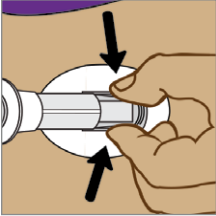
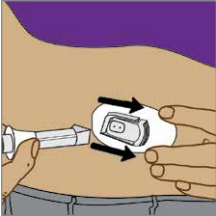
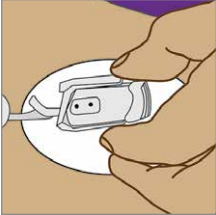
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Step	Picture	What you do
Inserting Sensor Wire		
8		<p><b>Place</b> <i>fingers</i> of one hand on edges of adhesive patch.</p> <p><b>Pinch up</b> <i>your skin</i> at the tips of the white adhesive.</p>
9		<p><b>Place</b> <i>two fingers</i> directly <i>above</i> collar to steady applicator barrel.</p> <p><b>Place</b> <i>thumb</i> on the white plunger.</p> <p><b>Push</b> <i>plunger</i> completely down the applicator barrel.</p> <ul style="list-style-type: none"><li>• You should hear 2 clicks.</li></ul> <p><b>NOTE:</b> Finger placement is important for correct insertion.</p>
Removing Applicator Barrel and Collar		
10		<p><b>Move</b> <i>two fingers</i> from <i>above</i> collar to <i>below</i> collar.</p> <p>Keep your thumb as a base on the white plunger.</p> <p><b>Pull back</b> <i>collar</i> all the way towards your thumb.</p> <p>You should hear 2 clicks.</p> <p><b>NOTE:</b> Finger placement is important for correct removal.</p>

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Step	Picture	What you do
Removing Applicator Barrel and Collar		
11		<p><b>Hold</b> <i>transmitter latch</i> down against your body.</p> <p><b>Squeeze</b> <i>ribbed release tabs</i> on the sides of sensor pod.</p>
12a		<p><b>Move</b> applicator barrel forward and out, away from your body.</p> <p>Follow local ordinances when disposing the applicator.</p>
12b		<p>What's left?</p> <ol style="list-style-type: none"><li>1. Sensor pod</li><li>2. Transmitter latch</li></ol>

You have successfully inserted the sensor!

At this point, you should have two items attached to your belly or upper buttocks:

1. Sensor pod
2. Transmitter latch

## Having problems?

If it's the first time inserting a sensor, you may have questions or need help. If you do, please contact Technical Support (available 24/7):

- TechSupport@dexcom.com
- Toll free: **1.888.738.3646**
- Toll call: **1.858.200.0200**

The next step is attaching your transmitter to the sensor pod.

## 6.6 Attaching Your Transmitter

Now that you have inserted your sensor, you need to attach your transmitter.

Since the transmitter is reusable, you don't need a new one every time you start a sensor session.

Keep your current session's transmitter box. The bottom label has important information you may need after you've attached the transmitter. Once the transmitter has been attached, you can't remove it until your session is over. Chapter 8 reviews when and how to remove your transmitter.

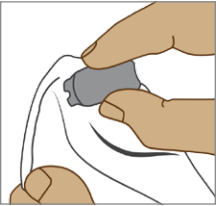
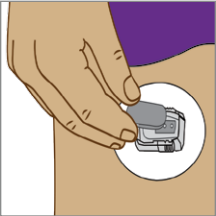


Before attaching your transmitter, make sure you've entered the correct transmitter SN into your display device. Chapter 5 covers entering the transmitter's SN number during initial setup. See Chapter 8 for pairing your transmitter after the startup wizard.

### Attaching Transmitter

Step	Picture	What you do
1		<p><b>Remove</b> <i>transmitter</i> from box.</p> <p><b>Keep</b> <i>box</i>.</p> <p><b>Save</b> <i>safety latch</i> from sensor applicator (helps remove transmitter once sensor session is over).</p> <p><b>Get</b> <i>alcohol wipe</i>.</p>

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Step	Picture	What you do
2		<p><b>Wipe</b> <i>back of transmitter</i> with alcohol wipe.</p> <p><b>Let dry</b> for 2-3 minutes.</p> <p><b>Don't</b> let the back of transmitter touch your skin.</p> <p><b>Don't</b> scratch transmitter's back; this can harm the waterproof seal.</p>
3		<p>Flat side down.</p> <p><b>Slide</b> <i>transmitter's</i> small end under the sensor pod lip located in front of pod's ribbed tabs, away from transmitter latch.</p>
4		<p><b>Keep</b> <i>finger on transmitter</i> holding it in place.</p> <p><b>Push</b> <i>transmitter latch</i> up and forward over the transmitter's wide end with your other hand.</p> <p>You should hear 2 clicks.</p>
5		<p>Is transmitter secure?</p> <p>Before removing transmitter latch, <b>verify</b> <i>transmitter</i> is securely in place.</p> <p>Make sure none of the transmitters sides popped out of the sensor pod.</p> <p>If transmitter is not completely snapped in, you may have a bad connection and it won't be watertight.</p>

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Step	Picture	What you do
6		<p><b>Hold</b> <i>sensor pod sides</i> with one hand.</p> <p><b>Twist latch away</b> from your body with other hand.</p> <p><b>Remove latch.</b></p> <p><b>Don't</b> remove transmitter while sensor pod is attached to skin.</p>

You're almost done starting your sensor session!

Inserting the sensor, attaching the transmitter, and the two-hour sensor warmup are the same, regardless of whether you use the receiver or app.

The remaining steps vary from app to receiver:

- Letting your device know you need to start the sensor warmup.
- Following your warmup countdown

## 6.7 Loose Sensor Pod

The sensor pod should stay on your skin using its own adhesive; however, in the course of normal wear and tear, it may peel up.

If the patch peels up, use medical tape (such as Blenderm™, Tegaderm™, Smith & Nephew IV3000®, 3M™ tape) for extra support.

- Tape over white adhesive patch on all sides for even support
- Don't tape over the transmitter or any plastic parts of the sensor pod
- Don't tape under sensor pod
- Don't leave any substance on the skin where you insert the sensor



Figure 4. The Right Way to Use Tape for Extra Support

## 6.8 Starting Your Sensor Session

If you choose to use both the receiver and the app, each system requires individual setups (see Chapter 5).



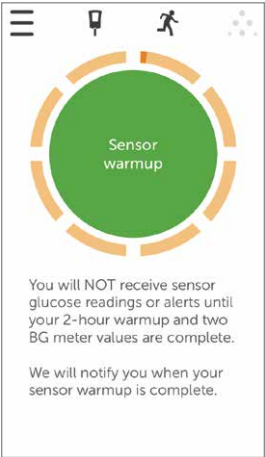
After pairing the transmitter to your display device(s), inserting your sensor, and attaching the transmitter to the sensor pod, your next step is telling your device(s) you want to start a sensor session.

Transmitters are reusable; pairing is required only when using a new transmitter.

During the warmup period, neither device will provide any sensor glucose readings. Your sensor glucose readings begin after the two-hour sensor warmup has passed and you entered the initial two calibration BG values into either the smart device or the receiver.



We'll first review starting the sensor session for the app.

## Dexcom App: Starting a Session


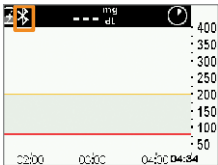
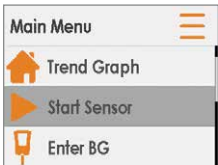
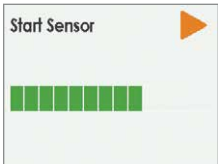
Step	What you see	What you do
1	 A black square with a large green checkmark in the center. Below the checkmark, the text "Pair Successful" is written in white.	If starting a new transmitter, pair it first. See chapter 8.
2	 A green circle with the text "Tap to start 2-hour sensor warmup" in white.	<b>Tap <i>sensor warmup</i></b> circle to start your two-hour sensor warmup. <b>NOTE:</b> You will NOT get any sensor glucose readings, Alarm/Alerts during your two-hour sensor warmup period. Use your BG meter during the warmup period, including when making a treatment decision.
3	 A screen with a green circle in the center containing the text "Sensor warmup". Surrounding the circle are four orange dashes forming a ring. Above the circle are three icons: a hamburger menu, a sensor icon, and a person walking icon. Below the circle, there is a text box with the following text: "You will NOT receive sensor glucose readings or alerts until your 2-hour warmup and two BG meter values are complete. We will notify you when your sensor warmup is complete."	<b>Wait.</b> Screen provides countdown to sensor warmup. The orange dashes darken as the countdown moves forward. <b>Keep <i>smart device</i></b> within 20 feet of transmitter during the sensor warmup period.

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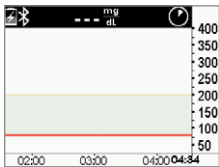


Step	What you see	What you do
4		<p><b>Locked screen.</b></p> <p>Initial calibration notification tells you when warmup is complete.</p> <p>Chapter 7 covers calibrating.</p>
5		<p>Initial calibration prompt tells you when warmup is complete.</p> <p>Sensor warmup is complete.</p> <p>You're ready to calibrate!</p>

## Receiver: Starting a Session

Step	What you see	What you do
1		<b>Press <i>select</i> button</b> to turn on receiver.
2		<p><b>Make sure <i>receiver</i> and <i>transmitter</i></b> are connected/paired before starting sensor session.</p> <p><b>Check <i>receiver</i></b> 10 minutes after starting for <i>Bluetooth</i> icon.</p> <ul style="list-style-type: none"> <li>• Solid: Connected/paired</li> <li>• Blinking: Searching/not paired</li> </ul> <p>Don't start a sensor session until they are paired.</p> <p><b>Once connected/paired:</b></p> <p><b>Press <i>select</i> button</b> to go to Main Menu.</p>
3		<p><b>Press <i>down arrow</i></b> to highlight Start Sensor.</p> <p><b>Press <i>select</i> button</b> to start new sensor session.</p> <p><b>NOTE:</b> After sensor starts, Start Sensor option disappears.</p>
4		<p>Start Sensor progress bar confirms two-hour sensor warmup.</p> <p>Keep your receiver within 20 feet during the warmup period.</p>

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Step	What you see	What you do
5		Receiver returns to the trend graph screen.
6		<b>Wait.</b> Screen provides countdown of the two-hour sensor warmup.
7		Sensor warmup is complete. You're ready to calibrate!

## 6.9 Receiver *Bluetooth* Tips

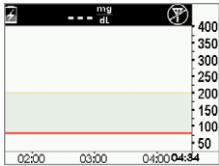
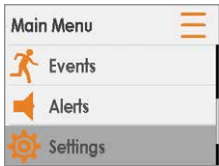
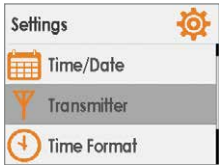

Your transmitter and receiver begin communicating once you start a sensor session. After approximately 30 minutes, if the *Bluetooth* symbol is solid, and not blinking, your transmitter and receiver are talking to each other.

- If blinking, *Bluetooth* is looking for your transmitter
  - Make sure your transmitter and receiver are within 20 feet of each other
  - Don't start a sensor session until they are paired.

If the *Bluetooth* icon isn't on the receiver and the Signal Loss icon appears in the receiver's upper right corner of the status bar, they're not communicating. Unlike with other Alerts, if your smart device is on Silent or Do Not Disturb, you won't get a vibration or hear any


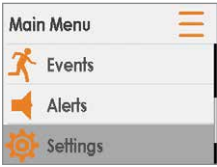
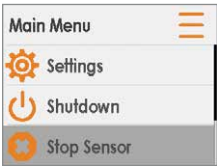
notifications. You will only see the Alert. To make sure you get your Signal Loss Alert, check to see that your smart device is not set on Silent or Do Not Disturb.

## No Communication Between Transmitter and Receiver

Step	What you see	What you do
1		<b>Check</b> correct <i>transmitter</i> SN is in receiver. SN is on the label on bottom of transmitter box. <b>Press</b> <i>select</i> button to go to Main Menu.
2		<b>Press</b> <i>down arrow</i> to highlight Settings. <b>Press</b> <i>select</i> button.
3		<b>Press</b> <i>down arrow</i> to highlight Transmitter. <b>Press</b> <i>select</i> button.
4		<b>Press</b> <i>select</i> button again.

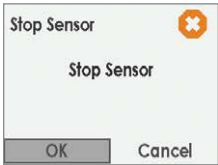
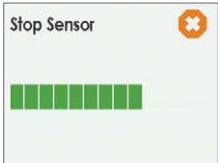
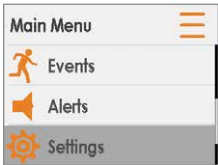
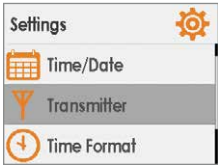

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Step	What you see	What you do
5		<p><b>Check</b> correct <i>transmitter</i> SN is in receiver. SN is on the label on bottom of transmitter box.</p> <p><b>Compare</b> SN number in receiver to SN on transmitter box.</p> <p>If correct, but still have Signal Loss icon, contact Technical Support (available 24/7) for help:</p> <ul style="list-style-type: none"> <li>• TechSupport@dexcom.com</li> <li>• Toll free: <b>1.888.738.3646</b></li> <li>• Toll call: <b>1.858.200.0200</b></li> </ul> <p><b>Press</b> <i>select button</i> to exit screen.</p> <p><b>Press</b> <i>left arrow</i> twice to go to Main Menu.</p>
If Wrong SN Entered		
6		<p><b>Press</b> <i>left arrow</i> twice to go to Main Menu.</p>
7		<p>If sensor session has started, to correct transmitter SN, you must stop the sensor session.</p> <p><b>Press</b> <i>down arrow</i> to highlight Stop Sensor.</p> <p><b>Press</b> <i>select button</i>.</p>


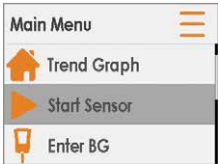
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Step	What you see	What you do
<b>If Wrong SN Entered</b>		
8		<b>Press</b> <i>select button</i> again to stop session.
9		<b>Wait</b> for sensor session to end.
10		From Main Menu: <b>Press</b> <i>down arrow</i> to highlight Settings. <b>Press</b> <i>select button</i> .
11		<b>Press</b> <i>down arrow</i> to highlight Transmitter. <b>Press</b> <i>select button</i> .
12		<b>Highlight</b> <i>Transmitter SN</i> . <b>Press</b> <i>select button</i> .

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Step	What you see	What you do
If Wrong SN Entered		
13		<p><b>Enter</b> correct SN using up/down arrows:</p> <p><b>Press</b> <i>up/down</i> arrows to select and enter transmitter SN.</p> <p><b>Press</b> <i>right arrow</i> to move to next digit.</p> <p><b>Press</b> <i>select button</i> to save and close.</p> <p><b>Press</b> <i>left arrow</i> twice to return to Main Menu.</p>
14		<p>Start sensor session:</p> <p><b>Press</b> <i>up/down arrows</i> to highlight Start Sensor.</p> <p><b>Press</b> <i>select button</i>.</p>

## 6.10 Sensor Session Warmup

The sensor takes about two hours to adjust to your body. While you are in the sensor warmup period, you can customize your settings. Chapter 12, steps you through how to personalize your Dexcom G5 display devices. Remember, during your warmup period, you will not get any Alarm/Alerts or sensor readings. During this time, use your BG meter.

Once the sensor warmup is complete, you're ready to enter your initial calibrations! The next chapter shows you how.

## Summary

### Now You Can:

- Identify sensor applicator features
- Properly prepare for sensor insertion
- Choose the best location to insert your sensor
- Correctly insert your sensor
- Prepare transmitter for placement
- Properly attach transmitter to sensor
- Outline sensor warmup
- Identify countdown icon

### What's Next?

The next chapter guides you through the calibration steps.

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# Chapter 7

*Let's G5! The Basics:*

## Calibration

### 7.1 Introduction

In the previous chapter, you learned how to insert your sensor, attach your transmitter, and start a new sensor session. You're now ready to begin your last step before getting your sensor glucose readings: Calibration.

This chapter reviews not just your initial calibration, but also update calibrations required throughout your sensor session.

After this chapter, you will be able to:

- Provide an overview of calibration
  - Define "calibration"
  - Explain the importance of calibration
  - Identify steps to ensure a successful calibration
- Recognize steps in taking accurate BG measurements
  - Identify the correct BG site for calibrations
  - Prepare finger for fingerstick measurement
- Determine if you should/should not calibrate
  - Recognize when you can enter a fingerstick measurement for calibration
  - Recognize when you shouldn't enter a fingerstick measurement for calibration
  - Determine if you need to calibrate outside of the normal calibration requirements
- Initiate startup calibration
- Perform update calibrations
- Correctly enter your fingerstick measurement

- G5 Mobile app
- Dexcom G5 receiver
- Identify calibration errors

## 7.2 Safety Statements

### Contraindication

**Don't:** *Never take any medications containing acetaminophen during your sensor session.*

**Why:** Taking medications with acetaminophen (such as Tylenol®, Excedrin® Extra Strength, Sudafed®, Robitussin®) while wearing your sensor may falsely raise sensor glucose readings. Level of sensor inaccuracy:

- Depends on amount of acetaminophen active in your body
- May be different for each person

**Consequences:** Without correct readings you might miss a severe low or high blood glucose event or make a treatment decision that results in injury.

### Warning

**Do:** *Do take a BG measurement with your BG meter and use the BG value for treatment decisions (such as how much insulin to take) if your Dexcom G5 does not display both a number and a trend arrow.*

**Why:** Not having both a number and the arrow means you may be getting inconsistent or inaccurate sensor glucose readings.

**Consequences:** Using inconsistent or inaccurate sensor glucose readings for treatment decisions could result in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Warning

**Do:** *Calibrate at least once every 12 hours.*

**Why:** Calibrating less often than every 12 hours might cause inaccurate sensor glucose readings.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Precaution

**Do:** *Look at trend arrows before calibrating. Trend arrows help you determine if you can calibrate now or should wait.*

**Don't:** *Never calibrate if your BG is changing at a significant rate, typically more than 2 mg/dL per minute.*

*Never calibrate when you see:*

- *A single arrow, pointing up*
  - *Rising 2-3 mg/dL each minute*
- *Two Arrows pointing up*
  - *Rising more than 3 mg/dL each minute*
- *Single arrow pointing down*
  - *Falling 2-3 mg/dL each minute*
- *Two arrows pointing down*
  - *Falling more than 3 mg/dL each minute*

**Why:** Calibrating during significant rise/fall of BG may affect accuracy of sensor glucose readings.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### Precaution

**Do:** *Enter the exact BG value displayed on your BG meter within five minutes of a carefully performed fingerstick measurement.*

**Why:** Entering the wrong BG values, or waiting more than five minutes before entry, might affect sensor accuracy.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### Precaution

**Do:** *Only use fingerstick measurements from your BG meter for calibration.*

**Don't:** *Never use alternative site BG values such as blood from palms, forearms, etc.*

**Why:** Alternative site BG values are different from a fingerstick BG value and may not reflect most recent BG value.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## 7.3 Calibration Overview

### What Is a Calibration?

As you learned earlier, the sensor glucose readings come from measuring the glucose found in fluids between your cells (interstitial fluids). Although blood and interstitial fluids are similar, sensor glucose readings can be different between your fingerstick and your CGM. Calibration provides a comparison, or measurement, between your BG meter's fingerstick measurement and the sensor's glucose readings, allowing alignment between the sensor and BG meter.

Your BG meter “teaches” the sensor your glucose values through calibration. Just like a clock can need adjusting, calibrations allow your CGM to adjust to your body.

## Why Is Calibrating Important?

Calibrations are a must. They align your Dexcom G5 Mobile readings with your BG meter, improving its accuracy and helping it perform at its best.

By calibrating when the system notifies you that a calibration is due, the Dexcom G5 uses your meter's BG value to make sure the sensor glucose readings remain accurate throughout your session.

## How Do I Calibrate?

Take a fingerstick measurement from your BG meter, and simply enter the meter's BG value into your display device.

When taking a fingerstick, it's important to do it correctly. Make sure you wash and dry your hands right before. And remember; always use your finger, never another site.

This chapter lets you know what precautions you need to take before taking your BG meter value, then entering your data. Up to now, you needed to enter information such as Alerts, transmitter SN, etc., separately for the receiver and smart device. Calibration is different.

Do not enter your BG values into both devices: only enter your BG value into your app OR your receiver. If you enter your meter's BG value into your receiver, it takes about five minutes for your sensor glucose readings to begin. In approximately ten minutes, you can view the readings in the other display device.

## How Often Do I Calibrate?

There are three primary “must do” calibration events, each with its own prompts:

1. Two initial calibrations once your warmup session is complete.
2. Update calibrations done twice daily, once every 12 hours.
3. When you're prompted.

If you receive a calibration prompt outside of your scheduled calibration schedule, either the system doesn't accept your most recent calibration or your meter's BG value is very different from the sensor's glucose reading.

Don't worry about keeping track of the time between calibrations; the system will prompt you when you are ready for another.

## 7.4 When to Calibrate

Calibrating on a regular schedule aligns your sensor glucose readings with your meter's BG values. Without calibrations, your sensor may be inaccurate, and as a result, so will your display device's sensor glucose readings, Alerts, and prompts, etc.

There are important times when you must calibrate:

1. Initial or Startup Calibration: two hours after you insert your sensor.
2. 12 Hour Update Calibration: every 12 hours after two-hour startup calibration.
3. When system notifies you: your next calibration is due 12 hours from the LAST calibration, but you may be notified for a calibration sooner.

With calibration prompts, your sensor and display device help you keep your calibration schedule on track. If your BG values are not between 40-400 mg/dL, the system won't accept your calibration. Wait until you are within the 40-400 mg/dL range before entering your BG values.

### Initial Calibration: Sensor Startup Completed

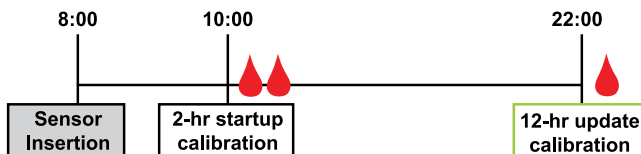
1. When notified (see next table) enter two back-to-back fingerstick measurements into just one device.
2. No need to do initial calibrations twice.
  - a. Calibration data flows between the receiver and your app.
  - b. Ten-minute reporting delay between devices.
3. First update calibration is 12 hours after your initial calibration.

### Update Calibration

Update calibrations are typically performed 12 hours since your last calibration; however, they can be done sooner. As an example, if you know your next calibration is due at 4 AM, you can do the calibration before bedtime, resetting the 12-hour countdown.

1. Enter one fingerstick measurement at least every 12 hours.
2. Display devices provide calibration prompts.
3. Your next calibration is due 12 hours from the LAST calibration but you may be prompted to calibrate sooner.

### Monday (Day One of Sensor Session):



### Tuesday - Sunday (Days 2-7 Sensor Session):

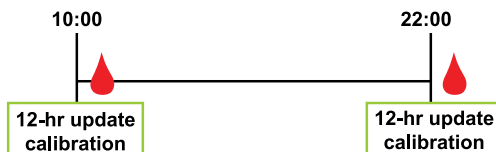





Figure 5. Example Minimum Calibration Schedule During Seven-Day Sensor Session

## 7.5 Calibration Prompts

### Sensor Session Startup Calibration Prompts

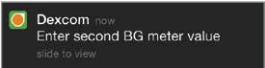


Once your two-hour sensor start-up is complete, your display device tells you it's time to enter the first of your two back-to-back start-up calibrations. Once the system has accepted your BG values, your glucose readings begin. If you don't enter your BG values right away, the system reminds you every 15 minutes. Remember, only use your BG meter for calibrations, and never enter values from your CGM.

## Startup Calibration Prompts

Device	What you see	What it means	What you do
<b>First Calibration</b>			
<b>Smart Device: Notification</b>		<p>Sensor warmup is complete.</p> <p>Ready for first of two initial calibrations.</p>	<p>Follow steps in Section 7.6 and 7.7.</p> <p>Immediately prepare for next calibration.</p> <p>Calibrate only from your BG meter.</p>
<b>Smart Device: In App</b>	 <p>Tap to enter your first BG meter value</p> <p><b>?</b> Why two meter values?</p> <p>Steps:</p> <ol style="list-style-type: none"> <li>1. Wash and dry your hands</li> <li>2. Take a fingerstick with your meter</li> <li>3. Tap the green circle above and promptly enter the exact value from your meter</li> </ol>		
<b>Receiver</b>			

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Device	What you see	What it means	What you do
<b>Second Calibration</b>			
<b>Smart Device: Notification</b>			
<b>Smart Device: In App</b>		Sensor accepted first calibration. Ready for second BG meter value.	Follow steps in Section 7.6 and 7.7. Next calibration in 12 hours.
<b>Receiver</b>			

Your sensor glucose readings begin in approximately five minutes once the device(s) accepts your calibrations. Look for the dots on your trend screen. Each dot represents a single reading taken every five minutes.




## Update Calibration Prompts

Once your start-up calibration is done, your update calibration schedule begins.

The steps to enter your update calibrations are the same as your initial calibration, including entering values in only one display device. The only difference is, with update calibrations; you enter your BG meter value just once.

Like the reminders you received with your initial calibration, if you don't enter your BG meter values right away, the system notifies you every 15 minutes.

### Update Calibration Notifications

Device	What you see	What it means	What you do
<b>Smart Device: Notification</b>		Enter update calibration.	Follow steps in Section 7.6 and 7.7.  Immediately prepare for next calibration.
<b>Smart Device: In App</b>		If notification doesn't go away:	
<b>Receiver</b>		<ul style="list-style-type: none"><li>• System didn't accept calibration</li><li>• BG values are very different from sensor glucose readings</li></ul>	

**Open** app to confirm notification on your smart device, or **press *select button*** to confirm it on your receiver.

## Sound/Vibration Prompts

In case you can't look at your screen, both the smart device and receiver provide, with the exception of your regular 12-hour update calibration, sound/vibration prompts to let you know it's time to calibrate or if there was a system calibration error.

## Smart Device

Calibration alerts repeat every five minutes until confirmed.

## Receiver

The receiver alerts you with an initial vibration for calibration notifications. If not confirmed, you will receive a vibrate/beep every five minutes until confirmed.

## 7.6 Preparing for Calibration

Your sensor depends on you to help make its sensor glucose readings accurate. If you don't prepare properly for the calibration, your sensor may not provide you with the most accurate sensor glucose readings.

When taking a fingerstick, it's important to do it correctly. Make sure you wash and dry your hands. Always use soap and water, not a gel cleaner, as gel cleaners can affect the values. And remember; always use your fingertip, never another site.

## Eight Steps to Successful Calibration:

### Do:

1. Wash and dry your hands before taking a fingerstick measurement.
  - a. Always use soap and water, never gel cleaners.
    - i. Gel cleaners may affect your meter values.
2. Always use the same BG meter you routinely use to measure your BG.
  - a. BG meter and strip accuracy vary between meter brands.
  - b. Switching within a session might cause sensor glucose readings to be less accurate.
3. Follow BG meter's instructions exactly when taking your fingerstick measurement.
4. Verify test strips are current and, if required, coded correctly with BG meter.
5. Check: that *Bluetooth* is active.
6. Use fingerstick (fingertip) BG values only.
  - a. Other sites are not as accurate.
  - b. Must enter within five minutes of taking BG meter value.
  - c. Enter exact BG value from your meter for each calibration.

**Don't:**

7. Never take acetaminophen-containing medication during your session (for example, Tylenol®, Excedrin® Extra Strength, Sudafed®, Robitussin®).
  - a. See your healthcare professional to better understand how long acetaminophen is active in your body.
8. Never calibrate if your BG values are under 40 mg/dL or over 400 mg/dL.
  - a. If BG value is outside of this range, receiver doesn't understand these values and won't calibrate.
  - b. You must wait until your BG is in the range to calibrate.

Be safe—if BG is low, first treat low blood sugar, and then calibrate.

## 7.7 Ready? Set? Calibrate!


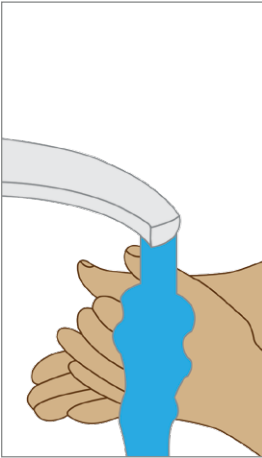
You've followed the eight steps above, have a valid BG value from your meter, and your display device keeps alerting you: Calibrate! Calibrate! Calibrate!

**Remember:**

You don't have to take a fingerstick measurement for each display device when calibrating; once you enter the reading into one; data is pushed to the other within ten minutes.

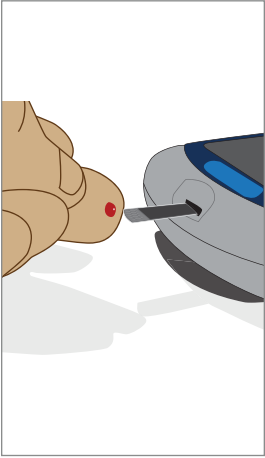
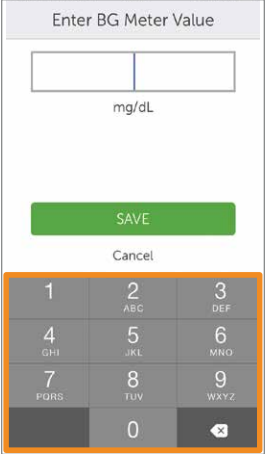
Next are steps to enter your calibrations using the app, followed by the steps for entering your calibrations into the receiver.

## Calibrate With Your G5 Mobile App

Step	What you see	What you do	Additional info
1		Tap <i>circle</i> .	<p><b>Screenshot is for initial calibration only.</b></p> <p><b>Initial calibration:</b> Enter two back-to-back meter BG values.</p> <p><b>Update calibration:</b> Enter single meter BG value.</p>
2		<p><b>Wash and dry your hands.</b></p> <p>Always use soap and water.</p>	<p>Having clean and dry hands is key to getting a good BG meter value.</p> <p>Don't use cleaning gels, they may affect your meter values.</p>



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Step	What you see	What you do	Additional info
3		<p><b>Take a <i>fingerstick BG measurement</i> using your BG meter.</b></p>	<p>Only use your fingertip, never use alternative sites for measuring your BG.</p>
4		<p><b>Enter meter's <i>BG value</i> using number pad.</b></p> <p><b>Tap <i>Save</i>.</b></p>	<p>Double-check your numbers.</p> <p>Entering wrong values can affect the sensor's accuracy.</p>


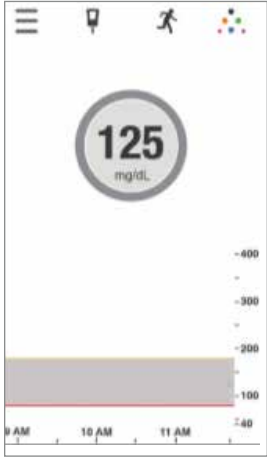
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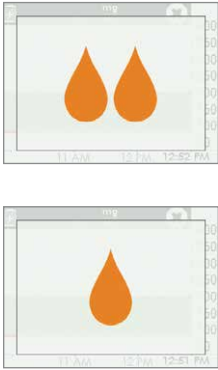
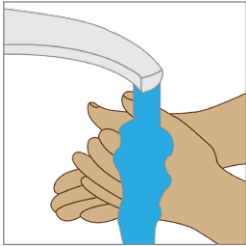
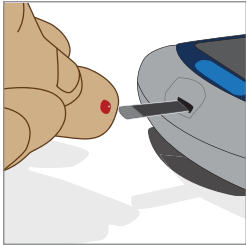
Step	What you see	What you do	Additional info
5		<p><b>Verify</b> value is correct.  <b>Tap Save.</b>          If not correct:  <b>Tap Cancel.</b>  <b>Reenter</b> correct value.</p>	N/A
6		<p><b>Tap circle</b> to enter your second BG value.          Follow steps 2-3 and enter second reading.</p>	N/A

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Step	What you see	What you do	Additional info
7		BG meter icon has no red calibration badge. Calibration accepted.	Your calibration was successful.
8		<b>Wait</b> for next calibration prompt in 12 hours.	Default home screen. Calibration accepted.

## Calibrate With Your Dexcom G5 Receiver

Step	What you see	What you do	Additional info
1		<p><b>Press <i>select button</i></b> to turn on receiver.</p> <p><b>Press <i>select button</i></b> again for Main Menu.</p>	<p>You won't see calibration prompts when receiver screen is black.</p>
2		<p><b>Wash and dry</b> your hands.</p> <p><b>Always</b> use soap and water.</p>	<p>Having clean and dry hands is key to getting a good BG meter value.</p> <p>Don't use cleaning gels, they may affect your meter values.</p>
3		<p><b>Take a <i>fingerstick BG measurement</i></b> using your BG meter.</p>	<p>Only use your fingertip, never use alternative sites for measuring your BG.</p>




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Step	What you see	What you do	Additional info
4		<b>Press up/down arrows</b> to highlight Enter BG. <b>Press select button.</b>	N/A
5		<b>Press up/down arrows</b> to change numbers. <b>Stop</b> at meter's BG value. <b>Press select button.</b>	Sensor default reading is 120 mg/dL. If sensor glucose reading is within the last 15 minutes, screen will show sensor's actual reading.
6a		<b>Verify</b> BG value is correct. If correct: <b>Press select button.</b>	If select button is not pressed: <ul style="list-style-type: none"> <li>• Receiver times out</li> <li>• BG level isn't recorded</li> </ul>
6b		<b>Verify</b> BG value is correct. If incorrect: <b>Press right arrow</b> to highlight Cancel. <b>Press select button.</b> <b>Reenter</b> BG value.	Cancel and reenter BG value. Fingerstick measurement must be within five-minute window.

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Step	What you see	What you do	Additional info
7		<b>Wait.</b>	“Thinking” screen. BG value is accepted.
8		Immediately take another meter reading. Enter meter's BG value.	First calibration accepted. Time for second calibration.
9		<b>Wait</b> for next calibration prompt in 12 hours.	Default home screen. Calibration(s) accepted.

## 7.8 Calibration Errors

Before or during your calibration process, your display device may show error notifications. If the notifications don't go away after 15 minutes, refer to Chapter 19, Troubleshooting.

## Calibration Errors

Device	What you see	What it means	What you do
<b>Smart Device: Notification</b>		Sensor can't calibrate now.	<b>Wait</b> 10-15 minutes. <b>Retake</b> fingerstick measurement at prompt. <b>Enter</b> BG value.
<b>Receiver</b>			
<b>Smart Device: In App</b>		System didn't accept recent calibration.	Additional calibration needed immediately. <b>Calibrate.</b> No sensor glucose readings.
<b>Receiver</b>			

Approximately five minutes after entering your second BG meter value, your display device(s) will start providing sensor glucose readings and glucose level trends. While each display device may have different ways of presenting sensor glucose readings and trends, the meanings are the same.

Fingerstick measurements entered into one device will be available in the other approximately ten minutes after entering data.

## Summary

### Now You Can:

- Provide an overview of calibration
  - Define "calibration"
  - Explain the importance of calibration
  - Identify steps to ensure a successful calibration
- Recognize steps in taking accurate BG measurements
  - Identify the best BG site for calibrations
  - Prepare finger for fingerstick measurement
- Determine if you should/should not calibrate
  - Recognize when you can enter BG meter values
  - Recognize when you should not enter BG meter values
  - Determine if you need to calibrate outside of the normal calibration requirements
- Initiate startup calibration
- Perform update calibrations
- Correctly enter your BG meter value
  - G5 Mobile app
  - Dexcom G5 receiver
- Identify calibration errors

### What's Next?

In the next chapter, you'll learn how to end a typical seven day sensor session, and what to do if you need to end your sensor session early, along with removing the transmitter and determining if you need to replace it.

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# Chapter 8

*Let's G5! The Basics:*

## Ending Your Sensor Session and Transmitter Session

### 8.1 Introduction

Dexcom G5 sensor sessions last seven days. This chapter reviews what you should expect when your session is about to expire and removing the sensor and transmitter. It also covers how to determine if you need to end your session early.

After this chapter, you will be able to:

- Identify replace sensor prompts at the end of a seven-day sensor session
- Recognize when you have to end a sensor session early
- Successfully end a sensor session early
- Identify how you can prevent sensor session failures
- Remove your sensor pod with transmitter attached
- Separate transmitter from sensor pod
- Determine if transmitter can be used for another sensor session
- Pair new transmitter

To keep up with your glucose trends, it's important to begin a new sensor session as quickly as possible. After a sensor session ends, the sensor stops taking your sensor glucose readings. You won't get your trends, nor will you get any Alarm or Alerts.

Before stopping a session, and removing the sensor pod and transmitter, review the following safety statements to make sure you don't harm yourself.

## 8.2 Safety Statements

### Warning

**Don't:** *If a sensor breaks under the skin with no portion visible above the skin, don't remove it. Don't ignore sensor fractures.*

**Do:** *Seek professional medical help if you have symptoms of infection or inflammation (e.g., redness, swelling or pain) at the insertion site.*

*Always report a broken sensor to Technical Support (available 24/7) as soon as possible:*

- *TechSupport@dexcom.com*
- *Toll free: 1.888.738.3646*
- *Toll call: 1.858.200.0200*

**Why:** Sensors may fracture on rare occasions.

### Precaution

**Do:** *Keep transmitter until its battery life has ended.*

**Why:** Transmitter is reusable. Use for multiple sessions.

## 8.3 Ending Your Sensor Session

There are different ways your sensor session might end.

The most common is your sensor's typical seven-day session ended. The second is ending the sensor session early. You may end a session early based on a personal decision, or on rare occasions, the receiver or app detects sensor issues and prompts you to end the session.

Let's review ending a normal session first. Later in this chapter we'll review the prompts for ending the session early.

### Ending Your Seven Day Sensor Session

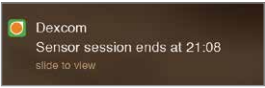
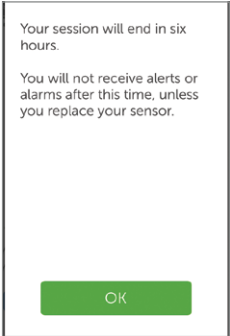
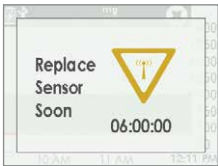
Just like with other prompts, you need to confirm your sensor session ending prompts:

- App
  - **Tap** screen

- Receiver
  - **Press select button**

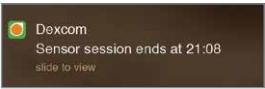
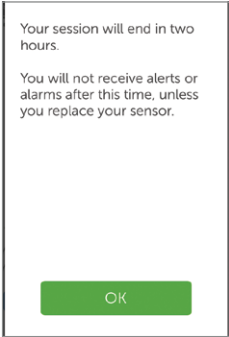
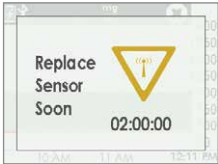
## End of Seven-Day Sensor Session Prompts

### Ending Sensor Session Prompts

Device	What you see	What it means
<b>At Six Hours</b>		
<b>Smart Device: Notification</b>		<p>Prompts begin when sensor session has only six hours left.</p> <p>Clock will count down until session has ended.</p> <p>Continue to get sensor glucose readings.</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

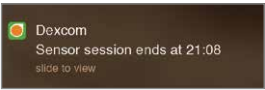
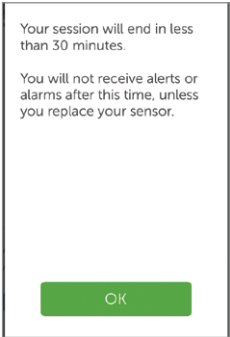
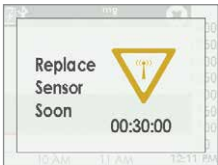
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Device	What you see	What it means
<b>At Two Hours</b>		
<b>Smart Device: Notification</b>		<p>Two hours remain on your current sensor session.</p> <p>Continue to get sensor glucose readings.</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

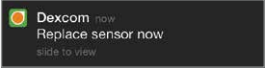
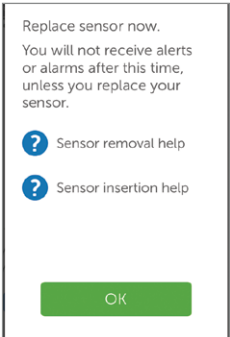

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Device	What you see	What it means
At Thirty Minutes		
Smart Device: Notification		Thirty minutes remain. Continue to get sensor glucose readings.
Smart Device: In App		
Receiver		



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Device	What you see	What it means
<b>Session Ended</b>		
<b>Smart Device: Notification</b>		<p>Session has ended.</p> <p><b>App:</b> Tap “?” for steps to:</p> <ul style="list-style-type: none"> <li>• Remove sensor</li> <li>• Insert new sensor</li> </ul> <p><b>Receiver:</b> Press <i>select button</i> to confirm.</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

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Device	What you see	What it means
<b>Session Stopped</b>		
<b>Smart Device: Notification</b>	<b>N/A</b>	<p>Sensor session has stopped.</p> <p><b>App:</b></p> <ul style="list-style-type: none"> <li>• No sensor glucose readings</li> <li>• Prompts for new session</li> </ul> <p><b>Receiver:</b></p> <ul style="list-style-type: none"> <li>• Straight line</li> <li>• No sensor glucose readings</li> </ul>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

## Sound/Vibration Prompts

In case you can't look at your screen, both the smart device and receiver provide sound/vibration prompts to remind you your sensor session will end in 30 minutes, it has just ended, or your sensor failed and you need to start a new session.

For more information on setting your sound/vibration prompts, please see Chapter 9.

### Smart Device

Your smart device prompts you with a sound, and repeats every five minutes until confirmed.

### Receiver

The receiver alerts you with an initial vibration prompts. If not confirmed, you receive a sound/vibration twice, five minutes apart.

Once a sensor session has expired, you are ready to start your new session! If you're not sure what to do, the app will provide instructions, or you can refer to the Getting Started Guide, view the online tutorials, or go to Chapter 6 in the user guide.

## Ending Your Sensor Session Early

For personal reasons, you may want to force quit a sensor session early (e.g., you're getting an MRI and need to remove the system).

Or, occasionally, the app or receiver may detect something is wrong with your sensor and let you know it's stopping the current session.

This may be caused by a number of reasons:

- Unresolved calibration issues
- Error symbol does not go away
- Wait symbol does not go away
- Sensor is coming out of the body (for example, the adhesive is peeling off).

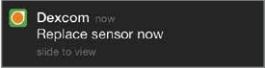
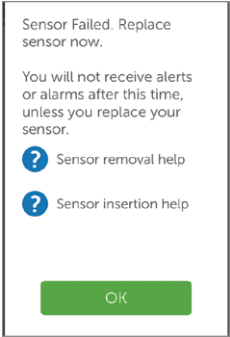

You'll receive error prompts leading to a new sensor session. If you see error prompts, always contact Technical Support (available 24/7) at:

- [TechSupport@dexcom.com](mailto:TechSupport@dexcom.com)
- Toll free: **1.888.738.3646**
- Toll call: **1.858.200.0200**

When your display device has system errors, you may not receive any sensor glucose readings and you should not calibrate.

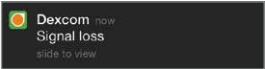

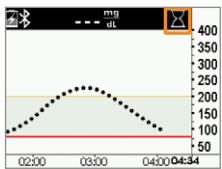
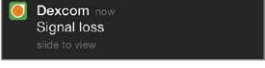

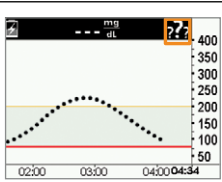
## Prompts to End Sensor Session Early

### System Prompts

Device	What you see	What it means
Smart Device: Notification		<p>Sensor issues detected. Session ends automatically.</p> <p><b>No:</b></p> <ul style="list-style-type: none"> <li>• Sensor glucose readings</li> <li>• Alarm/Alerts</li> </ul> <p><b>Tap OK.</b> <b>Replace sensor.</b></p>
Smart Device: In App		
Receiver		

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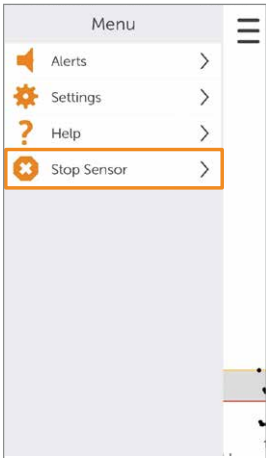
Device	What you see	What it means
Smart Device: Notification		<b>Wait</b> up to three hours while the system autocorrects.
Smart Device: In App		<b>Check transmitter</b> —is it properly inserted into sensor pod? Make sure you haven't taken acetaminophen. If not corrected after 3 hours:
Receiver		<b>Contact Technical Support</b> (available 24/7): <ul style="list-style-type: none"> <li>TechSupport@dexcom.com</li> <li>Toll free: <b>1.888.738.3646</b></li> <li>Toll call: <b>1.858.200.0200</b></li> </ul>
Smart Device: Notification		<b>Wait</b> up to three hours while the system autocorrects.
Smart Device: In App		<b>Check transmitter</b> —is it properly inserted into sensor pod? Make sure you haven't taken acetaminophen. If not corrected after 3 hours:
Receiver		<b>Contact Technical Support</b> (available 24/7): <ul style="list-style-type: none"> <li>TechSupport@dexcom.com</li> <li>Toll free: <b>1.888.738.3646</b></li> <li>Toll call: <b>1.858.200.0200</b></li> </ul>

The Dexcom G5 knows when a typical seven-day sensor session is over, automatically ending the session in each display device. However, if you need to end the session early, you need to let the system know by manually stopping the sensor session.

While the end result is the same (ending a sensor session), the steps differ between the app and receiver. If you're using both, no need to stop the sensor session in each: the other display device knows the session has stopped.

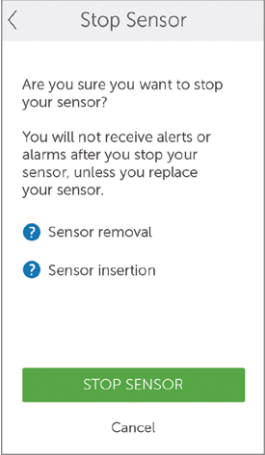

Before you can begin a new session, you must end the existing session. Let's first look at how to end a sensor session in the app, then the receiver.

## App: Ending a Sensor Session Early

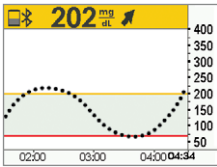

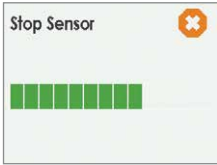
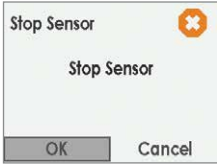
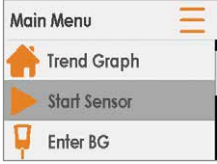
Step	What you see	What it means	What you do
1		Access Main Menu.	<b>Tap <i>Main Menu</i> icon.</b>
2		Ends sensor session. During session: <i>Stop Sensor</i> option appears. Not in active session: <i>Start Sensor</i> option appears when session is not active.	<b>Tap <i>Stop Sensor</i>.</b>

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Step	What you see	What it means	What you do
3		Blue “?” icons provide additional information.	<b>Tap <i>Stop Sensor</i>.</b>
4		Confirms sensor session has ended. Ready for new session.	<b>Remove <i>sensor</i>.</b> <b>Insert <i>new sensor</i>.</b> <b>Tap <i>green circle</i></b> when ready for new session.

## Receiver: Ending a Sensor Session Early

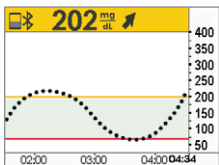
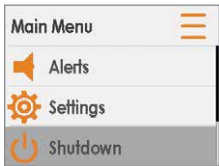

Step	What you see	What it means	What you do
1		Go to Main Menu.	<b>Press</b> <i>select button</i> .
2		Ends sensor session. During session: Stop Sensor option appears.	<b>Press</b> <i>down arrow</i> to highlight <i>Stop Sensor</i> . <b>Press</b> <i>select button</i> .
3		Thinking screen.	<b>Wait</b> .
4		Confirms you want to stop sensor. Return to Main Menu.	<b>Press</b> <i>select button</i> .
5		Ready to start a new session. Start Sensor option appears when not in an active session.	<b>Remove</b> <i>sensor</i> . <b>Insert</b> <i>new sensor</i> . <b>Press</b> <i>Start Sensor</i> when ready for new session.

## Temporarily Shutting Down Receiver

To save on its battery, you can temporarily shut down the receiver. When shut down, your receiver and transmitter no longer communicate and you won't get any Alarm or Alerts, although your sensor session remains active.

Shutting down the receiver does not extend your sensor session past the seven days; it only stops the receiver from communicating with the transmitter. Your sensor session will stop seven days after you started the session even if you temporarily shut the receiver off.

### Shutting Down Receiver

Step	What you see	What you do	What it means
1		<b>Press <i>select</i> button.</b>	Go to Main Menu.
2		<b>Press <i>down arrow</i> to highlight <i>Shutdown</i>.</b> <b>Press <i>select</i> button.</b>	Pauses sensor session. Doesn't extend sensor session. During session: <i>Stop Sensor</i> option appears.
3		<b>Press <i>select</i> button.</b>	Confirms you want to shut down. Shuts down receiver.

Press the select button to turn the receiver back on. It may take up to 20 seconds for the receiver to turn on.

## Preventing Sensor Failures

Sensor failures can happen when your display device doesn't receive your sensor glucose readings. While it is rare to have a sensor failure, there are preventative steps you can take.

### Help prevent sensor failures by checking:

1. Sensor hasn't expired.
2. Transmitter is snapped securely into sensor pod.
3. Sensor pod isn't dislodged or adhesive isn't peeling.
4. Nothing is rubbing against sensor pod (e.g., seat belts, etc.).
5. You selected a good insertion site (see Chapter 6).
6. Insertion site is clean and dry before sensor insertion.

The app and receiver are ready for a new session! However, before you can start a new sensor session, you need to end the current sensor session and remove the old sensor and transmitter.

## 8.4 Remove Sensor Pod and Transmitter

### Removing Sensor Pod

Think of the transmitter as being part of the sensor pod. Do not remove the transmitter before removing the sensor pod from your body.

To remove the sensor pod:

1. Gently peel sensor pod adhesive patch from skin.
  - Sensor wire comes out with sensor pod.
2. Separate the transmitter from the sensor pod.
3. Throw away the sensor pod following your local waste management regulations for disposing of blood-contacting parts (sensor and applicator).

### Removing Transmitter From Sensor Pod


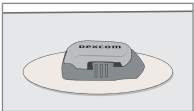
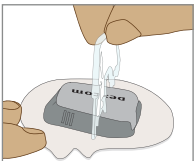

Remember your transmitter is reusable. With a battery life of 90 days, use the same transmitter over a number of sensor sessions. You'll receive prompts as you near the end of its battery life.

Before reusing the transmitter in your new sensor session, separate it from the old sensor pod.

You can detach transmitter two ways:

1. Use safety lock (see “With Safety Lock” table below), which you removed from the applicator barrel at the beginning of the session.
2. Manually spread out tabs holding transmitter in sensor pod (see “Without Safety Lock” table below).

### With Safety Lock

Step	Picture	What you do
1		<b>Grasp</b> end of <i>adhesive patch</i> . <b>Peel</b> <i>adhesive patch</i> up and away from your body to remove sensor pod and transmitter.
2		<b>Put</b> <i>sensor pod</i> on flat surface.
3		<b>Place</b> <i>safety latch's</i> jagged edge: <ul style="list-style-type: none"><li>• Over transmitters wide edge</li><li>• In between open slots on sensor pod's sides</li></ul>
4		<b>Lift up</b> <i>safety latch</i> .


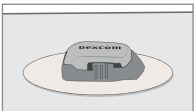
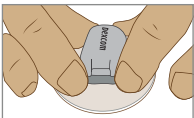
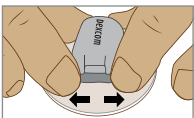
If you no longer have the safety lock, don't worry! You can use your fingers to remove the transmitter from the old sensor pod.

After removing your sensor, and taking the transmitter out of the sensor pod, you're ready to begin a new sensor session. The transmitter's battery is good up to three months. If you haven't received your final seven-day transmitter battery life warning, you can reuse the transmitter for your next session.

**Remember:**

- Never use same spot repeatedly for sensor insertion.
- Never use same site for 2 sensor sessions in a row.

## Without Safety Lock

Step	Picture	What you do
1		<b>Grasp end of adhesive patch.</b> <b>Peel</b> adhesive patch up and away from your body to remove sensor pod and transmitter.
2		<b>Put sensor pod</b> on flat surface.
3		<b>Grasp sensor pod's wide end</b> with two hands and <b>place</b> fingers in sides' open slots.
4		<b>Pull tabs</b> away from transmitter.

## 8.5 End of Transmitter Battery

How do you know if your transmitter battery will last through your next session?




System messages help you determine if your transmitter battery will last through your next seven-day session. Starting at three weeks prior to the end of its battery life, the messages count down the transmitter battery life until it has only seven days. If the transmitter battery has seven days or less remaining, you won't be able to start a new session.

### Transmitter Battery Messages

Device	What you see	What it means
<b>Smart Device: Notification</b>		<p>Transmitter battery will expire in three weeks.</p> <p>Order a new transmitter.</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

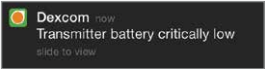


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Device	What you see	What it means
<b>Smart Device: Notification</b>		Transmitter battery will expire in two weeks. Order a new transmitter.
<b>Smart Device: In App</b>		
<b>Receiver</b>		

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Device	What you see	What it means
<b>Smart Device: Notification</b>	 A black notification banner with the Dexcom logo, the text "Transmitter battery critically low", and a "slide to view" link.	<p>Transmitter battery will expire in one week.</p> <p>Order a new transmitter.</p>
<b>Smart Device: In App</b>	 A white screen with a black border. It contains the text: "Your current transmitter will stop working in about one week.", "This is the last sensor session with your current transmitter.", "If you haven't already, please order a new transmitter.", and a green "OK" button at the bottom.	
<b>Receiver</b>	 A screen with a light blue background. It features a yellow lightning bolt icon, the text "Low Battery" and "Order New Transmitter", and a date/time stamp at the bottom.	


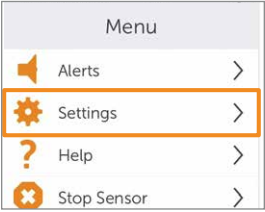
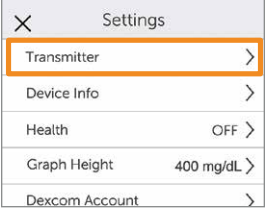
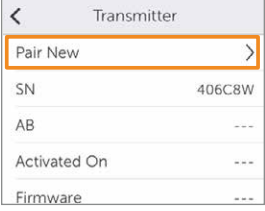
To make sure you have a transmitter that's ready for a new sensor session, you may want to reorder a new one at [store.dexcom.com/order](https://store.dexcom.com/order), by calling Customer Service (see Section 17.1), or through the channels you used before, at your first low battery prompt.

## 8.6 Pair New Transmitter

Once the transmitter battery has died, before starting a new sensor session, you need to pair your new transmitter with your display device(s). In Chapter 5 you learned how to pair your transmitter using the setup wizard. But how do you pair a new transmitter once your display device is already set up?



After inserting the sensor and putting the transmitter into the transmitter holder, pair the transmitter before starting a new sensor session.

## Pairing New Transmitter With App

Step	What you see	What you do
1		Tap <i>Menu</i> icon.
2		Tap <i>Settings</i> .
3		Tap <i>Transmitter</i> .
4		Tap <i>Pair New</i> .



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Step	What you see	What you do
5a		<p><b>If you still have transmitter package:</b></p> <p><b>Turn <i>transmitter box</i> upside down on a flat surface, with barcodes facing up.</b></p> <p><b>Please Note:</b> Picture is representational only; the back of your transmitter box may not look the same.</p>
5b		<p><b>Center <i>longest barcode</i> within green brackets.</b></p> <p><b>Tap <i>Take Photo</i>.</b></p>

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Step	What you see	What you do
5c		Check mark confirms successful transmitter SN scan.
6a		If unable to use app's scanning device: <b>Tap</b> Enter transmitter SN by hand.

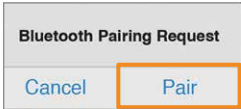

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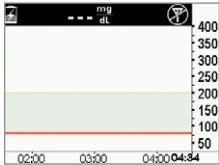
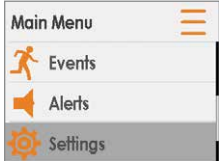
Step	What you see	What you do
6b		<p>Use keyboard to enter transmitter SN. Confirm correct SN . <b>Tap Save.</b></p>
7		<p><b>Wait</b> up to 30 minutes for smart device and transmitter to connect.</p>

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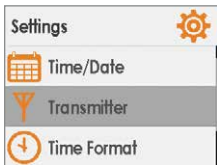

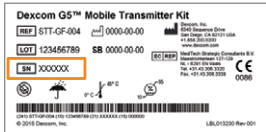

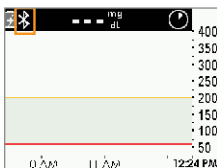
Step	What you see	What you do
8		At notification, <b>Tap Pair</b> to pair app with smart device.
9		Before starting a new sensor session, make sure your smart device and transmitter are paired.

## Pairing New Transmitter With Receiver

Step	What you see	What you do
1		<b>After inserting sensor and attaching transmitter into the sensor pod:</b> <b>Press left arrow twice to go to Main Menu.</b>
2		<b>Press down arrow to highlight Settings.</b> <b>Press select button.</b>

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Step	What you see	What you do
3		<b>Press down arrow</b> to highlight <i>Transmitter</i> . <b>Press select button</b> .
4		<b>Highlight Transmitter SN</b> . <b>Press select button</b> .
5		<b>Turn transmitter box upside down</b> to locate SN number.
6		<b>Press up/down arrows</b> to select and enter transmitter SN. <b>Press right arrow</b> to move to next digit. <b>Press select button</b> to save and close. <b>Press left arrow twice</b> to return to <i>Main Menu</i> .
7		<b>Make sure</b> receiver and transmitter are connected/paired before starting a sensor session. <b>Check</b> receiver 10 minutes after starting for <i>Bluetooth</i> icon. <ul style="list-style-type: none"><li>• Solid: Connected/Paired</li><li>• Blinking: Searching/Not Paired</li></ul>

## Sound/Vibration Prompts

Both the smart device and receiver provide sound/vibration prompts to tell you your transmitter battery is low or the transmitter failed. Remember, if your smart device is on Silent or Do Not Disturb, you may not get any sound notifications.

For more information on setting your sound/vibration prompts and how to confirm them, please see Chapter 9.

### Smart Device

Your smart device prompts you with a sound, and repeats every five minutes until cleared.

### Receiver

The receiver prompts you with an initial vibration. If not confirmed, you receive a sound/vibration twice, five minutes apart.

## Summary

### Now You Can:

- Identify replace sensor prompts at the end of a seven day sensor session
- Recognize when you have to end a sensor session early
- Successfully end a sensor session early
- Identify how you can prevent sensor session failures
- Remove your sensor pod with transmitter attached
- Separate transmitter from sensor pod
- Determine if transmitter can be used for another sensor session
- Pair new transmitter

### What's Next?

Congratulations, you have the basics down!

You can set up your app and receiver, start a sensor session, calibrate, as well as end your sensor session know when to replace your transmitter, and pair a new transmitter. But the Dexcom G5 can do much more.

In the next part, Part 3: Next Steps, you will learn how to get the most out of your Dexcom G5.

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# 3

## NEXT STEPS - GETTING THE MOST OUT OF YOUR DEXCOM G5

- Reading Trend Graph Screens and Recognizing Trends
- Events
- Alarm and Alerts
- Sounds for Alarm, Alerts and System Messages
- Using Dexcom G5 for Treatment Decisions

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# Chapter 9

*Next Steps - Getting the Most out of Your Dexcom G5*

## Home Screen, Rate of Change Arrows, and Errors

### 9.1 Introduction to Home Screens

In the previous chapter, you learned about calibrations: why they are important and how to do them. Within five minutes of your final calibration your sensor glucose readings begin!

In this chapter, you'll learn three things. First, reading the home screen. Second, identifying your sensor glucose readings and trends: What do they mean? What's the best way to use trend information? And third, what you do if you aren't getting your sensor glucose readings.

The purpose of this chapter isn't to tell you how to react to your trends, but to help you recognize where your glucose was and where it's going. Your healthcare professional can help you with your questions on what actions to take based on your glucose trends.

After this chapter, you'll be able to:

- Recognize home screen icons
- Locate sensor glucose reading
- Explain sensor glucose target range
- Recognize the importance of gray, yellow, and red colors
- Identify Low/High Glucose Alert levels on your trend graph
- Describe when you receive a high or low sensor glucose reading
- Change trend graph views
- Explain differences between rate of change arrows
- Recognize error messages

## 9.2 Safety Statements

Take a moment and read the safety statements. If not followed, your sensor glucose readings and trends may be less accurate, and you may miss important High or Low Glucose Alerts.

### Contraindications

**Don't:** *Never take any medications containing acetaminophen during your sensor session.*

**Why:** Taking medications with acetaminophen (such as Tylenol®, Excedrin® Extra Strength, Sudafed®, Robitussin®) while wearing sensor may falsely raise sensor glucose readings. Level of inaccuracy:

- Depends on amount of acetaminophen active in your body.
- May be different for each person.

**Consequences:** Without correct readings you might miss a severe low or high blood glucose event or make a treatment decision that results in injury.

### Warning

**Do:** *Take a BG measurement with your BG meter and use the BG value for treatment decisions (such as how much insulin to take) if your Dexcom G5 does not display both a number and a trend arrow.*

**Why:** Not having both a number and the arrow means you may be getting inconsistent or inaccurate sensor glucose readings.

**Consequences:** Using inconsistent or inaccurate sensor glucose readings for treatment decisions could result in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## Warning

**Don't:** *Never ignore symptoms of high and low glucose.*

**Do:** *Measure your BG with fingerstick measurement if sensor glucose readings don't match your symptoms.*

**Why:** Your sensor glucose readings may not be accurately reading your glucose.

**Consequences:** Ignoring your symptoms before treatment decisions could result in you having severe low or high blood glucose or making a treatment decision that results in injury.

## Precaution

Using an accessory device (like a smart watch) might override your smart device sounds. Alarm/Alerts might vibrate or be heard on the accessory instead of your smart device.

After connecting any accessories, make sure that the smart device settings allow you to continue receiving Alarm or Alerts on the smart device.

## 9.3 Overview of Home Screen

Regardless of your display device, the home screen shows your current sensor glucose value, glucose trend, rate of change arrow, and CGM system status. While the screen does look different between the receiver, smart device, Apple Today view, and Apple Watch, the information is the same.

No matter how you hold the receiver, its view does not change. The G5 app, on the other hand, has two ways to view data based on how you hold your smart device:

1. Vertically in portrait: mode 3-hour trend information with task bar.
2. Horizontally in landscape mode: 1-, 3-, 6-, 12-, or 24-hour trend information without task bar.

This section first familiarizes you with the app's home screen, then the Today view and Apple Watch, and last the receiver's home screen. In other chapters, you'll see how to use the icons to enter data or make system changes.







## App Home Screen

The app home screen has two main sections:

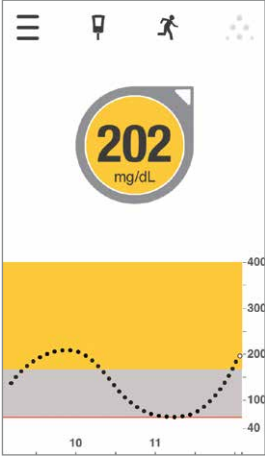
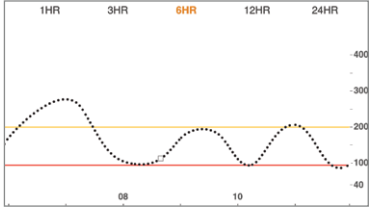
1. Task bar: Change settings, enter data, calibrate, and use Share.
2. Glucose information: Reflects glucose readings and trends.



Figure 6. App Home Screen on Smart Device

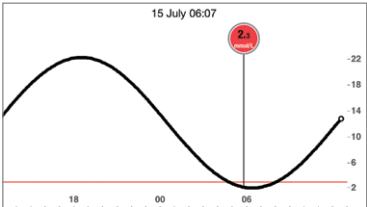
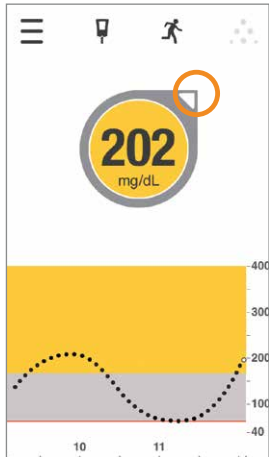
App	Name	What it means	What you do
Task Bar: Complete Tasks			
	Main Menu	Goes to other options.	<b>Tap Main Menu</b> to access: <ul style="list-style-type: none"> <li>• Alerts</li> <li>• Settings</li> <li>• Help</li> <li>• Start/Stop Sensor</li> </ul>
	BG Meter with red badge and number	Calibration prompt.	<b>Tap icon</b> and enter fingerstick BG value (see Chapter 7).
	BG Meter without red badge	No need to calibrate.	Do nothing.
	Event	Enter different events capturing activities affecting your glucose.	<b>Tap icon</b> to enter data for: <ul style="list-style-type: none"> <li>• Carbs</li> <li>• Insulin</li> <li>• Exercise</li> <li>• Health</li> </ul> (See Chapter 10).
	Dexcom Share	Dexcom Share is available only on the app. Gray icon: Share is not active.	<b>Tap icon</b> to activate (see Chapter 21).
	Dexcom Share	Once activated, Dexcom Share icon is colored.	<b>Do nothing.</b> <b>Tap icon</b> to access Dexcom Share.

## Glucose Information

App: Portrait	App: Landscape	What it means
		<p><b>Home Screen</b></p> <p>In landscape mode, tap on the trend view you want to see at the top of the screen: 1-, 3-, 6-, 12-, or 24-hour historical trend views.</p>
		<p><b>Number</b></p> <p>Indicates the most recent sensor glucose reading.</p> <p>Shown in milligrams per deciliter (mg/dL).</p> <ul style="list-style-type: none"> <li>• Yellow: At or above target</li> <li>• Gray: Within target range</li> <li>• Red: At or below target</li> </ul>

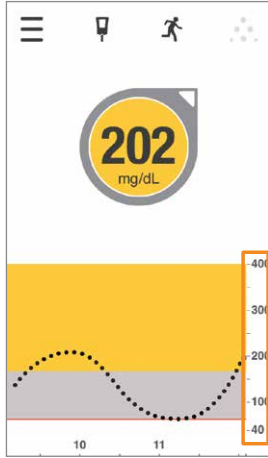
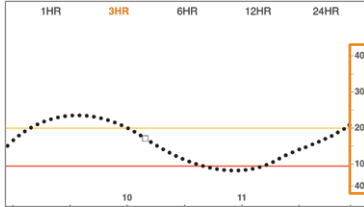
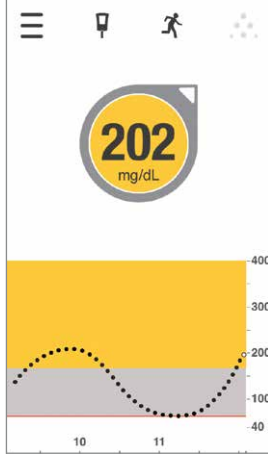
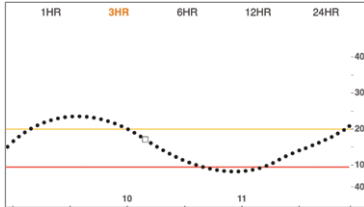
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App: Portrait	App: Landscape	What it means
<p>N/A</p>		<p><b>Historical Readings</b></p> <p><b>Turn</b> <i>smart device</i> to landscape mode.</p> <p><b>Tap</b> <i>time</i>, shows timeframe's sensor glucose reading.</p> <p>Slide finger across screen to view rest of day's sensor glucose readings.</p>
	<p>N/A</p>	<p><b>Rate of Change Arrow</b></p> <p>Direction and number of arrows show sensor glucose change rate.</p>

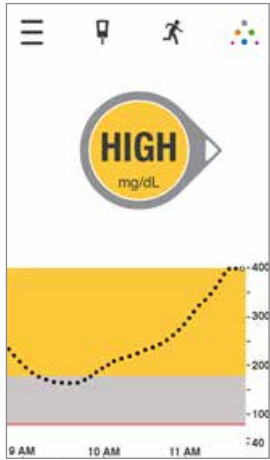
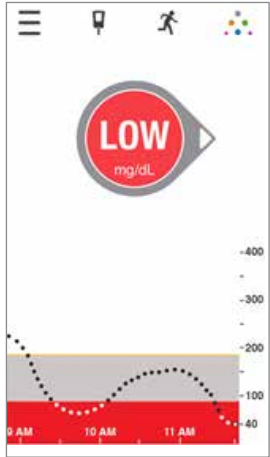
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App: Portrait	App: Landscape	What it means
		<p><b>Sensor Glucose Reading Range</b> Shows between 40-400 mg/dL.</p>
		<p><b>Within Glucose Range and Alert Levels</b></p> <ul style="list-style-type: none"> <li>• Yellow bar: High Alert level</li> <li>• Gray background: Within target range</li> <li>• Red bar: Low Alert level</li> </ul>

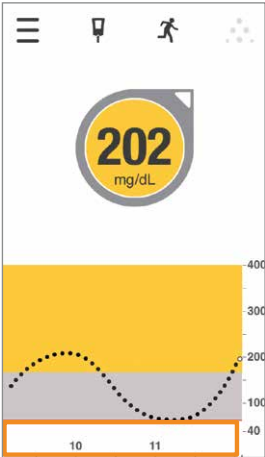
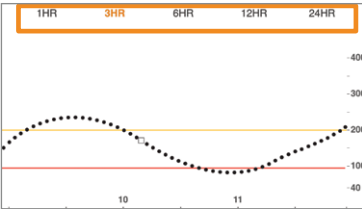
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App: Portrait	App: Landscape	What it means
	<p><b>N/A</b></p>	<p>Your sensor glucose readings are above 400 mg/dL.</p> <p>You will not receive sensor readings until you are at or below 400 mg/dL.</p>
	<p><b>N/A</b></p>	<p>Your sensor glucose readings are below 40 mg/dL.</p> <p>You will not receive sensor readings until you are at or above 40 mg/dL.</p>

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App: Portrait	App: Landscape	What it means
		<p><b>Trend Graph Time Frame</b>  Default is most recent 3 hours.  Turn smart device to landscape mode for most recent 1-, 3-, 6-, 12-, and 24-hour readings.</p>

When the app and transmitter connect after a Signal Loss, up to three hours of missed readings can fill in on the trend graph.

## Optional Views

### Quick Glance (Android)

Quick Glance allows access to your CGM through the notification area on your smart device. Quick Glance is on by default. To turn off go to Menu > Alerts > Quick Glance.

### Apple Today View

For quick access to your CGM information, add Dexcom G5 to your Today view.

1. Open Today view by swiping right from the left edge of the Home or Lock screens.
2. Scroll to the bottom and tap Edit.

See your smart device instructions for details.

## Smart Watches

Using a smart watch with your system may change how you get the Alarm and Alerts.

- Your smart watch will only communicate with your smart device, not the Dexcom G5 transmitter. You will not receive sensor readings or Alarm/Alerts on your watch unless it is connected with your smart device.
- Set your device settings to send notifications to both your smart device and smart watch.
- Do not disable or block notifications from the app.
- **Make sure that you understand how notifications are received once you pair a watch.**

When you wake your smart watch, it updates your current CGM data from your smart device. There may be a brief delay before your watch app shows current information.

For compatible devices, see [dexcom.com/compatibility](https://dexcom.com/compatibility).

### Android Wear

To check your CGM on your Wear watch, use the Dexcom watch face. See your Wear device instructions to learn about setting a watch face.

### Apple Watch

To check your CGM on your Apple Watch, add the Dexcom G5 app. Use the Watch app installed on your smart device.

By default, your Alarm and Alerts appear only on your Apple Watch when paired, and not your smart device. Set your notifications to appear on both devices in the Watch app.

## Receiver Home Screen

Unlike your smart device screens, the receiver's screen is not interactive; all prompts are for information only. To make changes or enter data in the receiver, **press select button** and go to the Main Menu.

The receiver's home screen has two main sections:

1. Status Bar
  - a. Reflects glucose trends, readings, status of receiver's system (e.g., battery level).

## 2. Glucose Information Trend Graph

### a. Reflects sensor glucose readings and trends.

This section will get you familiar with the receiver's home screen. In other chapters, you'll see how to use the navigation wheel to enter data or make system changes.

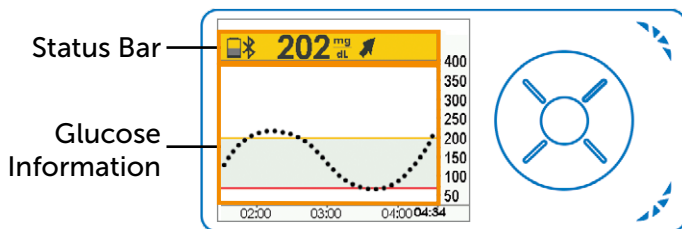
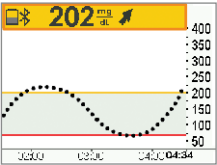
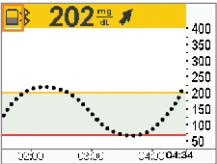


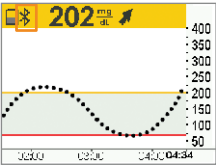
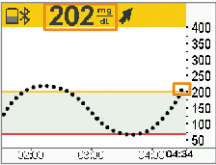
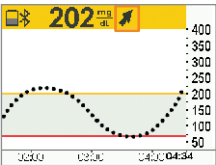
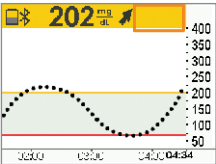
Figure 7. Home Screen on Receiver

### Status Bar

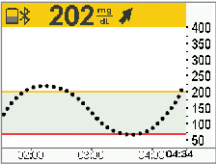
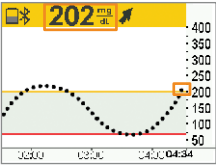
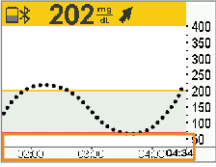
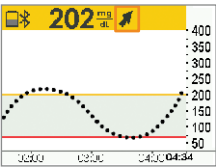
Receiver	Name	What it does	What you do
	Status Bar	Provides at-a-glance information about the receiver, system, or you. Icons will change based on current data.	Review and take appropriate action.
	Battery	Shows battery level.	When battery is low, <b>plug micro USB cable</b> into receiver. <b>Plug USB</b> into the adapter and then into electrical outlet.

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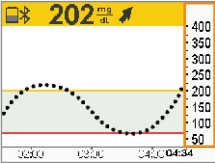
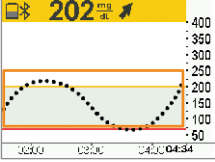
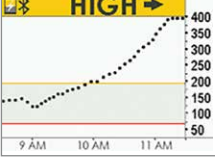

Receiver	Name	What it does	What you do
	<i>Bluetooth</i>	Shows <i>Bluetooth</i> connection is working.	Do nothing. Receiver's <i>Bluetooth</i> is always on.
	Sensor Glucose Reading	Shows most recent sensor glucose reading. Color of status bar changes: Yellow: At or above target. Gray: Within target range. Red: At or below target.	Take appropriate action.
	Trend Arrow	Shows direction and speed your glucose is changing.	Review and take appropriate action.
	Status Area	Far right. Error icons and calibration prompts.	Take appropriate action.

## Glucose Information

Receiver	What it does
	<p>Home screen.</p>
	<p><b>Number</b> Most recent sensor glucose reading. Shown in milligrams per deciliter (mg/dL). Color of status bar changes:</p> <ul style="list-style-type: none"> <li>• Yellow: At or above target</li> <li>• Gray: Within target range</li> <li>• Red: At or below target</li> </ul>
	<p><b>Historical Readings</b> Default is most recent 3 hours. <b>Press up/down arrows</b> to access 1-, 3-, 6-, 12-, or 24-hour trend views.</p>
	<p><b>Rate of Change Arrow</b> Direction and speed of your glucose changes.</p>

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Receiver	What it does
	<p><b>Sensor Glucose Reading Range</b> Shows between 40-400 mg/dL.</p>
	<p><b>Glucose Target Range Alert Settings</b></p> <ul style="list-style-type: none"><li>• Yellow bar: High Alert setting</li><li>• Gray fill: Target range</li><li>• Red bar: Low Alert setting</li></ul>
	<p>Your sensor glucose readings are above 400 mg/dL. You will not receive sensor readings until you are at or below 400 mg/dL.</p>
	<p>Your sensor glucose readings are below 40 mg/dL. You will not receive sensor readings until you are at or above 40 mg/dL.</p>

Now that you're familiar with the basic layout of the trend graph screen and can locate readings, identify color-coding, and view time frames, let's take a closer look at the rate of change arrows.

## 9.4 Rate of Change Arrows

Not sure how your sensor glucose readings are trending?









Rate of change arrows show the speed and direction of your glucose trends based on the last several sensor glucose readings. Arrows and the trend graph help you know when to take action before you are too high or too low.

You need a rate of change arrow when using your Dexcom G5 to make treatment decisions.

However, before doing anything, think about your most recent insulin dosing, food intake, overall trend graph, and current sensor glucose reading. **Don't overreact to the arrows.** For more information on using your Dexcom G5 Mobile for treatment decisions, please see Chapter 13.







Remember, the arrows don't reflect your latest reading: they reflect a combination of recent readings.

### Rate of Change Arrows

App	Receiver	What your glucose is doing
		Glucose is steady. Not increasing/decreasing more than 1 mg/dL per minute or up to 15 mg/dL in 15 minutes.
		Glucose is slowly rising 1-2 mg/dL each minute or up to 30 mg/dL in 15 minutes.
		Glucose is rising 2-3 mg/dL each minute or up to 45 mg/dL in 15 minutes.
		Glucose is rapidly rising more than 3 mg/dL each minute or more than 45 mg/dL in 15 minutes.

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App	Receiver	What your glucose is doing
		Glucose is slowly falling 1-2 mg/dL each minute or up to 30 mg/dL in 15 minutes.
		Glucose is falling 2-3 mg/dL each minute or up to 45 mg/dL in 15 minutes.
		Glucose is rapidly falling more than 3 mg/dL each minute or more than 45 mg/dL in 15 minutes.
<b>N/A</b>	<b>No arrow</b>	System can't calculate the speed and direction of your glucose change.

There are a number of reasons why you may not get rate of change arrows:

- You just started your sensor session
- No sensor glucose readings over the last few minutes

## 9.5 Error Messages

Sometimes the transmitter, or sensor, or display devices aren't communicating, causing you not to get your sensor glucose readings or rate of change arrows. Each device notifies you when there is an issue; however, the notifications look different.

Before the system can move forward, you need to address the error.

## App

If screen is locked:

- Depending on your device, swipe or tap message to go to app.

## Within app:

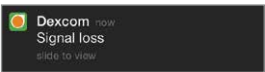
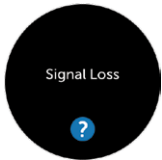
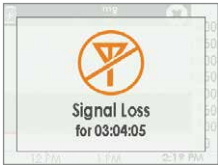
- Read message.
- Tap Question Marks** for more information and follow steps as appropriate.

## Receiver

- Press select button** to confirm message.


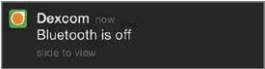

You will not get any sensor glucose readings or rate of change arrows on either display device until the error is resolved. Check with your BG meter to monitor your glucose or to make treatment decisions during these error periods.

## Error Notifications

What you see		What you do
Bluetooth Out of Range		
Smart Device: Notification		<p>Move display device and transmitter within 20 feet of each other without obstruction (walls or water).</p> <p>Wait up to 30 minutes.</p> <p>Smart device:</p> <ol style="list-style-type: none"><li><b>Restart</b> smart device.</li></ol> <p>If error remains:</p> <ol style="list-style-type: none"><li><b>Open</b> your device <i>Bluetooth</i> settings.</li><li><b>Delete</b> all Dexcom <i>entries</i>.</li><li>Pair your <i>transmitter</i>.</li></ol>
Smart Device: In App		
Receiver		


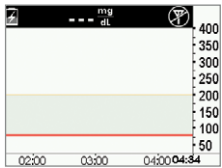
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What you see		What you do
App Notifications Disabled		
Smart Device: In App		<p><b>Apple:</b></p> <p>Notifications from the app are blocked.</p> <p><b>Enable <i>Notifications</i></b> in your smart device settings. See your smart device instructions.</p>
Bluetooth Off		
Smart Device: Notification		<p><b>Turn on <i>Bluetooth</i></b> in your smart device settings.</p>
Smart Device: In App		
Receiver	N/A; <i>Bluetooth</i> is always on.	


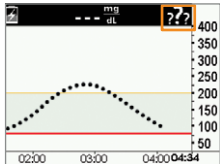
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What you see		What you do
Not Getting Sensor Glucose Reading		
Smart Device: Notification	N/A	<b>Signal Loss receiver only:</b> <b>Check</b> —Are you: <ul style="list-style-type: none"> <li>• Within 20 feet of your display device?</li> <li>• In your two-hour warmup period?</li> <li>• Outside of your calibration schedule?</li> <li>• In a sensor session?</li> </ul>
Smart Device: In App		
Receiver		


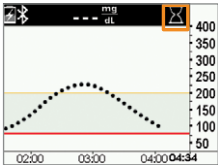
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What you see		What you do
System Found Temporary Sensor Issue		
<b>Smart Device: Notification</b>	N/A	<p>Don't calibrate.</p> <p>System may correct problem on its own and display sensor glucose readings again.</p> <p>If notification stays for three hours: Contact Technical Support (see Section 17.1).</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

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What you see	What you do
Transmitter and Sensor Not Communicating	
<b>Smart Device: Notification</b>	N/A
<b>Smart Device: In App</b>	
<b>Receiver</b>	

Wait three hours while the transmitter tries to fix the error.




Do not enter calibrations during this time. Make sure your transmitter is properly inserted into the sensor pod.

If not corrected:

- Contact Technical Support (see Section 17.1)
- Remove sensor
- Insert new sensor

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What you see	What you do
Calibration Required	
<b>Smart Device: Notification</b>	
<b>Smart Device: In App</b>	
<b>Receiver</b>	

Error in calibrating.  
Enter another BG meter value.

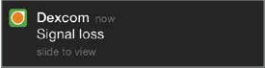
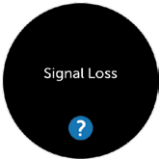

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What you see	What you do	
Calibration Error		
Smart Device: Notification		Wait 15 minutes. Enter a BG meter value.
Smart Device: In App		
Receiver		

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What you see	What you do
Display Devices and Transmitter Not Communicating	
<b>Smart Device: Notification</b>	
<b>Smart Device: In App</b>	
<b>Receiver</b>	

Wait 10 minutes.

Move display device and transmitter within 20 feet of each other without obstruction (walls or water).

Wait up to 30 minutes.

Smart device:

1. **Restart** smart device.

If error remains:

1. **Open** your device *Bluetooth settings*.
2. **Delete** all *Dexcom entries*.
3. **Pair** your *transmitter*.

If error messages don't go away after you followed necessary steps and you aren't getting sensor glucose readings, contact Technical Support (see Section 17.1).

## Summary

### Now You Can:

- Recognize home screen icons
- Locate sensor glucose reading
- Explain glucose target range
- Recognize the importance of gray, yellow, and red colors
- Identify Low/High Glucose Alert levels on your trend graph
- Describe when you receive a high or low sensor glucose reading
- Change trend graph views
- Cite differences between rate of change arrows
- Recognize error messages

### What's Next?

By now you have a pretty good understanding of how your trends look on the different display devices, but did you know that what you do can affect your trends and patterns? It's important to track actions or well-being, to better understand that what you do or how you feel can change your trends.

In the next chapter, you will learn how to enter Events in the Dexcom G5.

# Chapter 10

*Next Steps - Getting the Most out of Your Dexcom G5*

## Daily Events Affect Your Glucose Trends and Patterns

### 10.1 Introduction

Your daily activities can impact your glucose trends and patterns. In the previous chapter, you learned how to read your glucose trend screens; in this chapter, you will learn how to enter situations, or “Events”. By tracking Events, you can determine how certain actions or circumstances affect your glucose levels.

After this chapter, you'll be able to:

- Define “Event”
- Describe each Event
- Create Events
  - G5 Mobile app
  - Dexcom G5 receiver
- Recognize Event markers on the G5 Mobile app
  - Describe how Event markers are different in portrait and landscape view
- Describe how to view Events entered via your receiver

### 10.2 What Is an Event?

Did you take a walk after lunch today? Did you go to happy hour with your co-workers and have a beer? Are you feeling stressed? Did you catch your kid's sniffles? How much insulin did you take for your dinner meal? These are all Events that can raise or lower your blood sugars.

An Event is an action or situation affecting your glucose levels. With the Dexcom G5, you have the ability to enter your daily Events, helping you track their effect on your glucose

trends. Once entered into the smart device or receiver, Events can be viewed in Dexcom reports. The reports help you review how each Event influenced your glucose trends.

You can use the reports with your healthcare professional to create a game plan in managing your diabetes.

Even though they differ on how to enter an Event and time, the app and receiver have the same Event categories and subcategories. Later in this chapter, you'll learn how to enter Events in each device.

## Event Categories

There are four main Event categories:

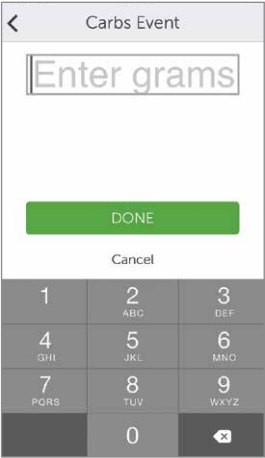
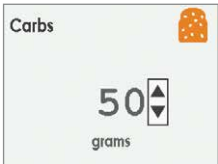
1. Carbs
2. Insulin
3. Exercise
4. Health

The fourth category, Health, has more options:

- Illness
- Stress
- Feel High
- Feel Low
- Cycle
- Alcohol

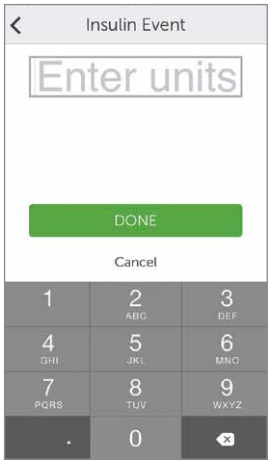

The following table provides more detail on each type of Event.

## Events Menu

Device	What you see	What it means	What you do
<b>Carbs</b>			
<b>Smart Device: In App</b>		<p>How many grams did you just eat?</p> <p>Receiver's screen reflects last number entered.</p>	<p>Enter Carb grams per snack or meal, up to 250 grams.</p>
<b>Receiver</b>			



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Device	What you see	What it means	What you do
Insulin			
Smart Device: In App		Receiver's screen reflects last number entered.	Enter insulin units for each dose, up to 250 units. Can't enter type of insulin, only dosage.
Receiver			



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Device	What you see	What it means	What you do
<b>Exercise</b>			
<b>Smart Device: In App</b>		Default duration is 30 minutes.	Select each exercise's intensity level and duration. Enter intensity and duration. Type of exercise isn't an option.
<b>Receiver</b>			

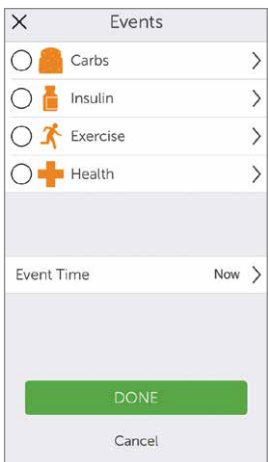

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Device	What you see	What it means	What you do
Health			
Smart Device: In App		General well-being.	Enter different health Events (see following Health Events Menu table).
Receiver			



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Device	What you see	What it means	What you do
<b>Event Time</b>			
<b>Smart Device: In App</b>		Event time.	For each separate Event, enter date/time Event began.
<b>Receiver</b>			


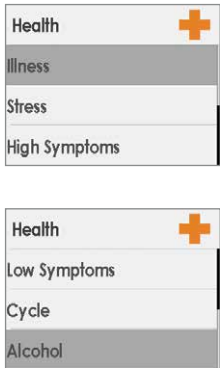
As mentioned in the last table, the Health category has a series of Events. Tell the system how you are feeling, if you had a drink, if you're having low or high BG symptoms, etc. You select the Event: no amounts are entered, just date and time.

# Health Events Menu

Device	What you see	What it means
Health Main Menu		
Smart Device: In App		Use Health Main Menu to access selections.
Receiver		

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Device	What you see	What it means
<b>Health Events</b>		
<b>Smart Device: In App</b>		<p><b>Illness</b> Have a cold, flu, or any other temporary illness affecting your well-being?</p> <p><b>Stress</b> Are you under stress? Feeling anxious?</p> <p><b>High Symptoms</b> Feel high BG symptoms?</p> <p><b>Low Symptoms</b> Feel low BG symptoms?</p>
<b>Receiver</b>		<p><b>Cycle</b> Have you started your menstrual cycle?</p> <p><b>Alcohol</b> Had a glass of wine, beer, or cocktail?</p>

You can have multiple Events in a single day, or even during the same time frame, and enter them all in at the same time. As an example, you're running late because of traffic (Stress) and quickly swing by a drive-thru to get lunch (Carbs of 85 grams).

For your convenience (and safety!), no need to stop everything and enter your Events as they are happening. When you have a moment, you can enter your Events retroactively in your app or receiver.

Events are meant to be entered as individual occurrences: don't enter daily totals, enter each Event separately.

In the next section, you will learn how to enter Events, first in your smart device, then into the receiver.

## 10.3 Entering Events

You probably will enter Events in the display device you use most often; however, you should know how to enter Events into each.

First, let's look at how to enter Events in a smart device, then in the receiver.



When using Dexcom Share, you can allow your Followers see your Event entries. For more Dexcom Share information, please see Part 5.

### Entering Events: Smart Device

In the G5 Mobile app, Events are just a tap away! The Event icon, a running man, is on the app's home screen task bar in portrait mode (remember, you don't have the task bar in landscape).

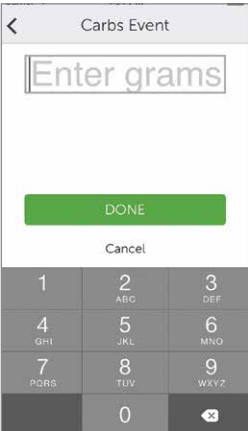
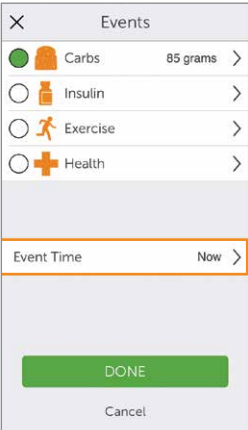
The same steps are used to enter Events for Carbs, Insulin, Exercise, and Health. If you can enter a Carb Event, you can enter an Insulin Event. To enter Events, we'll use the above scenario. The following table shows how to enter Carbs (drive-thru lunch) and Stress (traffic jam) Events.

## Entering Events: G5 Mobile App

Step	What you see	What you do
<b>Enter Carbs Event</b>		
1		<b>Tap <i>Running Man</i>.</b>
2		<b>Tap <i>Carbs</i>.</b>

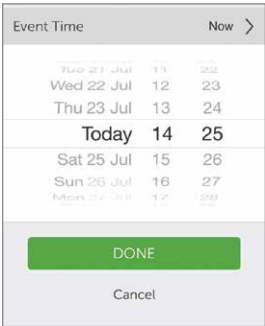
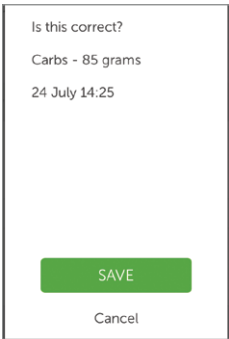

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Step	What you see	What you do
Enter Carb Event		
3		<p>Add up all carb grams from lunch.</p> <p><b>Enter “85” using keypad.</b></p> <p><b>Tap Done.</b></p>
4		<p><b>Tap Event Time.</b></p>

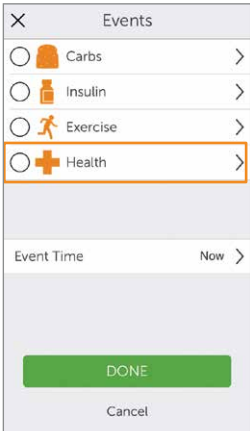
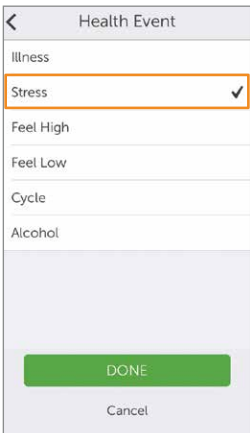
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Step	What you see	What you do
<b>Enter Carb Event</b>		
5		<p><b>Select</b> <i>date and time.</i></p> <p><b>Tap</b> <i>Done.</i></p>
6		<p><b>Tap</b> <i>Save or Cancel.</i></p>
<b>Enter Stress Event</b>		
7		<p><b>Tap</b> <i>Running Man.</i></p>

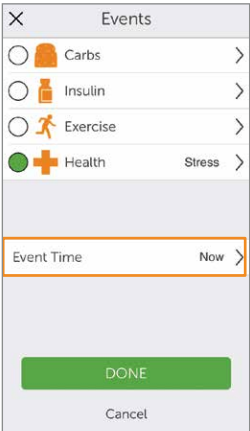
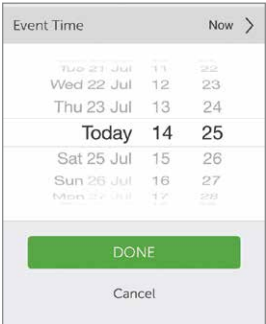
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Step	What you see	What you do
<b>Enter Stress Event</b>		
8		<p><b>Tap <i>Health</i>.</b></p>
9		<p><b>Tap <i>Stress</i>.</b> <b>Tap <i>Done</i>.</b></p>

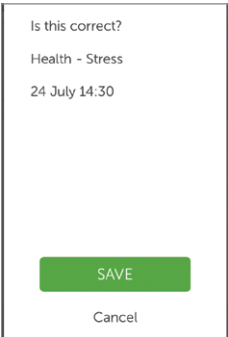
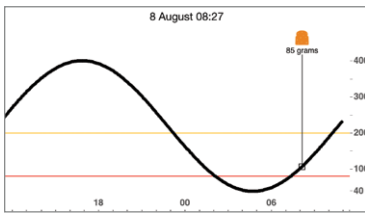
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Step	What you see	What you do
<b>Enter Stress Event</b>		
10		<p><b>Tap <i>Event Time</i>.</b></p>
11		<p><b>Select <i>date</i> and <i>time</i>.</b></p> <p><b>Tap <i>Done</i>.</b></p>

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Step	What you see	What you do
<b>Enter Stress Event</b>		
12		Tap <i>Save</i> or <i>Cancel</i> .
13		Turn to landscape.

The receiver and app don't talk to one another. If you enter an Event only into the receiver, while the information will appear on Dexcom reports, you won't get an Event marker on your app's Trend screen.

The app has Event markers on its screen, the receiver doesn't.

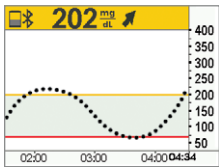
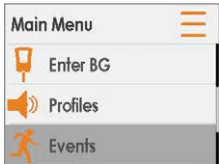

There may be times when you want or need to enter Events on the Dexcom G5 receiver.

## Entering Events: Dexcom G5 Receiver

While the Event data is the same between display devices, the flow is not the same, including how to enter the Event's date and time.


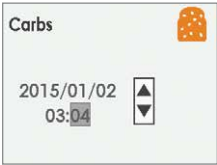

The following table reviews how to enter the same Carbs/Stress Event data from the previous scenario: Carbs at 85, and a Stress Event.

### Entering Events: Receiver

Step	What you see	What you do
Enter Carbs Event		
1		Default screen <b>Press <i>select</i> button</b> to go to Main Menu.
2		<b>Press <i>down arrow</i></b> to highlight Events. <b>Press <i>select</i> button.</b>
3		<b>Highlight <i>Carbs</i>.</b> <b>Press <i>select</i> button.</b>





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Step	What you see	What you do
Enter Carbs Event		
4		Add up all carb grams from lunch. <b>Press up arrow</b> to “85.” <b>Press select button.</b>
5		<b>Press left/right arrows</b> to change time and date. <ul style="list-style-type: none"><li>• Left: Backward</li><li>• Right: Forward</li></ul> <b>Press select button.</b>
6		Confirmation screen. <b>Press select button.</b>

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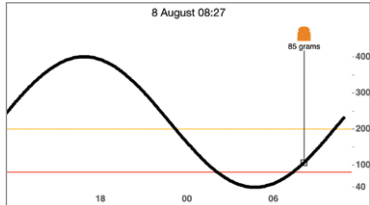
Step	What you see	What you do
<b>Enter Health Event</b>		
7		<p><b>Press</b> <i>down arrow</i> to highlight Health.</p> <p><b>Press</b> <i>select button</i>.</p>
8		<p><b>Press</b> <i>down arrow</i> to highlight Stress.</p> <p><b>Press</b> <i>select button</i>.</p>
9		<p><b>Press</b> <i>left/right arrows</i> to change time and date.</p> <ul style="list-style-type: none"> <li>• Left: Backward</li> <li>• Right: Forward</li> </ul> <p><b>Press</b> <i>select button</i>.</p>
10		<p><b>Verify</b> information is correct.</p> <p><b>Press</b> <i>left/right arrows</i> to highlight field.</p> <p><b>Press</b> <i>up/down arrows</i> to change numbers.</p> <p><b>Press</b> <i>select button</i> to save.</p>

## 10.4 Viewing Events

Events entered into your receiver can only be viewed on a Dexcom report; there are no Event markers on your receiver's screen.

On your smart device, turn to landscape mode to view your Event markers. A single small square marks all Events. Slide your finger across the screen or tap the square to get your Event information.

### Events Markers: App

What you see	What it does	What you do
	<b>Landscape Only</b> Show Event details.	<b>Landscape Only</b> <b>Tap <i>square</i>.</b> <b>Slide</b> finger across screen.

Once you have allowed your Share Follower's to access your trend screen, they too will be able to view your Events. See Part 5 for more information.

## Summary

### Now You Can:

- Define “Event”
- Describe each Event
- Create an Event
  - G5 Mobile app
  - Dexcom G5 receiver
- Recognize Event markers on the G5 Mobile app
  - Describe how Event markers are different in portrait and landscape view
- Describe how to view Events entered via your receiver

### What's Next?

In the next chapter, you will learn about how your trend's Alarm and Alerts help you monitor your glucose levels. You'll also learn how you know when your system loses its signal and stops communicating.

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# | Chapter 11

*Next Steps - Getting the Most out of Your Dexcom G5*

## Sensor Glucose Alarm and Alerts

### 11.1 Introduction

Monitoring your glucose trends is critical in managing your diabetes. But what happens if you're driving, in a meeting, at the movies, and can't, or don't want to, keep looking at your display device?

The Dexcom G5 understands there are times when you can't look at your receiver or smart device; however, you still need to know of actionable glucose trends or if you're not getting your sensor glucose readings.

This chapter reviews the Alarm and Alerts based on your sensor glucose readings, allowing you to proactively manage your glucose levels and make sure your transmitter is communicating with your display device.

In the next chapter, you'll learn how to customize the Alarm/Alerts.

After this chapter, you will be able to:

- Define "Alarm"
- Define "Alert"
- Identify the different types of Alerts
- Describe the difference between Alarm/Alerts
- Recognize different Alarm/Alerts
- Determine if signal loss is preventing you from getting an Alarm or Alert
- Describe recommended app settings
- Successfully confirm Alarm/Alerts on the smart device and receiver

Your trending information is one of the greatest benefits of the Dexcom G5. It's important to focus on your trends and rate of change arrows, rather than the exact number of your glucose reading.

## 11.2 Safety Statements

The Alarm and Alerts were designed to keep you safe, helping you avoid severe lows and highs or missing your readings. The following safety statements help ensure you get your Alerts and Alarm.

### **Warning**

**Do:** *Verify your smart device settings let you get Alarm and Alerts.*

To receive Alarm/Alerts you must:

- **Make sure** G5 Mobile app notifications are turned on in Settings menu
- **Verify** app hasn't been shut down.
- **Adjust** volume so you can hear sounds.
- **Turn on** *Bluetooth*.
- **Turn off** Do Not Disturb.
- **Keep** G5 Mobile app running in the background.
- **Restart** app after device is restarted.
- **Make sure** accessory devices (e.g., smart watch) do not override your sounds and other settings.

**Why:** Your app's settings do not override phone settings.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### **Warning**

**Don't:** *Never assume the Dexcom G5 Mobile app's Alarm/Alerts vibrations are different from other vibrating apps.*

**Do:** *Look at your smart device and check if vibration is a Dexcom G5 Alarm or Alert.*

**Why:** Medical device apps don't have special priority over your smart device's features. You can't determine if the vibration is coming from your G5 Mobile app or another app.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### **Warning**

**Do:** *Unplug headphones from your smart device when not in use.*

**Why:** If headphones are plugged in while not being used, you won't hear an Alarm or Alert.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### **Precaution**

**Don't:** *Never prevent communication between transmitter and display devices.*

**Do:** *Keep smart device and receiver within 20 feet of transmitter and away from obstructions.*

**Why:** If your transmitter and display device(s) are more than 20 feet apart or are separated by an obstruction, they might not communicate.

Types of obstruction differ, and not all types have been tested. Obstructions can include water, walls, metal, etc.

Water (e.g., while swimming, surfing, bathing, etc.) can severely limit communication range.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### Precaution

**Do:** *Set smart device and receiver settings separately.*

**Why:** Settings are specific to each display device and don't carry over to other devices. If you set up one device and then use another, you won't get an Alarm or Alert.

**Consequences:** Missing a severe low or high blood glucose or making a treatment decision that results in injury.

### Precaution

**Do:** *Verify smart device and receiver are turned on.*

**Why:** Neither the receiver nor smart device will generate sensor glucose readings, Alarm, or Alerts if turned off.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## 11.3 Alarm and Alerts

As part of managing your diabetes, you learned how to read your trend screen and how to enter Events. In this chapter, you'll learn how Alarm and Alerts can keep you safe from severe lows or highs.

Depending on your display device, you can customize how you receive your Alarm or Alerts.

### What Is an Alarm?

*While there are a variety of Alerts, there is just one Alarm, the Urgent Low Alarm (Alarm), which is set at 55 mg/dL. The Alarm will repeat every 5 minutes until you confirm the Alarm (see Chapter 12 on how to customize the sounds). If you confirm the Alarm and your sensor glucose readings do not go above 55 mg/dL in the next 30 minutes, the Alarm repeats.*

*Unlike Alerts, the Urgent Low Glucose Alarm setting can't be changed or turned off. Think of it as a safety net: your glucose level is dangerously low—pay attention now!*

### What Are Alerts?

An Alert is a message telling you your glucose level or CGM system needs attention.

Low/High glucose Alerts tell you when your sensor glucose readings are outside your target glucose range. Think of them as an FYI: You need to know what's happening. Rising/Falling Alerts tell you your glucose levels are changing quickly. Their default settings are Off (see Chapter 12 on how to turn them on).

Alerts message you with vibrations (vibrations are not available on all smart devices), visual prompts, sounds, or a combination of all three. On Apple devices, If your smart device is on Silent or Do Not Disturb, your Signal Loss Alert won't notify you with audio or vibration.

Unlike the Alarm, you can customize your different Alerts' target range (see Chapter 12).

During your initial setup, you establish your Low and High Alert levels. As mentioned before, this chapter is a review of the Alarm and Alerts, recommended smart device settings, and the receiver's default Alert settings.

Chapter 12 will show you how to change their settings to customize glucose level notifications, how you are notified, and, in some cases, how often you get notified. The following are the defaults.

## Default Alerts

### Low/High Alerts

When making treatment decisions using your Dexcom G5 Mobile CGM System, it's best to keep your Alerts turned on.

Your Low/High Alerts have the same color-coding as your trend graph screen:

- Red: Glucose levels are below your low threshold.
  - Default setting of 80 mg/dL.
- Gray: Glucose levels are within your High/Low Alert levels.
  - No Alerts.
- Yellow: Glucose levels are above your high threshold.
  - Default setting of 200 mg/dL

### Rise Rate/Fall Rate/Repeat/Signal Loss Alerts

Rise Rate and Fall Rate Alerts warn you when your glucose levels are changing rapidly, either up or down, and look similar to the rate of change arrows. Repeat Alerts let you know if your sensor glucose readings continue to be above or below your Alert levels.

## Glucose Level Alerts

- Rise Rate
  - Default setting is Off—No Alert.
  - Need to change settings to receive Rising Alert.
- Fall Rate
  - Default setting is Off—No Alert.
  - Need to change settings to receive Falling Alert.
- Repeat
  - Default setting is Off—No Alert.
  - Need to change settings to receive Repeat Alert.

## Signal Loss Alert

- Signal Loss tells you when you and the transmitter are too far from your display device or something is blocking your transmitter signal, causing you not to get sensor glucose readings.
  - Default setting is On.
  - On Apple devices, Silent and Do Not Disturb stop Signal Loss from making noise and vibrating.

Now you have the basics for Dexcom G5 Alarm/Alerts feature. Next, you will learn about each Alarm/Alert in more detail.

## 11.4 Alarm and Alerts Screens

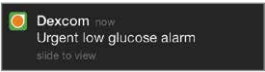


When you fall within an Alarm or Alert target range, your display device tells you. As mentioned in previous chapters, you won't get any Alarm or Alerts within five minutes of calibration.

Let's first review how the information is presented visually across the devices. While the Alarm/Alerts look different on the display devices, they reflect the same information.



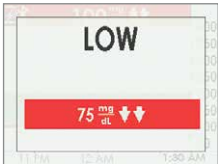
After prompts we'll separately review the vibration and audible Alarm/Alerts for the app and receiver.

Alarm and Alerts look different based on your display device, but reflect the same information.

## Urgent Low Glucose Alarm




Device	What you see	What it means
Smart Device: Lock Screen		<p>Sensor glucose reading at or below 55 mg/dL.</p> <p>Shows last glucose value.</p> <p>Arrows reflect rate of change.</p>
Smart Device: In App		
Receiver		

## Low/High Glucose Alerts

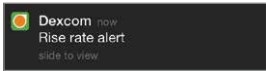


Device	What you see	What it means
<b>Smart Device: Notification</b>	 A black notification card with the Dexcom logo, the text "now Low glucose alert", and "slide to view".	<p>Sensor glucose reading at or below your Low Glucose Alert level.</p> <p>Shows most current sensor glucose reading.</p> <p>Arrows reflect rate of change.</p> <p>Can be set to repeat between 15 minutes to 4 hours.</p>
<b>Smart Device: In App</b>	 A white app screen titled "Low Glucose Alert" showing a large red circle with the number "77" and "mg/dL" below it. A green "OK" button is at the bottom.	
<b>Receiver</b>	 A receiver screen showing "LOW" in large letters. Below it, a red bar displays "75 mg/dL" with two downward arrows. The bottom of the screen shows a timeline from 11:00 to 1:00 AM.	

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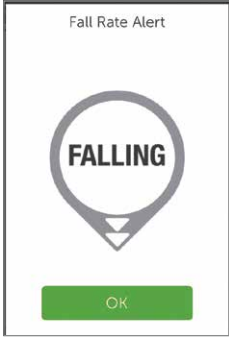

Device	What you see	What it means
<b>Smart Device: Lock Screen</b>		<p>Sensor glucose reading at or above your High Glucose Alert level.</p> <p>Shows most current sensor glucose reading.</p> <p>Arrows reflect rate of change.</p> <p>Can be set to repeat between 15 minutes to 4 hours.</p>
<b>Smart Device: In App</b>		
<b>Receiver</b>		

## Rise Rate/Fall Rate Alerts

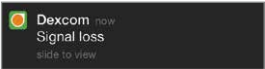


Device	What you see	What it means
Smart Device: Lock Screen	 A black notification banner on a lock screen with the Dexcom logo, the text "now Rise rate alert", and "slide to view".	<p>Sensor glucose readings rising quickly.</p> <p>Number of arrows shows how fast (2 mg/dL/min; 3+ mg/dL/min).</p>
Smart Device: In App	 A white alert box titled "Rise Rate Alert" with a large circular arrow icon containing the word "RISING". At the bottom is a green "OK" button.	
Receiver	 Two screenshots of a receiver screen. The left one shows "RISING" with one upward arrow. The right one shows "RISING" with two upward arrows. Both screens have a glucose trend graph in the background.	

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Device	What you see	What it means
Smart Device: Lock Screen	 A black notification banner on a lock screen. It features the Dexcom logo, the word 'now', and the text 'Fall rate alert' and 'slide to view'.	<p>Sensor glucose readings falling quickly.</p> <p>Number of arrows shows how fast (2 mg/dL/min; 3+ mg/dL/min).</p>
Smart Device: In App	 A white screen with a grey location pin icon in the center. Inside the pin, the word 'FALLING' is written in bold black letters. Above the pin, it says 'Fall Rate Alert'. Below the pin is a green button with the text 'OK'.	
Receiver	 Two screenshots of a receiver screen. The left screenshot shows the word 'FALLING' in bold black letters above a single black downward arrow. The right screenshot shows the word 'FALLING' in bold black letters above two black downward arrows. Both screens have a green bar at the bottom with a timestamp.	

## Signal Loss Alert

Device	What you see	What it means
Smart Device: Lock Screen		<p>Your receiver and transmitter are not communicating.</p> <p>You will not receive Alarm/Alerts.</p> <p>Check BG meter to check your glucose and make any treatment decisions.</p>
Smart Device: In App		
Receiver		

## 11.5 App: Suggested Settings

Review Chapter 5 to learn how to configure your smart device for use with the Dexcom G5. Use the suggested settings to help ensure you get Alarm and Alerts.


## 11.6 Receiver: Default Beeps and Vibrations

The Dexcom G5 receiver's Alarm/Alerts are vibrations and a beep, or a series of beeps, based on the Alarm or Alert. Beeps and vibrations are preprogrammed into the receiver, and unlike with the smart device, the volume can't be changed.

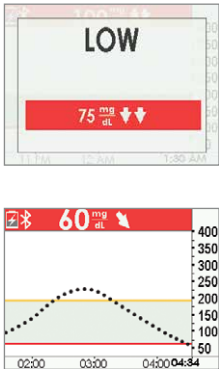
In Chapter 12 you'll learn how to adjust the volume and intensity of your Alarm/Alerts. The following is a table of the receiver's default beep and vibration patterns. After you confirm the initial Alert vibration, you won't get any beeps or sounds unless you've turned on the Repeat Alert.

In the next section, you'll learn how to confirm the Alarm/Alerts.

## Urgent Low Glucose Alarm

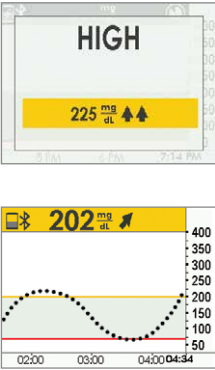
What you see	Beeps and vibration
 <p>The screen displays "URGENT LOW" in large black letters. Below it, a red banner shows "55 mg/dL" with a downward arrow and a double upward arrow.</p>	<p><b>Initial Default Alert:</b> Vibrates 4 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 4 times every 5 minutes until confirmed or sensor glucose readings go above Alarm level.</p> <p><b>After 30 Minutes:</b> After confirming the Alarm, you will continue to be notified if sensor glucose readings remain at or below the pre-set 55 mg/dL Alarm level.</p>

## Low/High Glucose Alerts


What you see	Beeps and vibration
 <p>The top screen shows "LOW" in large black letters. Below it, a red banner shows "75 mg/dL" with a downward arrow and a double upward arrow. The bottom screen shows a glucose trend graph with a red banner at the top displaying "60 mg/dL" and a downward arrow. The graph shows a peak around 03:00 and a decline towards 04:00.</p>	<p><b>Initial Default Alert:</b> Vibrates 3 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 3 times every 5 minutes until confirmed. Trend screen will continue to reflect Alert until sensor glucose readings go above Low Alert level.</p>

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What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> Vibrates 2 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 2 times every 5 minutes until confirmed. Trend screen will continue to reflect Alert until sensor glucose readings go below High Alert level.</p>

## Rise Rate/Fall Rate Alerts

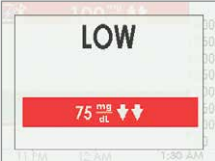
What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> None/Off.</p> <p><b>After Setting Change:</b> Vibrates 2 times, 2 sounds.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 2 times every 5 minutes until confirmed. Vibrates/beeps 3 times every 5 minutes until confirmed or sensor glucose reading rises below Alert level.</p>

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What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> None/Off.</p> <p><b>After Setting Change:</b> Vibrates 3 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 3 times every 5 minutes until confirmed or sensor glucose reading rises above Alert level.</p>

## Low Repeat/High Repeat


What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> None/Off.</p> <p><b>After Setting Change:</b> Vibrates 3 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 3 times every 5 minutes until confirmed. Will re-alert if sensor glucose readings drop to 55 mg/dL or below.</p>

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What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> None/Off.</p> <p><b>After Setting Change:</b> Vibrates 2 times.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 2 times every 5 minutes until confirmed.</p>

## Signal Loss Alert

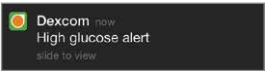

What you see	Beeps and vibration
	<p><b>Initial Default Alert:</b> On.</p> <p><b>After Setting Change:</b> Vibrates 1 time.</p> <p><b>After 5 Minutes:</b> Vibrates/beeps 1 time every 5 minutes for a total of 6 times if not confirmed. After 6 times it will not alert again.</p>

## 11.7 Confirming Alarm/Alerts


Alarm/Alerts require you to confirm them. How this is done depends on your display device. If using both display devices, you'll need to confirm Alarm/Alerts on each device separately.

Due to its medical importance, the Alarm is more persistent. Even after confirming an Alarm, if your sensor's glucose readings remain at or below 55 mg/dL, an Alarm will sound every 30 minutes until readings are above 55 mg/dL.

## Smart Device: Confirming Alarm/Alerts

Device	What you see	What you do
<b>Smart Device: Notification</b>		Open the app.
<b>Smart Device: In App</b>		<b>Tap</b> <i>OK</i> to confirm Alarm/Alert.

## Receiver: Confirming Alarm/Alerts

What you see	What you do
	<b>Press</b> <i>select button</i> .

Once confirmed, you won't receive the same Alert unless you hit the Alert's target range again. Your Alarm will repeat even after confirming if your glucose levels do not return to your target range.

## Summary

### Now You Can:

- Define “Alarm”
- Define “Alert”
- Identify the different types of Alerts
- Describe the difference between Alarm/Alerts
- Recognize different Alarm/Alerts
- Determine if signal loss is preventing you from getting an Alarm/Alert
- Describe recommended app settings
- Successfully confirm Alarm/Alerts on the smart device and receiver

### What's Next?

Up to now, you have learned about the Alarm/Alerts default settings. But what do you do if you want to decrease the High Alert glucose level threshold, or you want to continue getting a Low Alert notification if your glucose levels don't improve, even though you've confirmed the notification?

How do you make your Alarm/Alerts fit your needs?

# Chapter 12

*Next Steps - Getting the Most out of Your Dexcom G5*

## On the Go With G5: Customizing Your Alarm and Alerts

### 12.1 Introduction

The receiver and app come with default glucose level Alert settings, but perhaps they don't reflect the glucose level that works best for you.

Perhaps you're in a meeting and can only confirm an Alert, yet want to make sure your Alert repeats, or continues, until you're able to take corrective measures. Maybe you'd like to get a Rising/Falling glucose Alert, but their settings are off by default. How do you turn them on?

In this chapter, you'll learn how to personalize your Alarm and Alert tones and glucose levels.

After this chapter, you will be able to:

- Customize your Low/High Alerts
  - G5 Mobile app
  - Dexcom G5 receiver
- Adjust your Alarm sound notification
- Use receiver's Advanced Alerts
  - Low/High Repeat
  - Rise/Fall Rate
  - Signal Loss

Each display device has customization options; however, the setup flow is different. Before making any changes to your Alert levels, talk with your healthcare professional.

First, let's take a look at personalizing your app Alarm and Alerts, and then we'll review the same process for the receiver.

## 12.2 Safety Statement

### **Warning**

**Do:** *If using both receiver and app to get an Alarm or Alerts, change settings in each display device.*

**Why:** Any changes to the G5 Mobile app will not carry over to the receiver.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.


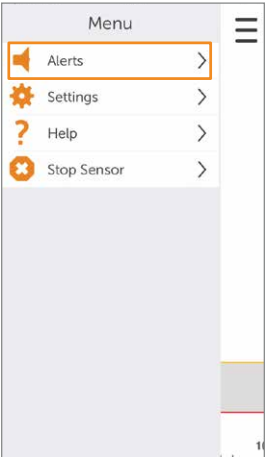
## 12.3 Changing App Alarm and Alerts

### App Screen Overview

The Alerts Main Menu lists all customizable Alarm/Alerts and their current settings. Part of your initial setup included setting your Low/High Alerts. In this chapter, you'll learn how to change them.

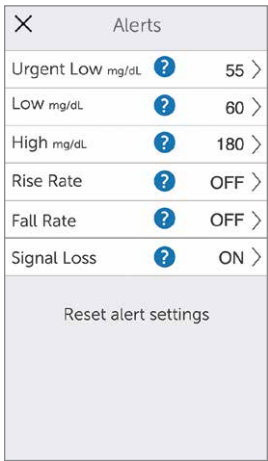
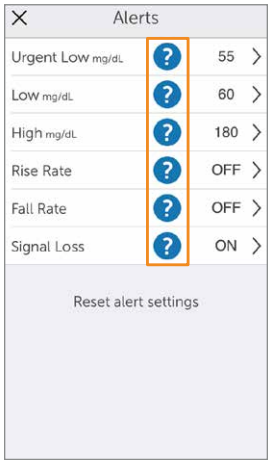
Before learning how to change your settings, let's review the app's Alerts Main Menu screen.

## Customizing Alerts: App Alarm/Alerts Screen Overview

Step	What you see	What it means	What you do
1		<b>Access</b> Main Menu.	<b>Tap</b> <i>Main Menu icon.</i>
2		<b>Access</b> Alerts Main Menu.	<b>Tap</b> <i>Alerts.</i>

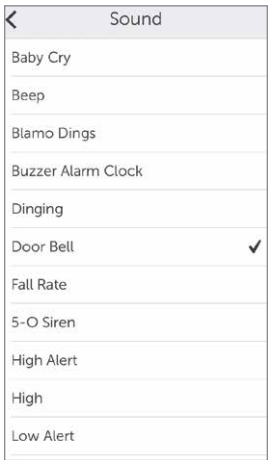
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Step	What you see	What you do	What it means
3		<p>All customizable Alarm and Alerts.</p> <p>Current Alert settings.</p> <p>All alerts have:</p> <ul style="list-style-type: none"> <li>• On/Off switch</li> <li>• "Notify me" options</li> <li>• Sound options</li> </ul>	<p><b>Tap Alarm/Alert</b> you want to change.</p>
4		<p>“?” explains:</p> <ul style="list-style-type: none"> <li>• Each Alarm/Alert</li> <li>• Message options</li> <li>• Recommended settings</li> </ul>	<p><b>Tap “?”</b> for Alarm/Alert information.</p>

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Step	What you see	What you do	What it means
5		<p><b>Urgent Low Glucose Alarm:</b></p> <ul style="list-style-type: none"><li>• Preset at 55 mg/dL and can't be changed</li><li>• <i>Repeat</i> preset at 30 minutes and can't be changed</li><li>• <i>Sound</i> is the only change option</li></ul>	<p><b>Tap <i>Sound</i></b> to change sound.</p>

## Steps to Customize App Alarm/Alerts

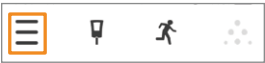
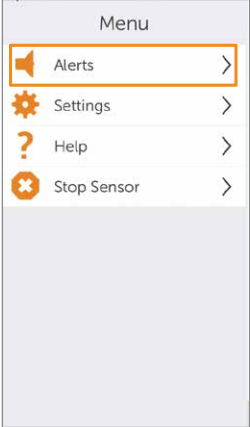
Although the results will vary depending on what Alarm or Alert you are customizing, the steps to change your Alarm or Alerts are the same:

From app's Main Menu:

1. **Tap Alerts.**
2. **Tap** the *Alert* you want.
  - a. **Tap switch** to turn Alert on/off.
3. **Tap Notify me.**
  - a. Change the Alert glucose level (mg/dL).
    - i. **Scroll selection wheel** to find your desired Alert level.
    - ii. **Tap** to highlight.
    - iii. **Tap Save.**
4. **Tap Repeat.**
  - a. Change the amount of time you want between your High/Low Alerts if your sensor glucose readings continue to be high or low.
    - i. **Scroll selection wheel** to find your desired Alert level.
    - ii. **Tap** to highlight.
    - iii. **Tap Save.**
5. **Tap Sound.**
  - a. Assign a different sound to each Alarm or Alert.
    - i. **Scroll selection wheel** to find your desired sound.
    - ii. **Tap** to highlight.
    - iii. **Tap back arrow.**

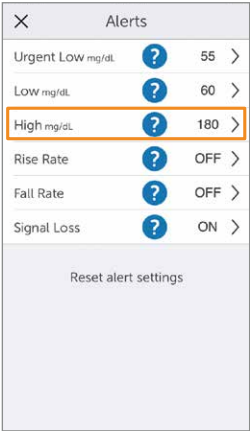

In this following example, we'll change the High Alert level from 200 mg/dL to 190 mg/dL, repeating every hour if you continue to stay high, with a Door Bell sound.

# Customizing Alerts: App

Step	What you see	What it means	What you do
Access Alerts Main Menu			
1		Opens Main Menu.	<b>Tap <i>Main Menu</i> icon.</b>
2		Opens Alerts Menu.	<b>Tap <i>Alerts</i>.</b>

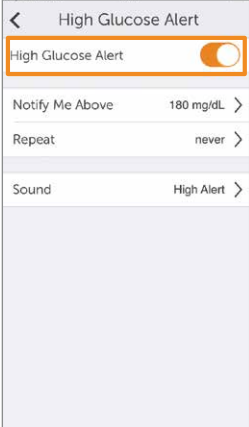
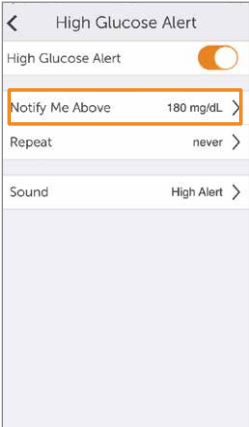
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Step	What you see	What it means	What you do
Changing an Alert			
3	 <p>The screenshot shows a list of alerts: Urgent Low mg/dL (55), Low mg/dL (60), High mg/dL (180), Rise Rate (OFF), Fall Rate (OFF), and Signal Loss (ON). Each item has a question mark icon and a right arrow. The 'High mg/dL' row is highlighted with an orange border. Below the list is a 'Reset alert settings' button.</p>	Opens High Alert settings (mg/dL).	<b>Tap <i>High mg/dL</i>.</b>
4	 <p>The screenshot shows the 'High Glucose Alert' settings. At the top is a toggle switch for 'High Glucose Alert', which is currently turned on (orange). Below it are settings for 'Notify Me Above' (180 mg/dL), 'Repeat' (never), and 'Sound' (High Alert). Each setting has a right arrow. The 'High Glucose Alert' toggle is highlighted with an orange border.</p>	Shows High Alert options and current settings	<b>Check <i>High Alerts</i> is on.</b> <ul style="list-style-type: none"><li>• On - Orange</li><li>• Off - Gray</li></ul>



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Step	What you see	What it means	What you do
<b>Changing an Alert</b>			
5		Won't get Alert if off.	<p>If off:</p> <p><b>Slide switch</b> to On.</p> <ul style="list-style-type: none"> <li>• On - Orange</li> <li>• Off - Gray</li> </ul>
6		Changes High Alert (mg/dL).	<p><b>Tap</b> <i>Notify Me Above</i>.</p>

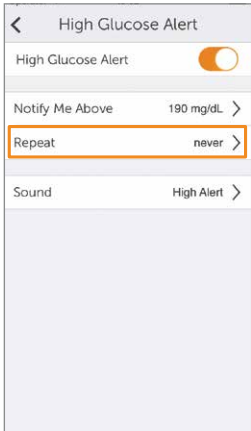

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Step	What you see	What it means	What you do
<b>Changing an Alert</b>			
7		Changes glucose level from current level (mg/dL).	<b>Scroll <i>selection wheel</i>.</b> <b>Stop at 190 mg/dL.</b>
8		<p>Saves new High Alert glucose level (mg/dL).</p> <p>Returns to High Glucose Alert screen options.</p> <p>Notify Me Above set at 190 mg/dL.</p>	<b>Tap <i>Save</i>.</b>


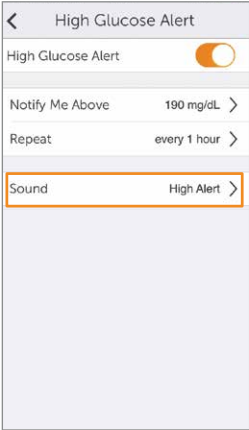
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Step	What you see	What it means	What you do
<b>Changing an Alert</b>			
9		<p>Changes how often your High Alert repeats after initial Alert and confirmation.</p> <p>Repeats only if you are above your high glucose level.</p>	<p><b>Tap <i>Repeat</i>.</b></p>
10		<p>Changes the current repeat setting.</p> <p>Can select in five minute steps (range 15 minutes-4 hours).</p>	<p><b>Scroll <i>selection wheel</i>.</b></p> <p><b>Stop</b> at 1 hour.</p>

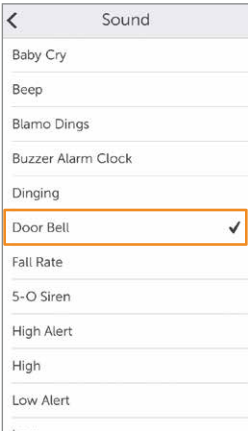
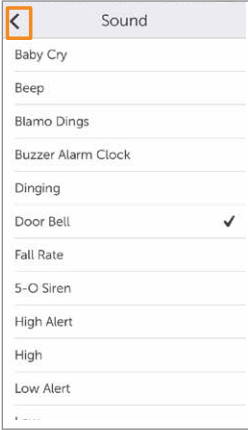
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Step	What you see	What it means	What you do
<b>Changing an Alert</b>			
11		<p>Saves your new repeat timing.</p> <p>Returns to High Glucose Alert screen options.</p> <p>Repeat shows how often you'll get notified.</p>	<b>Tap <i>Save</i>.</b>
12		<p>Customizes Alert sound.</p>	<b>Tap <i>Sound</i>.</b>

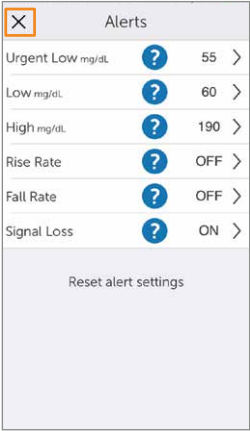
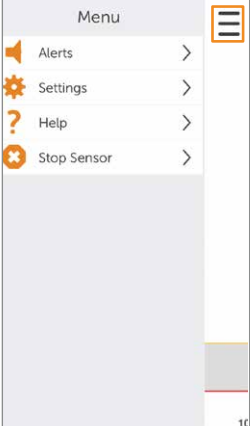
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Step	What you see	What it means	What you do
<b>Changing an Alert</b>			
13	 <p>The screenshot shows a list of sound options: Baby Cry, Beep, Blamo Dings, Buzzer Alarm Clock, Dinging, Door Bell (highlighted with an orange border and a checkmark), Fall Rate, 5-O Siren, High Alert, High, and Low Alert.</p>	Changes current sound setting.	<p><b>Tap</b> Doorbell.</p> <p><b>Tap</b> <i>Sound</i> again to hear sound sample.</p>
14	 <p>The screenshot shows the same list of sound options as in step 13. The back arrow in the top left corner is highlighted with an orange border.</p>	<p>Saves your new Alert sound.</p> <p>Returns to High Glucose Alert Menu.</p>	<p><b>Tap</b> <i>Back Arrow</i>.</p>

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Step	What you see	What it means	What you do
Return to Trend Screen			
15		Returns to Main Menu.	Tap "X".
16		Returns to trend screen.	Tap <i>Menu</i> icon Or Swipe <i>right</i> .

## 12.4 Changing Receiver Alarm and Alerts

Any changes to the app will not carry over to the receiver. If using both, make the same changes in the receiver that you made in your smart device. If you don't, you may miss an Alarm or Alert.

You'll notice a difference in flow between the app and the receiver when personalizing your Alarm/Alerts. With the app, all Alert adjustments are made from one screen, whereas in the receiver, you make changes in different screens.

Unlike the app, you change your receiver's tones (known as Profiles) through a number of different screens in the Profiles menu.

### Profiles

Profiles determine the sound and volume of your Alarm and Alerts.

As mentioned in the previous chapter, the receiver uses a series of beeps/vibrations for an Alarm or Alert. The receiver doesn't have the same variety of tones as the app; however, you *can* adjust the volume. While the receiver doesn't have a silent mode, selecting Vibrate will replace audible beeps with quiet vibrations. The only exception is the Alarm: the Urgent Low Glucose Alarm can't be turned off.

Changes made in Profiles are applied to all of the receiver's Alarm/Alerts. If you choose Soft (see next table), all Alerts are in Soft mode. In Chapter 10, you learned how many beeps each Alarm/Alert has.

Normal is the default setting for your receiver sound Profiles.

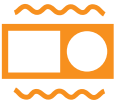





Attentive uses a rising or falling melody instead of beeps.

The receiver first vibrates when sending you an Alarm or Alert. If you confirm the alert at the first vibration by pressing the select button on your navigation wheel, you won't get any Alarm/Alert tones. If you would like to continue to get your Alarm or Alert after confirming, later in this chapter you'll learn about setting up Repeat Alerts.

HypoRepeat is very similar to the Normal Profile, but keeps repeating the fixed Urgent Low Glucose Alarm every 5 seconds until your sensor glucose value rises above 55 mg/dL or you confirm by pressing the select button.

The next table lists the different sound Profiles, starting with the quietest, working its way up to the loudest.

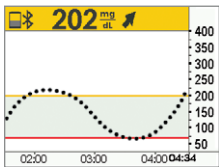


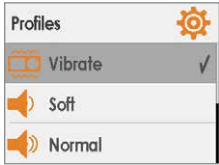
## Alarm/Alert Sound Profiles

Icon	Profile name	Notification description
	Vibrate	Vibration only. Only sound is your receiver vibrating. Vibrate is not available for the Alarm.
	Soft	Lower volume beeps.
	Normal	Medium volume beeps. Default Profile.
	Attentive	No beeps. Rising melody for High and Rising Alerts Dropping melody for Low and Falling Alerts
	HypoRepeat	Medium volume beeps. Urgent Low Glucose Alarm only. Repeats fixed low alarm every 5 seconds until sensor glucose reading rises above 55 mg/dL or is confirmed.
	Try It	Sample <i>Profile</i> setting before selecting.

After choosing your sound Profile, changing it is just a few steps away! Change your Profile throughout the day depending on what lies ahead. In a meeting? Select Vibrate. Going to a ball game after work? Select Attentive.

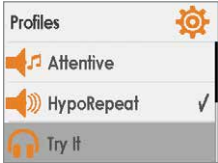
The next table shows how to change a sound Profile, then sample how it sounds.

## Customizing Sound Profiles: Receiver

Step	What you see	What it means	What you do
1		Goes to Main Menu	<b>Press <i>select button</i>.</b>
2		Second Main Menu screen.	<b>Press <i>down arrow</i>.</b> Profiles is on second screen.
3		Profiles adjusts volume of Alarm/Alerts.	<b>Press <i>up/down arrows</i>.</b> <b>Stop at <i>Profiles</i>.</b> <b>Press <i>select button</i>.</b>
4		Choose sound Profile.	<b>Press <i>up/down arrows</i>.</b> <b>Stop at desired <i>Profile</i>.</b> <b>Press <i>select button</i>.</b>

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Step	What you see	What it means	What you do
5		Hear the sound.	<b>Sample sound:</b> <b>Press</b> <i>down arrow</i> . <b>Stop</b> at <i>Try It</i> . <b>Press</b> <i>select button</i> to have the sound play. <b>Exit Profiles:</b> <b>Press</b> <i>left arrow</i> .
6	N/A	Repeat as needed.	<b>Repeat</b> steps 2-5 to change Profile. <b>To Exit:</b> <b>Press</b> <i>left arrow</i> to Main Menu.

Profiles allow you to change your Alarm and Alert tones. The Alerts menu gives you options for personalizing your glucose level Alerts, repeat Alerts, turning on your Rising/Falling Alerts, and turning on your Signal Loss Alert.

## Alerts Main Menu

The Low/High Alert option lets you adjust your Low/High glucose Alert level (mg/dL). If you are using your Dexcom G5 for treatment decisions, keep your Alerts on.

The Advanced option lets you turn on Low/High Repeat, Rise/Fall Rate Alerts, and Signal Loss Alert.

### Low/High Repeat

In the previous chapter, you learned that confirming an Alert stops it from repeating. If you want to continue to be re-alerted until your glucose levels are back in your target range, turn on the Low/High Repeat option.

The default setting for Low/High Repeat is Off.

## Rise/Fall Rate

Your trend screen provides visual cues letting you know your sensor glucose readings are falling or rising rapidly.

Constantly looking at your screen may not be practical. You can customize your Rise/Fall Rate Alert with vibrations or beeps to let you know when your glucose is rising or falling (2 mg/dL/min, or 30 mg/dL in 15 minutes) or rapidly rising or falling (3 or more mg/dL/min, or 45 mg/dL or more in 15 minutes).

The default setting for the Rise/Fall Rate Alert is Off.

It is important that you discuss your Alert settings with your healthcare professional.

## Signal Loss

Signal Loss Alert tells you when your transmitter and receiver aren't communicating. Set the Signal Loss Alert to get alerted if your sensor glucose readings have stopped due to a signal loss anywhere from 20 to 200 minutes.

The default setting for the Signal Loss Alert is On.

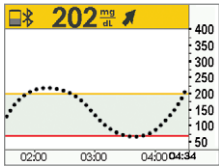
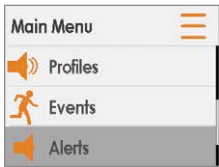
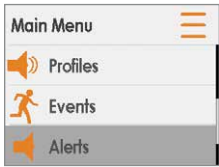

Remember, on Apple devices, if Silent or Do Not Disturb are on, Signal Loss can't make sound or vibrate.

## Steps to Customize Receiver Alarm/Alerts

Using the same example from changing your app Alerts, let's change the receiver's High Alert notification level from 200 mg/dL to 190 mg/dL, repeating every 60 minutes.

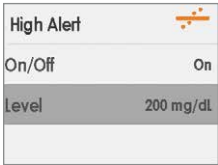



Follow the same steps for turning on the Rise/Fall Rate Alerts, and adjusting your Low Alert.

## Customizing Alerts: Receiver

Step	What you see	What it means	What you do
Change High Alert Level			
1		Goes to Main Menu.	<b>Press</b> <i>select button</i> .
2		Alerts option from the Main Menu.	<b>Press</b> <i>down arrow</i> . <b>Stop</b> at Alerts.
3		Enter Alerts menu option.	<b>Press</b> <i>select button</i> .
4		Alerts' option menu. Lists different Alerts: High Alert, Low Alert, Advanced (High/Low Repeat, Rise/Fall Rate, Signal Loss) Alerts.	<b>Press</b> <i>up/down arrows</i> . <b>Stop</b> at High Alert. <b>Press</b> <i>select button</i> .






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Step	What you see	What it means	What you do
<b>Change High Alert Level</b>			
5		Alert's current settings. Change your current High Alert level.	<b>Press down arrow.</b> <b>Stop at Level.</b> <b>Press select button.</b>
6		Current setting. Use up/down arrows to change your High Alert level (mg/dL).	<b>Press down arrow.</b> <b>Stop at 190 mg/dL.</b>
7		Save new High Alert level. Return to Alerts Menu.	<b>Press select button.</b> To exit: <b>Press left arrow.</b>
<b>Turn on Repeat</b>			
8		Alerts Menu. Choose Advanced to get to Repeat Alert.	<b>Press down arrow.</b> <b>Stop at Advanced.</b>

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Step	What you see	What it means	What you do
<b>Turn on Repeat</b>			
9		Enter Advanced Alert options.	<b>Press</b> <i>select button</i> .
10		Main Advanced screen. Set Repeat Alerts. Turn on Rise/Fall Rate Alerts.	<b>Arrow</b> to <i>High Repeat</i> . <b>Press</b> <i>select button</i> .
11		Initial screen shows current repeat minutes. Change time frame in 5-minute increments.	<b>Press</b> <i>up/down arrows</i> . <b>Stop</b> at <i>60 minutes</i> .
12		Change Repeat time for High Alert.	<b>Press</b> <i>select button</i> .
13		Changed completed. Return to Alerts Menu.	To exit: <b>Press</b> <i>left arrow</i> .

It doesn't matter which device you first use to customize your Alarm/Alerts settings; the key is making sure you make the same changes in both devices or you may miss an Alarm or Alert.

## Summary

### Now You Can:

- Customize your Low/High Alerts
  - G5 Mobile app
  - Dexcom G5 receiver
- Adjust your Alarm sound notification
- Use receiver's Advanced Alerts
  - Low/High Repeat
  - Rise/Fall Rate
  - Signal Loss

### What's Next?

Believe it or not, you are becoming a pro at using your Dexcom G5! You've set up the app and receiver, started a session, calibrated, followed your glucose trends, paid attention to your Alarm/Alerts prompts, and ended a session!

Other than monitoring your blood glucose sensor readings and their trends, how else can you use your Dexcom G5? In the next chapter, you will learn what you need to know when using your CGM system for treatment decisions.

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# Chapter 13

*Next Steps - Getting the Most out of Your Dexcom G5:*

## Using the Dexcom G5 Mobile CGM System for Treatment Decisions

### 13.1 Introduction

In previous chapters, you learned how trend arrows help you see how quickly your glucose is falling or rising. You also learned how Alarm/Alerts let you know something is happening to your glucose levels.

For example, you had a snack this afternoon. Just as you are leaving work, you get a High Glucose Alert. What would you do? What would you look at? Could you use your Dexcom G5 sensor glucose readings to make a treatment decision?

Prior to the Dexcom G5, you had to take a fingerstick with your BG meter before making any treatment decisions.

The Dexcom G5 changes all that. When asked if you could make treatment decisions based on your Dexcom G5 readings, the answer is now “Yes I can!”

Treatment decisions using your Dexcom G5 are easy. Follow the steps outlined in this chapter and you’ll have what you need to make decisions using your G5. You’ll also know when you should still use your BG meter.

After this chapter, you will be able to:

- Talk with your healthcare professional about creating a personalized treatment plan
- Identify when you can use your Dexcom G5 in treatment decisions
- Describe the importance of Alarm/Alerts in treatment decisions
- Tell when you shouldn’t make a treatment decision using the Dexcom G5
- Recognize when you should watch and wait before treating

## 13.2 Safety Statement

### Warning

**Do:** *Do take a BG measurement with your BG meter and use the BG value for treatment decisions (such as how much insulin to take) if your Dexcom G5 does not display both a number and a trend arrow.*

**Why:** Not having both a number and the arrow means you may be getting inconsistent or inaccurate sensor glucose readings.

**Consequences:** Using inconsistent or inaccurate sensor glucose readings for treatment decisions could result in you missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## 13.3 Treatment Decisions: The Basics

### How Do You Know You're Ready?

Whether you're new to Dexcom or experienced, **you should keep using your BG meter to make treatment decisions until you know how Dexcom works for you.** Don't rush! It may take days, weeks or months for you to gain confidence in using your CGM to make treatment decisions. **Confirm your glucose readings using your BG meter so you understand that:**

- The accuracy you experience with each newly inserted sensor may vary
- A sensor might work differently in different situations (meals, exercise, first day of use, etc.)

Before you start making treatment decisions with your Dexcom G5, work with your HCP and learn the basics: When do you need to use a BG meter instead of relying on your Dexcom G5? How can you avoid insulin stacking? Once you and your HCP are comfortable that you know the basics, you're ready!

Some users have reported that performance may vary significantly between sensors; pay attention to how each newly inserted sensor is working for you when deciding whether to make treatment decisions based on your glucose readings. If your symptoms don't match your glucose readings, use your BG meter when making treatment decisions. If your glucose readings don't consistently match your symptoms or BG meter values then talk to your healthcare professional about how you should be using the Dexcom G5 to help manage your diabetes. Your healthcare provider can help you decide how you should best use this device."

Working closely with your healthcare professional (HCP), develop a personalized treatment plan. This section is designed to help you talk with your HCP, followed by what you need to have on your Dexcom G5 before making a treatment decision.

## Creating Personal Guidelines

Working with your HCP, find *your* target glucose range, plus your appropriate Alert settings.

Along with helping you figure out your target glucose range, your HCP can show you how to stay within your target range using the Dexcom G5. Let your HCP guide you through the system's features: adjusting your Alert settings accordingly, working with sensor readings and trend errors for treatment decisions, along with managing your diabetes with the system.

Learn from your HCP how changes:

- To an insulin regimen should be made cautiously and only under medical supervision
- In insulin strength, manufacture, type, or method of administration may result in a need for a change in insulin dose

Your HCP is your partner in personalizing your diabetes management plan and treatment decisions.

## Make a List

Before meeting with your HCP, make a list of questions you have about treatment decisions in general and how to specifically include your Dexcom G5 in your decision-making process. Think of the following as talking points or your “What to Dos” when making treatment decisions. Below are some topics you may want to include:

- What is your plan if your blood glucose is falling or rising rapidly?
- Discuss different scenarios. When to:
  - Take more insulin
  - Eat fast-acting carbohydrates
- When to watch and wait so you don't stack insulin
- How to use your Dexcom G5 to make better meal-dosing decisions
  - Using the Dexcom G5 in treatment decisions
  - Setting your Alerts
  - What to do when you get an Alarm or Alert

- What to expect on your first day
- Acting on trend arrows
- Looking at your trend graph for your most recent readings
- Using sensor readings
- Looking at the last 24 hours
  - What decisions worked?
  - How can you improve?

## What Not to Do

While talking to your HCP about using your Dexcom G5 for treatment decisions, ask, “When shouldn’t I use my Dexcom G5 and use my BG meter instead?”

### *Use Your BG Meter When...*

There are times when you need to rely on your BG measurements from your BG meter and not your Dexcom G5.

### **Not Sure if Your Dexcom G5 Mobile Is Correct**

There are times when you look at your home screen and think, “Hmmmmm, that’s not the number I thought I would see.” For example, you just took a brisk walk and looked at your home screen. The sensor reading says 285, but you think you should be around 180.

Anytime the number on your home screen doesn’t match what you expect, obtain a BG with your BG meter.

### **Your Symptoms Don’t Match**

You know your body...listen to it. Your symptoms may not always match your sensor glucose readings. For example, you may feel low, but your readings show you are in your target range.

If your symptoms and readings don’t match, don’t ignore how you feel. Measure your BG with your BG meter and treat accordingly.

## **Loved One's Symptoms Don't Match**

If you're a caregiver, watch for signs that something is wrong. Your two-year-old may not be able to tell you what's going on, but chances are their actions will. Look for the differences between how they normally act and now; then look at the Dexcom G5.

If the symptoms don't match, use the BG meter. Don't ignore changes in behavior. Take a fingerstick and treat accordingly.

## **When in Doubt**

Sometimes you don't feel your lows or highs. Or you may be new to diabetes and aren't even sure what your body is telling you. When in doubt, use your BG meter to determine your BG value before making treatment decisions.

Sometimes on your first day, it takes a little while for your body and sensor to know each other. Until you are comfortable with making treatment decisions with the G5, use your meter.

## **Just Took Acetaminophen**

Any medications containing acetaminophen, such as Tylenol®, Excedrin Extra Strength®, or Nyquil® can give you a false high reading. Never use the Dexcom G5 for treatment decisions if acetaminophen is in your system; always use your BG meter.

## **Use a Smart Watch**

You shouldn't use your smart watch readings for treatment decisions.

If you're using a smart watch to get your Dexcom G5 information, look at your receiver or smart device before making a treatment decision. Your smart watch reflects information sent from your smart device and may not show your most recent sensor readings.

## **No Arrows or Readings**

To make a treatment decision, you want to make sure all the information is there. Anytime you don't have a number and arrow on your trend screen, use your BG meter to get a BG value to make treatment decisions. If your trend screen shows Signal Loss or Low or High instead of a glucose reading number, use your BG meter.

At times you may have a number but not an arrow. When this happens, use your BG meter.

No number, no arrow, don't use your Dexcom G5 for treatment decisions.

Learning what not to do isn't just about deciding if you need to use your BG meter and not your Dexcom G5. It's also about learning when you shouldn't dose. Next, you'll learn about "stacking" insulin.

## Watch and Wait

Be patient. Insulin takes time to work.

It's tempting to correct an ongoing high blood sugar; however, taking insulin doses too close together, or “stacking” insulin, is a common cause of low blood sugars.

So what should you do?

Rapid-acting insulin may not start working until 15 minutes after dosing. It works hardest typically one or two hours later, staying in your system four or more hours. If you inject another corrective dose within that time frame, it could result in low blood sugar. You do want to respond to a high glucose reading between meals; just be careful not to overreact. Talk with your HCP about what you should do if you are high between meals.

Don't worry—If you take insulin to cover what you eat, you're not stacking insulin. Talk to your HCP to help you decide the best action to take.

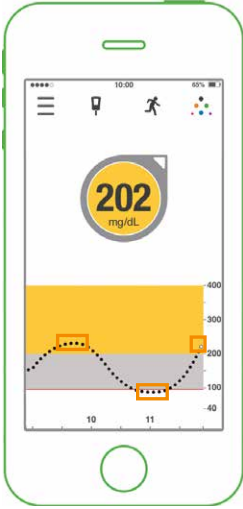
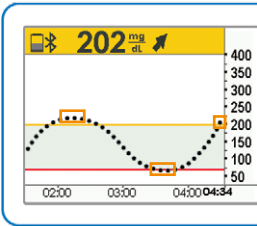
After meeting with your HCP, you should be ready to use the Dexcom G5 for treatment decisions. But do you know why? The next section explains the whys and hows of using your Dexcom G5 in treatment decisions.

## 13.4 Treatment Decisions: Beyond the Basics

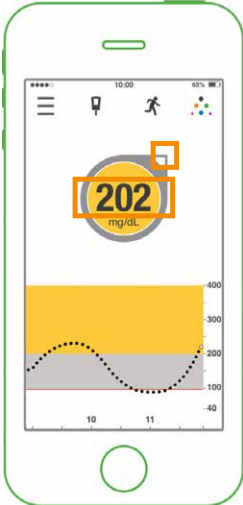
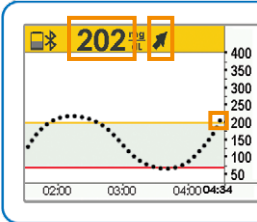
Ready for more? Your Dexcom G5 offers information you can use to adjust your treatment decisions.

The table below is an overview of the information your Dexcom G5 offers, followed by how you can use its Alarm/Alerts, readings, and trend arrows, in your treatment decisions.

## Alarm/Alerts

Device	What you see	What it means
<p><b>Smart Device: In App, Portrait</b></p>	 <p>The image shows a smartphone screen with a green border. At the top, the status bar shows signal strength, time (10:00), and battery (60%). Below the status bar are icons for a menu, a glucose sensor, a person walking, and a group of people. The main display features a large circular gauge showing '202 mg/dL'. Below the gauge is a line graph with a yellow shaded area above 300 mg/dL and a grey shaded area below 100 mg/dL. Two orange boxes highlight specific points on the graph: one at approximately 250 mg/dL and another at approximately 100 mg/dL.</p>	<p><b>Alarm/Alerts</b></p> <p>Highlighted sections show your Alarm and Alerts triggers.</p> <p>Your Alarm/Alerts are your call to action.</p>
<p><b>Receiver</b></p>	 <p>The image shows a receiver screen with a blue border. At the top, the status bar shows signal strength, time (02:00), and battery (60%). Below the status bar are icons for a menu, a glucose sensor, a person walking, and a group of people. The main display features a large circular gauge showing '202 mg/dL'. Below the gauge is a line graph with a yellow shaded area above 300 mg/dL and a grey shaded area below 100 mg/dL. Two orange boxes highlight specific points on the graph: one at approximately 250 mg/dL and another at approximately 100 mg/dL.</p>	

## Sensor Readings and Arrows

Device	What you see	What it means
<p><b>Smart Device: In App, Portrait</b></p>	 <p>The image shows a smartphone screen with a green border. At the top, the status bar shows signal strength, time (10:00), and battery (60%). Below the status bar is a navigation bar with icons for a menu, a glucose sensor, a person walking, and a multi-colored dot icon. The main display features a large circular glucose reading of 202 mg/dL, with an orange box highlighting the number 202. To the right of the reading is a small orange square icon with a white upward-pointing arrow. Below the reading is a line graph showing glucose levels over time, with a yellow shaded area above the line and a grey shaded area below. The x-axis is labeled with 10 and 11. The y-axis ranges from -40 to 400.</p>	<p><b>Sensor Glucose Reading</b> Most recent sensor glucose reading.</p> <p><b>Trend Arrows</b> Current sensor glucose speed and rate of change arrows.</p> <p>No readings or arrows? Use your BG meter.</p>
<p><b>Receiver</b></p>	 <p>The image shows a receiver screen with a blue border. At the top, there is a status bar with a Bluetooth icon, a glucose sensor icon, and a multi-colored dot icon. Below the status bar is a navigation bar with icons for a menu, a glucose sensor, a person walking, and a multi-colored dot icon. The main display features a large glucose reading of 202 mg/dL, with an orange box highlighting the number 202. To the right of the reading is a small orange square icon with a white upward-pointing arrow. Below the reading is a line graph showing glucose levels over time, with a yellow shaded area above the line and a grey shaded area below. The x-axis is labeled with 02:00, 03:00, 04:00, and 04:34. The y-axis ranges from 50 to 400.</p>	

## Alarm/Alerts

With the Dexcom G5, you have everything you need to make a treatment decision: an Alarm or Alert, sensor glucose readings, and trend arrows.

Just got an Alarm or Alert? Chances are you need to make a treatment decision quickly.

As you learned earlier, you can never turn off or change your Urgent Low Glucose Alarm, but you can change your Alerts—including turning them off. Make sure you always get your Alerts by keeping them on.

Even when your smart device is set to Silent, you still get notified. As a reminder, if you use an accessory device, such as a smart watch, check your smart device and accessory device settings so they don't override your sounds and other settings.

Work with your HCP in setting optional Alert features (Chapter 12). You can repeat an Alert if you continue to be high or low over time, or set an Alert letting you know your sensor glucose readings are rising or falling. Alerts help you make timely decisions to help you stay within your target range.

Your HCP can help you set your Alerts. While the default Low Alert is 80 mg/dL, setting it lower may decrease the time before you get symptoms. Setting it higher gives you more time. However, the higher the setting, the more Alerts you'll get.

Your High Alert default is 200 mg/dL. If you normally have a high A1C, this may result in too many Alerts. You may want to talk with your HCP about raising your High Alert setting. If you are tightly managing your diabetes, you may want to talk with your HCP about lowering your High Alert setting.

The Signal Loss alert lets you know your transmitter and display device are no longer talking with each other. When there is a signal loss, you won't get a reading with a trend arrow and won't be able to use your Dexcom G5 for treatment decisions. As a reminder, your Signal Loss alert won't make a sound if your smart device is set to Do Not Disturb or Silent.

Need a refresher on your Alarm and Alerts? Chapter 11 reviews all of the Alarm and Alerts, and Chapter 12 shows you how to customize them to best fit your needs.

After receiving an Alarm or Alert, look at your home screen: What direction is your trend arrow showing?

## Sensor Glucose Readings and Trend Arrows

In Chapter 8 you learned how to read your home screen. When making a treatment decision, you want to make sure you have a sensor glucose reading number and a trend arrow. Before treating, look at your trend graph; it gives you your most recent reading.

When your home screen shows Signal Loss, High, or Low instead of a number, use your BG meter.

Sometimes your home screen may show just a number, without a trend arrow. Once again, if you don't have both a number and an arrow, you don't have enough information to treat. Use your BG meter, not your Dexcom G5 for a treatment decision.

When you do have both a number and an arrow, you can use the number by itself to make treatment decisions, just like you use your BG meter's number. To fine-tune your treatment decisions, use both the number and the trend arrow. Trend arrows are your guides to the amount of insulin to use. As an example, typically with a down arrow, you use less insulin, and with an up arrow, more. Always check with your HCP when creating a treatment decision plan.





## Using Your Trend Arrows

In Chapter 8, you learned how arrows help you see the speed and direction of your sensor glucose readings. Trend arrows and your sensor glucose reading help you determine your best plan of action.

Remember—be patient; it takes time for your insulin to work. Don't “stack insulin” by giving yourself too much insulin, too often, in too short a period of time. Before dosing, watch and wait!

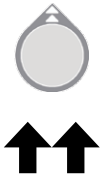



The table below gives you a general overview of how you use your Dexcom G5 trend arrows to fine-tune your treatment decisions. Your HCP can help you determine what is your appropriate low or high glucose value, and the best plan of action based on the direction of the trend arrow.

## Trend Arrows

What you see		Possible actions based on trend arrows	
Arrows	Low glucose	High glucose	Target glucose
	<p>No arrows/no readings.</p> <p>Don't use your Dexcom G5 for treatment decisions!</p> <p>Use your BG meter for any treatment decisions.</p>	<p>No arrows/no readings.</p> <p>Don't use your Dexcom G5 for treatment decisions!</p> <p>Use your BG meter for any treatment decisions.</p>	<p>No arrows/no readings.</p> <p>Don't use your Dexcom G5 for treatment decisions!</p> <p>Use your BG meter for any treatment decisions.</p>
	<p>May need to eat a snack or a fast-acting carbohydrate.</p>	<p>May adjust insulin to correct a high sensor glucose reading to reach target range.</p> <p>Don't stack insulin.</p>	<p>Based on last meal or insulin dose, may need to take insulin or eat a snack to stay within target range.</p> <p>Don't stack insulin.</p>
	<p>Watch and <i>wait</i>.</p>	<p>May adjust insulin to correct a high sensor glucose reading to reach target range.</p> <p>Don't stack insulin.</p>	<p>Based on last meal or insulin dose, may need to take insulin to stay within target range.</p> <p>Don't stack insulin.</p>
	<p>Watch and <i>wait</i>.</p> <p>Make sure you didn't over-treat for a low.</p>	<p>May adjust insulin to correct a high sensor glucose reading to reach target range.</p> <p>Don't stack insulin.</p>	<p>If you haven't already taken insulin with a recent meal or snack, you may take insulin to stay within target range.</p>

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What you see Possible actions based on trend arrows			
Arrows	Low glucose	High glucose	Target glucose
	Watch and <i>wait</i> . Make sure you didn't over-treat for a low.	May adjust insulin to correct a high sensor glucose reading to reach target range. Don't stack insulin.	May need to take insulin to stay within target range. Don't stack insulin.
	May need to eat a snack or fast-acting carbohydrate. Was last insulin dose too high or activity too strenuous?	Based on last insulin dose or activity, may need to watch and wait to reach target range.	May need to eat a snack or fast-acting carbohydrate.
	May need to eat a snack or fast-acting carbohydrate. Was last insulin dose too high or activity too strenuous?	Based on last insulin dose or activity, may need to watch and wait to reach target range.	May need to eat a snack or fast-acting carbohydrate.
	May need to eat a snack or fast-acting carbohydrate. Was last insulin dose too high or activity too strenuous?	Based on last insulin dose or activity, may need to watch and wait to reach target range.	May need to eat a snack or fast-acting carbohydrate.

At this point, you should know when you can and when you cannot make a treatment decision based on your Dexcom G5 sensor glucose readings. Now let us go back to the questions at the beginning of the chapter and see what you would do!

## 13.5 You Decide!

The following scenarios are examples only; however, they probably reflect treatment decisions you have made in real life. While there's a “correct” answer, no situation is black and white. Your treatment decisions are based on numerous factors, so always consult your HCP when learning how to make treatment decisions using your Dexcom G5.

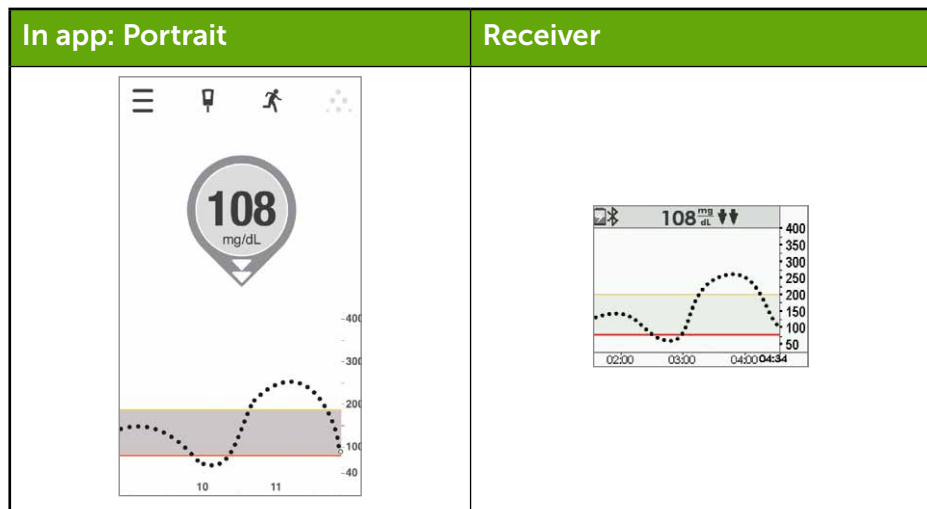
### Scenario 1: What would you do?

An hour ago, you drank orange juice to treat a low glucose reading.

Although you are within your target range, as you are sitting down for dinner, you look at your Dexcom G5 and see your trend arrow is pointing down.

Using the information below, what treatment decision would you make?

#### Scenario 1



## Your Options

You have a number of options; which would you choose?

- A. Adjust insulin to correct for a low pre-meal glucose.
- B. Eat fast-acting carbohydrates and adjust insulin to correct for a low pre-meal blood sugar. Consider taking less insulin based on your immediate plans, since your trend arrow is going down.
- C. Eat your meal but don't take any insulin.
- D. Eat fast-acting carbohydrate to treat the current sensor glucose reading, and delay your meal. Do not take any more insulin.

If you chose “B”, you are correct!

Based on your target glucose range and how you manage a low glucose, you may need to reduce the amount of insulin needed to cover the food you are about to eat.

Let's take a look at why “B” was the best answer:

- “A” doesn't consider that you are recovering from a low and treated with fast-acting carbohydrates  
You are still dropping and your glucose is not stable.
- “C” doesn't consider that your glucose is dropping and you're below your target range  
However, depending on your meal and planned activities, you may still need to take some insulin to prevent a high glucose after your meal.
- “D” doesn't consider that your glucose is already below target range and dropping  
Fast-acting carbohydrates will raise your glucose, and your normal meal should help get you to your target glucose range.

Let's look at another scenario.

## Scenario 2: What would you do?

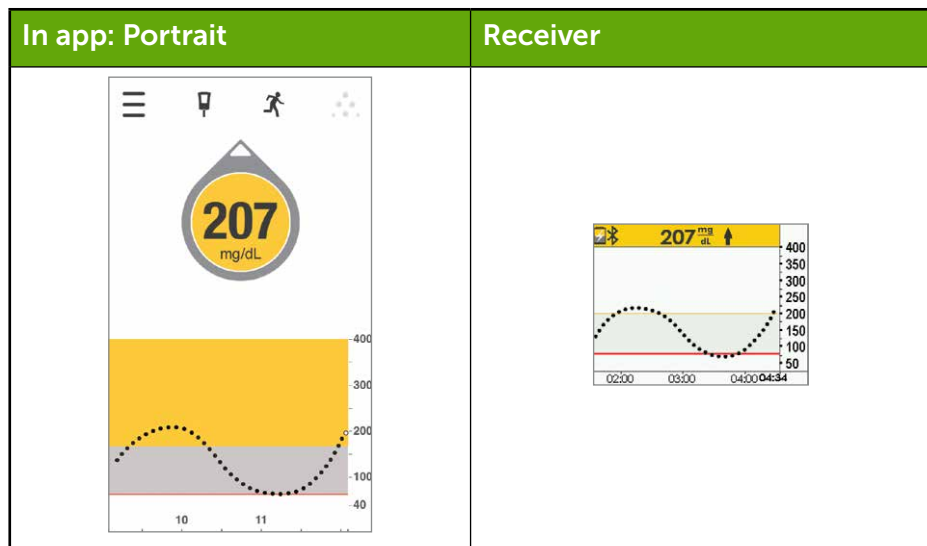
Right before lunch you look at your display device and check your glucose level. The trend screen shows your sensor BG reading is 150 mg/dL with a single arrow pointing up, so you know it is rising. After taking your normal insulin dose, you eat lunch.

About 90 minutes later, you get a High Glucose Alert.

You know your High Glucose Alert is set at 200 mg/dL. Your display devices show your sensor glucose at 207 mg/dL with a single arrow going up. Not only is your glucose high, it is also rising at around 1-2 mg/dL each minute or up 30 mg/dL in 15 minutes.

Using the information below, what treatment decision would you make?

## Scenario 2



## Your Options

- Take insulin to lower your high glucose reading based on your correction factor. Since your trend arrow is going up, you are even thinking about taking more insulin than your usual correction dose.
- Watch and wait. Take no insulin. The insulin you took for your meal may still have not reached its full effect, and you don't want to stack insulin.
- Eat fast-acting carbohydrates to treat your sensor glucose value and don't take any more insulin.

- D. Consider taking a small correction dose because your glucose is still trending up. You know the insulin you took at dinner may not have fully kicked in, but your blood glucose is continuing to climb.

If you chose “D”, you are correct!

Your blood glucose is still climbing but you are taking only a small extra dose. You know your pre-meal insulin dose is still working.

Let’s take a look at why “D” was the best answer:

- “A” doesn’t consider how long it takes insulin to work.

The insulin you took before your meal may continue to work for 3-4 hours. So, taking a “full” extra dose of insulin, a short time after your meal insulin, is “stacking” insulin, and could result in a low glucose. Talk to your HCP about the dangers of stacking insulin.

- “B” may be a correct answer, as the insulin you took 2 hours ago is still working.

However, as your glucose is still rising, the dose you took may not have been enough. Your HCP can help you decide when to take small correction insulin doses.

- “C” would be better if your glucose were going down rapidly, but since your glucose is already high and rising, eating some fast-acting carbohydrates would not be the right answer.

## 13.6 General Guidelines

During your daily life with diabetes, it is important to learn from your treatment decisions: what worked (getting you back to your target glucose range) or what did not work (keeping you from reaching your target glucose range). Think about why you were high or low.

### For lows:

- Did you take too much insulin for a meal or snack?
- Did you take too much insulin to correct for a high glucose level?
- Did your exercise lower your glucose levels?
- Did you drink any alcohol?
- Did you accurately count carbohydrates?
- Did you take too much insulin in too close a time period?

**For highs:**

- Did you take too little insulin for a meal or snack?
- Did you take too little insulin to correct a high glucose level?
- Did your mood or stress levels change?
- Did you think about what medications you are on?
- Did you accurately count carbohydrates?
- Did you take insulin earlier to help avoid post-meal high glucose levels?

These are just a few things to think about when learning how to make treatment decisions. Your HCP can help you personalize your specific diabetes management and treatment plans. Keep notes and share them with your HCP.

**Now You Can:**

- Talk with your healthcare professional about creating a personalized treatment plan
- Identify when you can use your Dexcom G5 in treatment decisions
- Describe the importance of Alarm/Alerts in treatment decisions
- Tell when you shouldn't make a treatment decision using the Dexcom G5
- Recognize when you should watch and wait before treating

**What's Next?**

The next chapters begin our fourth part of the user guide: information you need to know, but unlike previous chapters, not typically part of your day-to-day Dexcom G5 experience.

The next part, Part 4: Everything Else G5, reviews the warranty, how to take care of the Dexcom G5 components, going through security when traveling, contacting customer service, technical specifications, troubleshooting information, and symbols on system components and packages.

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# 4

## EVERYTHING ELSE G5

- Warranty
- Maintenance
- Travel Tips
- Customer Service Contacts
- Technical Information
- Troubleshooting
- Package Symbols

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# Chapter 14

*Everything Else G5:*

## Warranty: The Fine Print

### 14.1 Introduction

Sometimes stuff happens. Dexcom has you covered!

The following is our warranty information outlining what we do cover, what we don't, and for how long. First the receiver's limited warranty information, then the transmitter's limited warranty information.

### 14.2 Receiver Warranty Information

#### Dexcom G5 Limited Warranty

#### What's Covered and for How Long?

Dexcom, Inc. ("Dexcom") provides a limited warranty to the original purchaser ("you" or "Purchaser") that the Dexcom G5 Receiver (the "Receiver") is free from defects in material and workmanship under normal use ("Limited Warranty") for the period starting from the shipment date and continuing for a year following the shipment date ("Warranty Period"):

Dexcom G5 Receiver: 1 year from shipment date

**NOTE:** If you received this Receiver as a replacement for an in-warranty Receiver, the Limited Warranty for the original Receiver shall continue for the Warranty Period on the original Receiver, but the replacement is not subject to any other warranty.

#### What's Not Covered?

This Limited Warranty is based on the Purchaser properly using the CGM system in accordance with the documentation provided by Dexcom. You are not permitted to use the CGM system otherwise. You understand that misusing the CGM system, improperly accessing it or the information it processes and transmits, "jailbreaking" or "rooting" your

CGM system or cell phone, and taking other unauthorized actions may put you at risk, cause the CGM system to malfunction, is not permitted and voids your Limited Warranty.

**This Limited Warranty does not cover:**

1. Defects or damage resulting from accident, misuse, abuse, neglect, unusual physical, electrical or electromechanical stress, modification of any part of the product, or cosmetic damage.
2. Equipment with the ID number removed or made illegible.
3. All surfaces and other externally exposed parts that are scratched or damaged due to normal use.
4. Malfunctions resulting from the use of the Receiver in conjunction with accessories, ancillary products, and peripheral equipment, whether hardware or software, not furnished or approved by Dexcom.
5. Defects or damage from improper testing, operation, maintenance, installation, or adjustment.
6. Installation, maintenance, and service of products or services other than the CGM system (which may be subject to a separate limited warranty), whether provided by Dexcom or any other party; this includes your cell phone or smart device and your connection to the Internet.
7. Equipment which has been taken apart physically or which has had any of its software accessed in any unauthorized manner.
8. Water damage to the Receiver.
  - a. Receiver is not water resistant.
  - b. Do not get the receiver wet at any time.

## Dexcom's Obligations Under the Limited Warranty

During the Warranty Period, Dexcom will replace, without charge to purchaser, any defective Dexcom G5 Receiver.

To return, you must send the Receiver to an authorized Dexcom Technical Support Department. Make sure you package the Receiver adequately for shipping.

**The return package needs to include:**

1. Receiver

2. Sales receipt or comparable substitute proof of sale showing the date of purchase
3. Receiver's Serial Number
4. Seller's name and address

**Call Dexcom Technical Support Department for delivery information help:**

Toll free **1.888.738.3646**:

Charges may apply: **1.858.200.0200**

Upon receipt, Dexcom will promptly replace the defective Receiver.

If Dexcom determines the Receiver isn't covered by this Limited Warranty, Purchaser must pay all shipping charges for the Receiver's return by Dexcom.

**Limits on Dexcom's Warranty and Liability Obligations**

The Limited Warranty described above is the exclusive warranty for the Receiver, and in lieu of all other warranties, expressed or implied, either in fact or by operation of law, statutory or otherwise.

Dexcom expressly excludes and disclaims all other warranties, including without limitation any warranty of merchantability, fitness for a particular purpose, or non-infringement, except to the extent prohibited by applicable law.

Dexcom shall not be liable for any special, incidental, consequential, or indirect damages, however caused, and on any theory of liability, arising in any way out of the sale, use, misuse, or inability to use, any Dexcom G5 or any feature or service provided by Dexcom for use with the Dexcom G5.

These limits on Dexcom's warranty and liability obligations apply even if Dexcom, or its agent, has been advised of such damages and notwithstanding any failure of essential purpose of this Limited Warranty and the limited remedy provided by Dexcom.

This Limited Warranty is only provided to the original Purchaser and can't be transferred to anyone else, and states Purchaser's exclusive remedy.

If any portion of this Limited Warranty is illegal or unenforceable by reason of any law, such partial illegality or enforceability shall not affect the enforceability of the remainder of this Limited Warranty. This Limited Warranty will be enforced to the maximum extent permitted by law.

## 14.3 Transmitter Warranty Information

### Dexcom G5 Transmitter Limited Warranty

#### What's Covered and for How Long?

Dexcom, Inc. ("Dexcom") provides a limited warranty to the original purchaser that the Dexcom G5 Transmitter is free from defects in material and workmanship under normal use for the period commencing on the date of first use by the original purchaser (the "Date of First Use") and expiring three (3) months thereafter; provided, that, the Date of First use occurs within five (5) months of the date of shipment (or disbursement) of the transmitter to the original purchaser.

**NOTE:** If you received this Transmitter as a replacement for an in-warranty Transmitter, the Limited Warranty for the original Transmitter shall continue for the Warranty Period on the original Transmitter, but the replacement is not subject to any other warranty.

#### What's Not Covered?

This Limited Warranty is based on the Purchaser properly using the CGM system in a timely manner and in accordance with the documentation provided by Dexcom. You are not permitted to use the CGM system otherwise. You understand that misusing the CGM system, improperly accessing it or the information it processes and transmits, "jailbreaking" or "rooting" your CGM system or cell phone, and taking other unauthorized actions may put you at risk, cause the CGM system to malfunction, is not permitted and voids your Limited Warranty.

#### **This Limited Warranty does not cover:**

1. Defects or damage resulting from accident, misuse, abuse, neglect, unusual physical, electrical or electromechanical stress, modification of any part of the product, or cosmetic damage.
2. Equipment with the ID number removed or made illegible.
3. All surfaces and other externally exposed parts that are scratched or damaged due to normal use.
4. Malfunctions resulting from the use of the Transmitter in conjunction with accessories, ancillary products, and peripheral equipment, whether hardware or software, not furnished or approved by Dexcom.

5. Defects or damage from improper testing, operation, maintenance, installation, or adjustment.
6. Installation, maintenance, and service of products or services other than the CGM system (which may be subject to a separate limited warranty), whether provided by Dexcom or any other party; this includes your cell phone or smart device and your connection to the Internet.
7. Equipment which has been taken apart physically or which has had any of its software accessed in any unauthorized manner.
8. Water damage to Transmitter.
  - a. Beyond specifications listed in Dexcom G5's User Guide found on dexcom.com or a printed copy can be requested by calling **1.888.738.3646**

## 14.4 Dexcom's Obligations Under the Limited Warranty

During the Warranty Period, Dexcom will replace, without charge to purchaser, any defective Dexcom G5 Transmitter.

To return, you must send the Transmitter to an authorized Dexcom Technical Support Department. Make sure you package the Transmitter adequately for shipping.

The return package needs to include:

- Transmitter
- Sales receipt or comparable substitute proof of sale showing the date of purchase
- Transmitter's Serial Number
- Seller's name and address

**Call Dexcom Technical Support Department for delivery information or help:**

Toll free: **1.888.738.3646**

Charges may apply: **1.858.200.0200**

Upon receipt, Dexcom will promptly replace the defective Transmitter.

If Dexcom determines the Transmitter isn't covered by this Limited Warranty, Purchaser must pay all shipping charges for the Transmitter's return by Dexcom.

## Limits on Dexcom's Warranty and Liability Obligations

The Limited Warranty described above is the exclusive warranty for the Transmitter, and in lieu of all other warranties, expressed or implied, either in fact or by operations of law, statutory or otherwise.

Dexcom expressly excludes and disclaims all other warranties, including without limitation any warranty merchantability, fitness for a particular purpose, or non-infringement, except to the extent prohibited by applicable law.

Dexcom shall not be liable for any special, incidental, consequential, or indirect damages, however caused, and on any theory of liability, arising in any way out of the sale, use, misuse, or inability to use, any Dexcom G5 or any feature or service provided by Dexcom for use with the Dexcom G5.

These limits on Dexcom's warranty and liability obligations apply even if Dexcom, or its agent, has been advised of such damages and notwithstanding any failure of essential purpose of this Limited Warranty and the limited remedy provided by Dexcom.

This Limited Warranty is only provided to the original Purchaser and can't be transferred to anyone else, and states Purchaser's exclusive remedy.

If any portion of this Limited Warranty is illegal or unenforceable by reason of any law, such partial illegality or enforceability shall not affect the enforceability of the remainder of this Limited Warranty.

This Limited Warranty will be enforced to the maximum extent permitted by law.

# Chapter 15

## *Everything Else G5:*

## How to Take Care of Your Dexcom G5

### 15.1 Introduction

There are not a lot of moving parts in the Dexcom G5, so maintenance is relatively simple: keep it clean, keep display device (s) dry and protected, use accessory parts, like the USB cable, etc., given to you with the system and store according to each piece's labeling instructions.

After this chapter, you will be able to:

- Demonstrate proper maintenance
  - Sensor
  - Transmitter
  - Receiver
    - Charge receiver battery
- Determine what accessories you may use
- Identify the best storage methods
  - Sensor applicator
  - Transmitter
  - Receiver
- Check app and receiver information
- How to safely dispose of
  - Sensor
  - Transmitter
  - Receiver

## 15.2 Basic Maintenance

### Sensor

1. Keep in sterile package until ready for use.
2. Check package label for expiration date.
  - a. Expiration date format is YYYY-MM-DD (year-month-day) format.
  - b. Don't use if sensor has expired.
    - i. May provide inaccurate sensor glucose readings.
    - ii. May be unsterile.

### Transmitter

1. Keep in box until ready for use.
  - a. Check transmitter and don't use if damaged.
2. Transmitter is reusable, however only by the same person.
  - a. Never share transmitter with anyone.
3. Between uses, clean outside of the transmitter with damp cloth or alcohol wipes. Let dry before use or storage.
4. When not in use.
  - a. Protect transmitter by returning to its packaging or another safe place.
  - b. Store between 32° F-113° F.

### Receiver




1. Check receiver casing; if it's cracked or damaged, don't use.
  - a. May get an electric shock.
2. Keep receiver dry—it is only splash resistant.
  - a. Don't submerge in liquid.
  - b. Don't spill fluids on receiver.
3. Keep battery charged.
  - a. Use only Dexcom USB charging/download cable.

4. Keep the micro USB port cover closed if not using USB cable.
  - a. Prevents fluid from getting inside receiver.

## Charging Receiver's Battery



The receiver's status bar lets you see its battery level and prompts you when the battery is getting low. While the receiver is being charged, you'll continue to get your sensor glucose readings if the transmitter and receiver are within 20 feet of each other.

Each charge lasts approximately three days. If your receiver's battery was drained prior to charging, after charging you may need to reset its time and date. If this is required, the system tells you to reset and takes you to the time/date setting screens.

Step	What you see	What it means	What you do
1	 	Low Battery	Charge your battery.
2		Micro USB Port	<b>Open</b> <i>USB port door</i> . <b>Plug</b> <i>USB cable</i> into port for recharging.




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Step	What you see	What it means	What you do
3		Micro USB Cable	<p><b>Plug</b> into receiver to charge battery.</p> <p><i>Don't</i> plug into a computer port to charge</p> <p><i>Don't</i> use an external USB hub; it doesn't provide enough power to charge battery.</p> <p>Battery can only be charged using the adapter/wall charger.</p> <p>Charge battery before each new sensor session.</p>
4		Wall Charger	<p><b>Plug</b> <i>USB cable</i> into adapter/wall charger.</p> <p><b>Plug</b> wall charger into an electrical outlet to charge receiver's battery.</p> <p><i>Don't</i> block access to the charger.</p>

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Step	What you see	What it means	What you do
5		Battery Charging	Keep charging until icons are solid.
6		Battery Charged	<b>Unplug</b> <i>wall charger</i> from outlet when fully charged.
7		USB Port Door	<b>Remove</b> <i>USB cable</i> from receiver. <b>Close</b> <i>USB port door</i> after removing USB cable to keep receiver clean and dry.

## Accessories

1. Use only Dexcom-supplied parts (including cables and chargers).
  - a. Use of non-Dexcom-supplied parts may affect safety and performance.
2. Insert cables only as directed.
  - a. Do not force cables in place.
3. Look at cables for signs of wear and tear. Do not use if worn or damaged.

There is no repair service available for any Dexcom G5 parts.

If you experience problems, call Dexcom Technical Support, available 24 hours, 7 days a week, toll free at **1.888.738.3646** or toll at **1.858.200.0200** to report the issue.

## 15.3 Storage

Storing your Dexcom G5 correctly helps prevent system failures.

### Sensor

1. Keep the sensor in its sterile packaging until you are ready to use it.
2. Store at temperatures between 36° F-77° F.
  - a. Storing outside of this range may cause inaccurate sensor glucose readings.
  - b. May store in refrigerator if it's within this temperature range.
  - c. Sensors should not be stored in freezer.
3. Store at humidity levels between 15%-85% relative humidity.

### Transmitter

1. Keep transmitter protected when not in use.
2. Store at temperatures between 32° F-113° F.
3. Store at humidity levels between 10%-95% relative humidity.

### Receiver

1. Keep receiver protected when not in use.
2. Fully charge the battery before storing for over 3 months.
3. Store at temperatures between 32° F-104° F.
4. Store at humidity levels between 10%-95% relative humidity.

## 15.4 Checking App and Receiver Information

### CHECKING YOUR APP & RECEIVER SOFTWARE VERSION

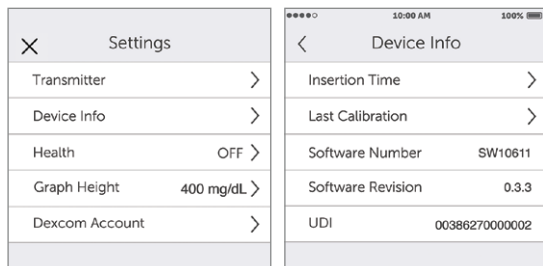
You can check your app or receiver for information about your CGM system at any time.

#### Receiver



1. From the Settings menu, press *up/down arrows* to scroll to Device Info.
2. Press *select button* to show information about your sensor session and system.

#### App



1. From Main Menu, **tap Settings**.
2. **Tap Device Info**.

#### Available Information

- Insertion Time
- Last Calibration
- Transmitter Battery
- Transmitter SN
- Serial Number
- Part Number
- Part Revision
- Software Number

## 15.5 System Disposal

Different municipalities have different requirements when throwing away electronics (receiver and transmitter) and parts that have come in contact with blood or other bodily fluids (sensor).

Consult your area's local waste management authorities for proper disposal instructions.

### Summary

#### Now You Can:

- Demonstrate proper maintenance
  - Sensor
  - Transmitter
  - Receiver
  - Receiver battery
  - Accessories
- Identify the best storage methods
  - Sensor applicator
  - Transmitter
  - Receiver
- Check app and receiver information
- Safely dispose of system components
  - Sensor
  - Transmitter
  - Receiver

#### What's Next?

Taking care of your Dexcom G5 is pretty easy. In the next chapter, “On the Go With Dexcom G5: Getting Through Security,” you’ll learn how simple it is to travel the world with your Dexcom G5!

# Chapter 16

*Everything Else G5:*

## On the Go with Dexcom G5: Getting Through Security

### 16.1 Introduction

Dexcom G5 can be a great travel companion; you can go through metal detectors, be hand-wanded, and even keep your receiver on during your flight.

This chapter covers only the Dexcom G5. It doesn't cover steps you need to take when traveling with your smart device. See your smart device's instructions to learn how to travel with it.

After this chapter, you will be able to:

- Explain proper procedure if you prefer a full-body pat-down
- Describe steps needed for a TSA officer to inspect Dexcom G5 components
- Identify when your display device(s) can be on during a flight
- Contact TSA directly with your security questions

### 16.2 Going Through Security

#### Walk-Through Metal Detectors

##### *Transmitter and Sensor*

You should have no worries about wearing your transmitter and sensor when going through security.

You can go through walk-in metal detectors or, if you prefer, be hand-wanded without worrying about damaging your transmitter or sensor.

If you're concerned or uncomfortable about walking through the metal detector, the Transportation Security Administration (TSA) requests you tell the Security Officer you're

wearing a continuous glucose monitor and want a full-body pat-down with a visual inspection of your sensor and transmitter.

Let the Security Officer know the sensor can't be removed because it's inserted under the skin.

## X-Ray Machines

### *Receiver, Extra Sensors*

Don't put your Dexcom G5 components through x-ray machines.

Before your screening process begins, ask the TSA Officer to perform a visual inspection of the receiver and your extra sensors. Place all Dexcom G5 components in a separate bag before handing over to the Security Officer.

For other medical supplies, such as medications, meters, and strips, check manufacturer's instructions or the TSA website.

## Body Scanners

Use of advanced imaging technology (AIT) body scanners, like millimeter wave scanners, has not been studied, and we therefore recommend hand-wanding or a full-body pat-down with a visual inspection in those situations.

## In the Plane

To use your smart device, receiver, or both to get sensor glucose information while in the plane:

- Smart device: When you switch to airplane mode, keep *Bluetooth* on
- Receiver: Keep receiver on

Contact your airline for their policies.

## Technical Information

The Dexcom G5 transmitter is an M-PED (Medical-Portable Electronic Device) with emission levels that meet RTCA/DO160, Section 21, Category M. Per FAA Advisory, Circular #91-21, 1B, dated 8/25/06.

Any M-PED that meets this standard in all modes may be used onboard the aircraft without any further testing by the operator.

This device can withstand exposure to common electrostatic discharge (ESD) and electromagnetic interference (EMI).

## Still Have Questions?

Visit the TSA's website if you have any questions or concerns at [tsa.gov](https://www.tsa.gov).

- Email: [TSA-ContactCenter@tsa.dhs.gov](mailto:TSA-ContactCenter@tsa.dhs.gov)
- Phone: 1.866.289.9673

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# Chapter 17

*Everything Else G5:*

## Need Help? You're Not Alone!

### 17.1 Dexcom Technical Support Team

The Dexcom Technical Support Team helps you with all CGM system-related issues as well as software-related issues. They provide replacement units, resolve technical issues, and take product complaints.

*Dexcom Technical Support does not offer medical advice.*

#### By Email

Email: [TechSupport@dexcom.com](mailto:TechSupport@dexcom.com)

If you prefer to email, to help us help you best, include the following information in your email:

- Name of patient
- Patient's date of birth
- Description of technical problem
- When the problem happened (date and time)
- Patient's address
- Patient's phone number
- Item SKU number and description (for example, name of the device)
- Lot number and/or serial number(s) of affected device(s) (for example, sensor)
- Your preferred contact method and information so Dexcom can reach you if needed.  
For example: by phone 555-555-5555 after 5 PM Pacific Time

## By Phone

Available 24 hours a day, 7 days a week.

Dexcom Technical Support phone numbers:

- Toll free: **1.888.738.3646**
- Toll call: **1.858.200.0200**

## What Can They Help Me With?

The Dexcom Technical Support Team helps you with all CGM system related issues as well as software related issues.

*Dexcom Technical Support does not offer medical advice.*

## 17.2 Dexcom Patient Care Team

The Dexcom Patient Care Team (PCT) is a group of Certified Diabetes Educators (CDE®) and Registered Nurses (RNs) offering you customer care and individualized education services around Dexcom CGM.



Your PCT provides education and support throughout your CGM experience, such as:

- Initial CGM product training
- Ongoing Dexcom product education (for example, how to use a specific feature)
- How to maximize Dexcom CGM use
- Dexcom CGM reporting software and features
- How to review and understand Dexcom CGM reports

## By Email

Email: [patientcare@dexcom.com](mailto:patientcare@dexcom.com)

If you prefer to email, to help us help you best, include the following information in your email:

- Name of patient
- Patient's date of birth
- Contact phone number

- Reason for inquiry or education needed

For additional Dexcom CGM education, check the Dexcom website: [dexcom.com/web-based-education](https://dexcom.com/web-based-education).

## By Phone

Available Monday-Friday 5:30 AM-8:00 PM PST (subject to change)

Toll Free: **1.888.738.3646**

Toll Call: **1.858.200.0200**

## 17.3 Sales Support Team

### Inside Sales Support Team

#### By Internet

Dexcom online store: [dexcom.com/order](https://dexcom.com/order)

#### By Email

Email: [CustomerService@dexcom.com](mailto:CustomerService@dexcom.com)

#### By Phone

Dexcom Inside Sales Support phone numbers:

Toll Free: **1.888.738.3646**

Toll Call: **1.858.200.0200**

#### By Fax

Fax number: 1.877.633.9266

## 17.4 Corporate

Dexcom Website: **Dexcom.com**

Dexcom Address:

6340 Sequence Drive

San Diego, CA 92121

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# Chapter 18

## *Everything Else G5:*

## Technical Information

### 18.1 Device Performance Characteristics

**NOTE:** We recommend that you review the information in this chapter with your healthcare provider to understand how well the Dexcom G5 performs.

The Dexcom G5 (the System) uses a glucose sensor to continuously measure and monitor your glucose levels. The sensor is “calibrated” using a commercially available blood glucose meter. Once calibrated, the System reports glucose readings up to every 5 minutes. The System was evaluated in clinical studies in which System readings were compared to blood glucose values to assess its performance and how well the System readings compare to a laboratory test method that measures blood glucose values. Additionally, subjects performed self-monitoring blood glucose meter tests at home to assess the System performance in real use environment.

Although the performance characteristics of the System are presented in the following, there is no commonly accepted statistical approach for capturing performance of continuous glucose monitors (CGMs), such as the Dexcom G5.

### Clinical Study Overview

The System performance was evaluated in four separate prospective clinical studies. In all four studies, subjects were required to confirm glucose readings with their SMBG meters before making any treatment decisions. Two studies included adults, and two studies included pediatrics. In the following sections and tables, the studies will be identified as follows:

#### **Adult Studies (18 years and older)**

**Original Adult** Study: the Receiver included software version SW10050

**Software 505 Adult** Study: the Receiver included software version SW10505

#### **Pediatric Studies (2 to 17 years)**

**Original Pediatric** Study: the Receiver included software version SW10050

**Software 505 Pediatric** Study: the Receiver included software version SW10505

The Dexcom G5 Mobile CGM System incorporates the algorithm from software version SW10505 and has a new software number.

## Overview of Adult Studies

The System performance for adults was evaluated in two separate prospective clinical studies: **Original Adult** Study (software SW10050) and the **Software 505 Adult** Study (software SW10505). Differences between the studies include the number of subjects enrolled, the number of Systems worn by each participant, the SMBG meter used, and the number of clinic days each subject participated in during the study. An overview of each study is provided below.

The **Original Adult** Study enrolled 72 subjects, and the **Software 505 Adult** Study enrolled 51 subjects. All subjects had Type 1 or Type 2 diabetes mellitus, and required insulin or oral medication to manage their diabetes. In the **Original Adult** Study, 83% of subjects had Type 1 diabetes, and 17% of subjects had Type 2 diabetes. In the **Software 505 Adult** Study, 86% of subjects had Type 1 diabetes, and 14% of subjects had Type 2 diabetes. Both studies included subjects greater than 18 years of age.

Subjects in both studies used the System for seven days. In the **Original Adult** Study, thirty-six subjects each wore 2 sensors; in the **Software 505 Adult** Study, all subjects wore 1 sensor only. Throughout the 7-day wear period, the sensor was calibrated with an average of 2 fingersticks per day (approximately once every 12 hours). In the **Original Adult** Study, subjects used the LifeScan® OneTouch® Ultra®2 meter and in the **Software 505 Adult** Study, subjects used Bayer's CONTOUR® NEXT USB meter.

In the **Original Adult** Study, all subjects were evaluated in a controlled clinic environment on all three clinic days: Day 1, Day 4, and Day 7 of the 7-day wear period. In the **Software 505 Adult** Study, subjects were evaluated in one of the three clinic days so there are fewer data samples than in the **Original Adult** Study. While using the System in the clinic, subjects had their blood glucose measured every 15 minutes with a reliable laboratory method, the Yellow Springs Instrument 2300 STAT Plus™ Glucose Analyzer. This instrument is referred to as the "YSI." Readings from the System were reported every 5 minutes and paired with YSI values in order to characterize how well the System readings agreed with laboratory standard blood glucose results. The remainder of the study took place at home, and the System performance was also paired with the comparative meter results, referred to as the "SMBG."

## Overview of Pediatric Studies

The System performance for children and adolescents was evaluated in two separate prospective clinical studies: the **Original Pediatric** Study (SW10050) and the **Software 505 Pediatric** Study (SW10505). Differences between the studies include the number of subjects enrolled, the number of Systems worn by each participant, the SMBG meter used, the length of time subjects were evaluated in a controlled clinic environment and whether or not subjects ages 13-17 had their glucose levels intentionally manipulated during the study. An overview of each study is provided below.

The **Original Pediatric** Study enrolled 176 subjects, with 16% of subjects younger than 6-years old, and the **Software 505 Pediatric** Study enrolled 79 subjects, with 20% of subjects younger than 6-years old. All subjects had Type 1 or Type 2 diabetes mellitus and required insulin or oral medication to manage their diabetes. In the **Original Pediatric** Study, about 99% of subjects had Type 1 diabetes

and 1% had Type 2 diabetes. In the **Software 505 Pediatric** Study, all subjects had Type 1 diabetes. Sensors were inserted in either the abdomen or upper buttocks.

Subjects in all studies used the System for seven days. In the **Original Pediatric** Study, all subjects wore 2 sensors; in the **Software 505 Pediatric** Study, all subjects wore 1 sensor only. Throughout the 7-day wear period, the sensors were calibrated with an average of 2 fingersticks per day (approximately once every 12 hours), using self-monitoring blood glucose (SMBG) meter values. The **Original Pediatric** Study used the LifeScan® OneTouch® Verio® IQ meter; the **Software 505 Pediatric** Study used Bayer's CONTOUR® NEXT USB meter.

All subjects were evaluated in a controlled clinic environment on Day 1, Day 4 or Day 7 of the 7-day wear period. While using the System in the clinic, subjects provided at least two fingerstick measurements per hour, and subjects ages 6-17 also provided venous blood for comparison to a laboratory method, the Yellow Springs Instrument 2300 STAT Plus™ Glucose Analyzer. This instrument is referred to as the "YSI." In the **Original Pediatric** Study, subjects' glucose levels were not intentionally manipulated during this study; in the **Software 505 Pediatric** Study, subjects ages 13-17 had their glucose levels intentionally manipulated during the clinic session. Readings from the System were reported every 5 minutes and paired with YSI values collected every 15 minutes in order to characterize how well the System readings agreed with laboratory standard blood glucose results. The remainder of the study took place at home, and the System performance was also paired with the comparative meter results, referred to as the "SMBG."

**Table 1-A. System Agreement to YSI Within CGM Glucose Ranges (Adult)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-YSI	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
Overall	Original	9152	71%	82%	92%	3%
	Software 505	2263	86%	93%	98%	1%
40-60	Original	512	67%	78%	88%	6%
	Software 505	120	89%	94%	98%	0%
61-80	Original	781	73%	85%	94%	2%
	Software 505	226	91%	96%	99%	0%
81-180	Original	3853	67%	78%	91%	3%
	Software 505	738	84%	92%	98%	1%
181-300	Original	2784	72%	84%	93%	4%
	Software 505	798	86%	93%	98%	1%
301-350	Original	775	82%	91%	97%	2%
	Software 505	229	86%	94%	98%	1%
351-400	Original	447	74%	84%	91%	5%
	Software 505	152	80%	92%	97%	0%

<sup>1</sup>CGM readings are within 40-400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** Study (SW10505).

**Table 1-B. System Agreement to YSI Within CGM Glucose Ranges (Pediatric)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-YSI	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
<b>Overall</b>	<b>Original</b>	2922	55%	68%	85%	7%
	<b>Software 505</b>	2262	81%	91%	96%	2%
<b>40-60</b>	<b>Original</b>	19	63%	74%	79%	21%
	<b>Software 505</b>	86	54%	74%	91%	3%
<b>61-80</b>	<b>Original</b>	76	61%	82%	92%	4%
	<b>Software 505</b>	142	77%	82%	90%	3%
<b>81-180</b>	<b>Original</b>	1155	56%	69%	84%	6%
	<b>Software 505</b>	805	78%	88%	97%	1%
<b>181-300</b>	<b>Original</b>	1380	55%	68%	85%	7%
	<b>Software 505</b>	957	89%	96%	99%	1%
<b>301-350</b>	<b>Original</b>	206	48%	62%	80%	11%
	<b>Software 505</b>	209	81%	91%	94%	5%
<b>351-400</b>	<b>Original</b>	86	48%	61%	79%	12%
	<b>Software 505</b>	63	64%	81%	83%	8%

<sup>1</sup>CGM readings are within 40-400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## Agreement Relative to YSI

Agreement between the System and blood glucose values is characterized using paired System and YSI values. The System and YSI results were compared by pairing the YSI blood glucose value to a System glucose reading that occurred immediately after the YSI was collected.

The agreement of the System to blood glucose values was assessed by calculating the percentage of System readings that were within 15%, 20%, 30% and greater than 40% of the YSI values. For readings less than or equal to 80 mg/dL the absolute difference in mg/dL between the two glucose results was calculated. For values greater than 80 mg/dL the absolute percent difference (%) from

the YSI values was calculated. The percentages of total readings within 15 mg/dL or 15%, 20 mg/dL or 20%, 30 mg/dL or 30% or greater than 40 mg/dL or 40% are provided in Tables 1-A and 1-B. The tables are categorized within CGM glucose ranges. When you see a CGM reading on your receiver, this table shows you how likely that reading matches your blood glucose level (measured by YSI in the study).

For example, in the **SW10505 Adult** Study (Table 1-A), the total number of data pairs considered in the analysis was 2263. Of these, 93% of the System readings fall within  $\pm 20$  mg/dL of the YSI blood glucose values  $\leq 80$  mg/dL and within  $\pm 20\%$  of YSI blood glucose values  $> 80$  mg/dL.

**Table 2-A. Number and Percentage of YSI Values When CGM Readings Are “LOW” or “HIGH” (Adult)**

			YSI mg/dL					Total
CGM Readings	Study <sup>1</sup>	CGM-YSI Pairs	< 55	< 60	< 70	< 80	≥ 80	
“LOW”	Original	n	66	84	123	142	13	155
		Cumulative Percent	42%	54%	79%	92%	8%	
	Software 505	n	11	16	17	18	0	18
		Cumulative Percent	61%	89%	94%	100%	0%	
			YSI mg/dL					Total
CGM Readings	Study <sup>1</sup>	CGM-YSI Pairs	> 340	> 320	> 280	> 240	≤ 240	
“HIGH”	Original	n	189	220	238	246	2	248
		Cumulative Percent	76%	89%	96%	99%	1%	
	Software 505	n	40	43	45	45	0	45
		Cumulative Percent	89%	96%	100%	100%	0%	

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 2-B. Number and Percentage of YSI Values When CGM Readings are “LOW” or “HIGH” (Pediatric)**

			YSI mg/dL					Total
CGM Readings	Study <sup>1</sup>	CGM-YSI Pairs	< 55	< 60	< 70	< 80	≥ 80	
“LOW”	Original	n	0	0	0	0	13	13
		Cumulative Percent	0%	0%	0%	0%	100%	
	Software 505	n	3	5	10	15	1	16
		Cumulative Percent	19%	31%	63%	94%	6%	
			YSI mg/dL					Total
CGM Readings	Study <sup>1</sup>	CGM-YSI Pairs	> 340	> 320	> 280	> 240	≤ 240	
“HIGH”	Original	n	38	51	68	69	1	70
		Cumulative Percent	54%	73%	97%	99%	1%	
	Software 505	n	14	19	22	23	1	24
		Cumulative Percent	58%	79%	92%	96%	4%	

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## Agreement When CGM Reads “LOW” or “HIGH”

The System reports glucose readings between 40 and 400 mg/dL. When the System determines the glucose reading is below 40 mg/dL, it displays “LOW” in the Receiver Status Box. When the Dexcom G5 determines that the glucose level is above 400 mg/dL, it displays “HIGH” in the Receiver Status Box. Because the System does not display glucose values below 40 mg/dL or above 400 mg/dL, the comparisons to the actual blood glucose levels (as determined by the YSI analyzer) when CGM is classified as “LOW” or “HIGH” are included separately in Tables 2-A and 2-B. The tables include the numbers and the cumulative percentages when YSI values were less than certain glucose levels (for “LOW”), and when YSI values were greater than certain glucose levels (for “HIGH”).

For example, in the **Software 505 Adult** Study (Table 2-A), when the System displayed “LOW” (18 occasions), 100% (18 out of 18) of the YSI values were less than 80 mg/dL, and 94% (17 out of 18) of the YSI values were less than 70 mg/dL. When the System displayed “HIGH” (45 occasions), 100% (45 out of 45) of the YSI values were greater than 240 mg/dL, and 100% (45 out of 45) of the YSI values were greater than 280 mg/dL.

**Table 3-A. Concurrence of CGM Readings and YSI Values (Original Adult Study)**

CGM (mg/dL)	YSI (mg/dL) Row Percentage of Matched Pairs in Each CGM Glucose Range											Number of Paired CGM-YSI
	< 40	40- 60	61- 80	81- 120	121- 160	161- 200	201- 250	251- 300	301- 350	351- 400	> 400	
< 40	6%	48%	37%	7%	1%	0%	0%	0%	0%	0%	0%	155
40-60	4%	49%	36%	11%	1%	0%	0%	0%	0%	0%	0%	512
61-80	0%	22%	51%	24%	1%	0%	0%	0%	0%	0%	0%	781
81-120	0%	2%	17%	66%	13%	1%	0%	0%	0%	0%	0%	1706
121-160	0%	0%	1%	25%	60%	13%	2%	0%	0%	0%	0%	1492
161-200	0%	0%	0%	2%	28%	53%	16%	2%	0%	0%	0%	1240
201-250	0%	0%	0%	0%	3%	21%	51%	21%	3%	1%	0%	1181
251-300	0%	0%	0%	0%	0%	4%	19%	49%	24%	3%	0%	1018
301-350	0%	0%	0%	0%	0%	0%	3%	28%	51%	16%	1%	775
351-400	0%	0%	0%	0%	0%	0%	3%	10%	43%	38%	7%	447
> 400	0%	0%	0%	0%	0%	0%	1%	6%	21%	57%	15%	248

**Table 3-B. Concurrence of CGM Readings and YSI Values (Software 505 Adult Study)**

CGM (mg/dL)	YSI (mg/dL) Row Percentage of Matched Pairs in Each CGM Glucose Range											Number of Paired CGM-YSI
	< 40	40- 60	61- 80	81- 120	121- 160	161- 200	201- 250	251- 300	301- 350	351- 400	> 400	
< 40	6%	83%	11%	0%	0%	0%	0%	0%	0%	0%	0%	18
40-60	2%	74%	22%	3%	0%	0%	0%	0%	0%	0%	0%	120
61-80	0%	19%	68%	13%	0%	0%	0%	0%	0%	0%	0%	226
81-120	0%	0%	19%	72%	8%	1%	0%	0%	0%	0%	0%	347
121-160	0%	0%	0%	17%	72%	11%	0%	0%	0%	0%	0%	246
161-200	0%	0%	0%	0%	25%	59%	16%	0%	0%	0%	0%	286
201-250	0%	0%	0%	0%	0%	16%	70%	13%	1%	0%	0%	376
251-300	0%	0%	0%	0%	0%	2%	16%	61%	14%	7%	0%	281
301-350	0%	0%	0%	0%	0%	0%	2%	28%	59%	10%	1%	229
351-400	0%	0%	0%	0%	0%	0%	0%	4%	47%	45%	5%	152
> 400	0%	0%	0%	0%	0%	0%	0%	0%	20%	38%	42%	45

**Table 3-C. Concurrence of CGM Readings and YSI Values (Original Pediatric Study)**

CGM (mg/dL)	YSI (mg/dL) Row Percentage of Matched Pairs in Each CGM Glucose Range											Number of Paired CGM-YSI
	< 40	40-60	61-80	81-120	121-160	161-200	201-250	251-300	301-350	351-400	> 400	
< 40	0%	0%	0%	54%	31%	15%	0%	0%	0%	0%	0%	13
40-60	0%	21%	58%	16%	5%	0%	0%	0%	0%	0%	0%	19
61-80	0%	21%	45%	30%	4%	0%	0%	0%	0%	0%	0%	76
81-120	0%	1%	20%	66%	12%	1%	0%	0%	0%	0%	0%	338
121-160	0%	0%	1%	36%	54%	7%	1%	0%	0%	0%	0%	511
161-200	0%	0%	0%	4%	40%	48%	6%	1%	0%	0%	0%	596
201-250	0%	0%	0%	1%	9%	44%	41%	5%	0%	0%	0%	658
251-300	0%	0%	0%	0%	2%	7%	50%	36%	3%	0%	2%	432
301-350	0%	0%	0%	0%	0%	2%	18%	59%	21%	0%	0%	206
351-400	0%	0%	0%	0%	0%	0%	3%	28%	50%	16%	2%	86
> 400	0%	0%	0%	0%	0%	0%	1%	14%	41%	36%	7%	70

**Table 3-D. Concurrence of CGM Readings and YSI Values (Software 505 Pediatric Study)**

CGM (mg/dL)	YSI (mg/dL) Row Percentage of Matched Pairs in Each CGM Glucose Range											Number of Paired CGM-YSI
	< 40	40-60	61-80	81-120	121-160	161-200	201-250	251-300	301-350	351-400	> 400	
< 40	6%	25%	63%	6%	0%	0%	0%	0%	0%	0%	0%	16
40-60	0%	33%	60%	6%	1%	0%	0%	0%	0%	0%	0%	86
61-80	0%	8%	64%	26%	2%	0%	0%	0%	0%	0%	0%	142
81-120	0%	1%	15%	69%	13%	1%	1%	0%	0%	0%	0%	314
121-160	0%	0%	0%	15%	66%	18%	1%	0%	0%	0%	0%	313
161-200	0%	0%	0%	1%	18%	66%	15%	0%	0%	0%	0%	355
201-250	0%	0%	0%	0%	1%	17%	68%	14%	0%	0%	0%	444
251-300	0%	0%	0%	0%	0%	0%	26%	58%	16%	0%	0%	336
301-350	0%	0%	0%	0%	0%	0%	4%	40%	46%	9%	0%	209
351-400	0%	0%	0%	0%	0%	0%	3%	14%	62%	21%	0%	63
> 400	0%	0%	0%	0%	0%	0%	4%	13%	29%	38%	17%	24

## Concurrence of System and Laboratory Reference

Tables 3-A (Original Adult Study), 3-B (Software 505 Adult Study), 3-C (Original Pediatric Study) and 3-D (Software 505 Pediatric Study) are categorized by ranges of CGM glucose readings. These tables describe, for each range of CGM glucose readings, what percentage of paired YSI values were in the same glucose range (shaded) or in glucose ranges above and below the paired CGM readings. For example, based on the Software 505 Adult, when CGM readings are within 81 to 120 mg/dL, you can expect your blood glucose levels are within 81 to 120 mg/dL 72% of time.

**Table 4-A. System Difference to YSI Within CGM Glucose Ranges (Adult)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-YSI	Mean Percent Difference	Median Percent Difference	Mean Absolute Percent Difference	Median Absolute Percent Difference
Overall	Original	9152	2.9%	1.7%	13.3%	9.8%
	Software 505	2263	2.5%	2.4%	9.0%	7.0%
*40-60	Original	512	-10.0	-8.2	13.5	9.7
	Software 505	120	-3.3	-2.1	6.9	4.8
*61-80	Original	781	-2.4	-0.4	11.4	8.6
	Software 505	226	0.8	1.4	6.7	5.4
81-180	Original	3853	4.8%	3.0%	13.8%	9.8%
	Software 505	738	3.9%	4.1%	9.6%	8.2%
181-300	Original	2784	2.1%	0.0%	11.9%	9.2%
	Software 505	798	0.6%	0.4%	8.0%	6.1%
301-350	Original	775	3.8%	2.8%	9.8%	7.9%
	Software 505	229	4.1%	3.4%	8.0%	5.8%
351-400	Original	447	10.4%	7.7%	12.8%	9.1%
	Software 505	152	7.2%	6.3%	9.2%	7.2%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

\*For CGM ≤ 80 mg/dL, the difference and absolute difference in mg/dL are included instead of percent differences (%).

**Table 4-B. System Difference to YSI Within CGM Glucose Ranges (Pediatric)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-YSI	Mean Percent Difference	Median Percent Difference	Mean Absolute Percent Difference	Median Absolute Percent Difference
Overall	Original	2922	13.5%	11.6%	17.4%	13.5%
	Software 505	2262	1.8%	1.2%	10.4%	7.9%
*40-60	Original	19	-18.1	-9.1	19.2	9.1
	Software 505	86	-15.3	-13.2	16.1	13.2
*61-80	Original	76	-3.7	-2.3	13.4	10.6
	Software 505	142	-4.8	-1.0	11.8	7.7
81-180	Original	1155	11.9%	9.7%	17.0%	13.0%
	Software 505	805	1.9%	0.7%	10.6%	8.1%
181-300	Original	1380	14.8%	12.4%	17.4%	13.3%
	Software 505	957	2.2%	1.0%	8.1%	6.5%
301-350	Original	206	19.2%	15.9%	19.4%	15.9%
	Software 505	209	7.8%	6.5%	11.0%	7.9%
351-400	Original	86	18.5%	15.5%	19.1%	15.5%
	Software 505	63	14.9%	11.6%	15.2%	11.6%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

\*For CGM ≤ 80 mg/dL, the difference and absolute difference in mg/dL are included instead of percent differences (%).

## Accuracy Relative to YSI

Accuracy between matched pairs was also estimated by calculating the percent difference between the System reading and the YSI value. For example, if the YSI value is 100 mg/dL and the System reading is 90 mg/dL, a 10% difference between the System and the YSI is reported. The System and YSI values were compared by pairing the System reading that fell immediately after the YSI value was collected.

In the example above, the System reading is less than the YSI value, so the percent difference reading is negative. The mean percent difference is the average of all positive and negative percent differences between the two devices; it tells you if the System reads higher or lower on average than the YSI within each glucose range.

Another estimate used to show the accuracy of the System is the absolute percent difference. The absolute percent difference tells you the percent difference or “distance” between the System and YSI values, but does not tell you whether the System is reading, on average, higher or lower than the YSI laboratory standard. The mean absolute percent difference is the average “distance” (regardless if positive or negative) between System readings and YSI values.

Accuracy measures in differences for both the **Original Adult** and **Software 505 Adult** Studies are summarized in Table 4-A. Accuracy measures in differences for both the **Original Pediatric** and **Software 505 Pediatric** Studies are summarized in Table 4-B. Tables 4-A and 4-B are categorized within CGM glucose ranges.

For example, in the **Software 505 Adult** Study (Table 4-A), overall, on average, the System reads 2.5% different (Mean Percent Difference) than the reference and 9.0% absolute different (Mean Absolute Difference) than the reference values. The Median Percent Difference shows that half of the time the System reads 2.4% or less than the YSI blood glucose values and the Median Absolute Percent Difference shows that half of the time the System reads about 7.0% or less than the YSI blood glucose values.

**Table 5-A. Hypoglycemia Alert and Detection Rate Evaluation in Reference to YSI 15 Minutes Before and After (Adult)**

Hypoglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hypoglycemia Detection Rate	Hypoglycemia Missed Detection Rate
55	Original	50%	50%	71%	29%
	Software 505	71%	29%	68%	32%
60	Original	64%	36%	75%	25%
	Software 505	85%	15%	83%	17%
70	Original	79%	21%	83%	17%
	Software 505	92%	8%	91%	9%
80	Original	87%	13%	86%	14%
	Software 505	95%	5%	90%	10%
90	Original	90%	10%	89%	11%
	Software 505	96%	4%	94%	6%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 5-B. Hypoglycemia Alert and Detection Rate Evaluation in Reference to YSI 15 Minutes Before and After (Pediatric, Ages 6-17 Years)**

Hypoglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hypoglycemia Detection Rate	Hypoglycemia Missed Detection Rate
55	Original	0%	100%	0%	100%
	Software 505	22%	78%	75%	25%
60	Original	11%	89%	25%	75%
	Software 505	42%	58%	78%	23%
70	Original	47%	53%	50%	50%
	Software 505	68%	32%	75%	25%
80	Original	55%	45%	55%	45%
	Software 505	86%	14%	91%	9%
90	Original	69%	31%	62%	38%
	Software 505	90%	10%	93%	7%
100	Original	75%	25%	62%	38%
	Software 505	91%	9%	93%	7%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 5-C. Hypoglycemia Alert and Detection Rate Evaluation in Reference to SMBG 30 Minutes Before and After (Pediatric, Ages 2-5 Years)**

Hypoglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hypoglycemia Detection Rate	Hypoglycemia Missed Detection Rate
55	Original	3%	97%	57%	43%
	Software 505	25%	75%	100%	0%
60	Original	11%	89%	62%	38%
	Software 505	20%	80%	100%	0%
70	Original	29%	71%	77%	23%
	Software 505	20%	80%	100%	0%
80	Original	35%	65%	85%	15%
	Software 505	61%	39%	100%	0%
90	Original	51%	49%	89%	11%
	Software 505	78%	22%	100%	0%
100	Original	64%	36%	91%	9%
	Software 505	82%	18%	100%	0%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## Low and High Glucose Alerts

The ability of the System to detect high and low glucose levels is assessed by comparing System results to YSI results at low and high blood glucose levels and determining if the alert may have sounded. The System and YSI values were compared by pairing the System reading that occurred immediately after the YSI value was collected. We suggest that you ask your doctor what alert settings would be best for you.

## The Low Glucose Alert

Estimates of how well the adjustable Low Glucose Alert performs are presented in Tables 5-A, 5-B and 5-C. Table 5-A represents the hypoglycemic alert evaluation within 15 minutes of the YSI value in the adult studies. Table 5-B represents the alert evaluation within 15 minutes of the YSI value for a subset of the pediatric population—subjects age 6 to 17 years who had YSI measurements every 15 minutes.

Table 5-C represents the alert evaluation within 30 minutes of an SMBG reading for 2- to 5-year old subjects in the pediatric studies.

### ***Hypoglycemia Alert Rate***

The Alert Rate shows how often the alert is right or wrong. The True Alert Rate is the % of time the device alarmed when the blood glucose level was at or below the alert setting within 15 or 30 minutes before or after the device alarmed. The False Alert Rate is the % of time the device alarmed when the blood glucose level was above the alert setting within 15 or 30 minutes before or after the device alarmed.

For example, if you set the Low Glucose Alert to 70 mg/dL and your alarm sounds, how often can you expect your blood sugar to actually be low? In the **Software 505 Adult** Study (Table 5-A), when your alarm sounds, you can expect your blood sugar to be below 70 mg/dL approximately 92% of the time and above 70 mg/dL approximately 8% of the time within the 15 minute period before or after your alarm sounds.

### ***Hypoglycemia Detection Rate***

The Detection Rate shows how often the device recognizes and alerts you to an episode of hypoglycemia or how often it misses such an event. The Hypoglycemia Detection Rate is the % of time the blood glucose level was at or below the alert setting and device alarmed within 15 or 30 minutes before or after the blood glucose was at or below the alert settings. The Hypoglycemia Missed Detection Rate is the % of time the blood glucose was at or below the alert setting, but the device did not alarm within 15 or 30 minutes before or after the blood glucose was at or below the alert setting.

For example, if you set the Low Glucose alert to 70 mg/dL, how often will your alarm alert you if your blood glucose goes below 70 mg/dL? In the **Software 505 Adult** Study (Table 5-A), when your blood sugar goes below 70 mg/dL, you can expect your alarm to sound 91% of the time and not to sound approximately 9% of time within the 15 minute period before or after your blood sugar goes below 70 mg/dL.

**Table 6-A. Hyperglycemia Alert and Detection Rate Evaluation in Reference to YSI 15 Minutes Before and After (Adult)**

Hyperglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hyperglycemia Detection Rate	Hyperglycemia Missed Detection Rate
120	Original	95%	5%	98%	2%
	Software 505	98%	2%	100%	0%
140	Original	94%	6%	97%	3%
	Software 505	97%	3%	99%	1%
180	Original	92%	8%	97%	3%
	Software 505	97%	3%	99%	1%
200	Original	92%	8%	97%	3%
	Software 505	96%	4%	98%	2%
220	Original	91%	9%	95%	5%
	Software 505	94%	6%	98%	2%
240	Original	91%	9%	94%	6%
	Software 505	93%	7%	95%	5%
300	Original	82%	18%	86%	14%
	Software 505	86%	14%	90%	10%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 6-B. Hyperglycemia Alert and Detection Rate Evaluation in Reference to YSI 15 Minutes Before and After (Pediatric, Ages 6-17 Years)**

Hyperglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hyperglycemia Detection Rate	Hyperglycemia Missed Detection Rate
120	Original	91%	9%	98%	2%
	Software 505	98%	2%	99%	1%
140	Original	87%	13%	99%	1%
	Software 505	97%	3%	98%	2%
180	Original	75%	25%	99%	1%
	Software 505	94%	6%	98%	2%
200	Original	71%	29%	98%	2%
	Software 505	94%	6%	97%	3%
220	Original	67%	33%	97%	3%
	Software 505	93%	7%	96%	4%
240	Original	62%	38%	96%	4%
	Software 505	88%	12%	94%	6%
300	Original	43%	57%	93%	7%
	Software 505	69%	31%	84%	16%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 6-C. Hyperglycemia Alert and Detection Rate Evaluation in Reference to SMBG 30 Minutes Before and After (Pediatric, Ages 2-5 Years)**

Hyperglycemia Alert Level (mg/dL)	Study <sup>1</sup>	True Alert Rate	False Alert Rate	Hyperglycemia Detection Rate	Hyperglycemia Missed Detection Rate
120	<b>Original</b>	92%	8%	98%	2%
	<b>Software 505</b>	97%	3%	99%	1%
140	<b>Original</b>	90%	10%	98%	2%
	<b>Software 505</b>	98%	2%	100%	0%
180	<b>Original</b>	87%	13%	96%	4%
	<b>Software 505</b>	99%	1%	93%	7%
200	<b>Original</b>	85%	15%	96%	4%
	<b>Software 505</b>	98%	2%	93%	7%
220	<b>Original</b>	81%	19%	95%	5%
	<b>Software 505</b>	100%	0%	97%	3%
240	<b>Original</b>	80%	20%	95%	5%
	<b>Software 505</b>	99%	1%	98%	2%
300	<b>Original</b>	71%	29%	90%	10%
	<b>Software 505</b>	95%	5%	96%	4%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## The High Glucose Alert

Estimates of how well the adjustable High Glucose Alert performs are presented in Tables 6-A, 6-B and 6-C. Table 6-A represents the hyperglycemic alert evaluation within 15 minutes of the YSI value in the adult studies. Table 6-B represents the alert evaluation within 15 minutes of the YSI value for a subset of the pediatric population—subjects age 6 to 17 years who had YSI measurements every 15 minutes. Table 6-C represents the alert evaluation within 30 minutes of an SMBG reading for 2- to 5-year old subjects in the pediatric studies.

## Hyperglycemia Alert Rate

The Alert Rate shows how often the alert is right or wrong. The True Alert Rate is the % of time the device alarmed when the blood glucose level was at or above the alert setting within 15 or 30 minutes before or after the device alarmed. The False Alert Rate is the % of time the device alarmed when the blood glucose level was below the alert setting within 15 or 30 minutes before or after the device alarmed.

For example, if you set the High Glucose alert to 200 mg/dL and your alarm sounds, how often can you expect your blood sugar to actually be high? In the [Software 505 Adult](#) Study (Table 6-A), when your alarm sounds, you can expect your blood sugar to be at or above 200 mg/dL approximately 96% of the time and not be above 200 mg/dL approximately 4% of the time within the 15 minute period before or after your alarm sounds.

## Hyperglycemia Detection Rate

The Detection Rate shows how often the device recognizes and alerts you to an episode of hyperglycemia or how often it misses such an event. The Hyperglycemia Detection Rate is the % of time the blood glucose level was at or above the alert setting and the device alarmed within 15 or 30 minutes before or after the blood glucose was at or above the alert settings. The Hyperglycemia Missed Detection Rate is the % of time the blood glucose was at or above the alert setting, but the device did not alarm within 15 or 30 minutes before or after the blood glucose was at or above the alert setting.

For example, if you set your High Glucose alert to 200 mg/dL, how often will your alarm alert you if your blood glucose goes at or above 200 mg/dL? In the [Software 505 Adult](#) Study (Table 6-A), when your blood sugar goes above 200 mg/dL, you can expect your alarm to sound 98% of the time and not to sound approximately 2% of time within the 15 minute period before or after your blood sugar goes above 200 mg/dL.

**Table 7-A. Percentage of System Readings<sup>1</sup> Within YSI Values With Data Stratified in 2-Hour Increments After Calibration (Adult)**

Time From Calibration	Study <sup>2</sup>	Number of Paired CGM-YSI	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
0-2 hours	Original	1929	78%	88%	96%	2%
	Software 505	469	93%	97%	99%	0%
2-4 hours	Original	1516	69%	81%	91%	4%
	Software 505	389	90%	97%	99%	0%
4-6 hours	Original	1547	69%	79%	91%	5%
	Software 505	383	85%	91%	97%	2%
6-8 hours	Original	1520	68%	79%	92%	3%
	Software 505	380	79%	90%	97%	2%
8-10 hours	Original	1555	71%	82%	92%	4%
	Software 505	347	83%	92%	98%	0%
10-12 hours	Original	1068	65%	77%	91%	4%
	Software 505	295	80%	90%	98%	0%
12-14 hours	Original	17	65%	76%	82%	12%
	Software 505	0	--	--	--	--

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 7-B. Percentage of System Readings<sup>1</sup> Within YSI Values with Data Stratified in 2-Hour Increments after Calibration (Pediatric)**

Time From Calibration	Study <sup>2</sup>	Number of Paired CGM-YSI	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
0-2 hours	Original	648	65%	75%	87%	7%
	Software 505	545	83%	91%	97%	1%
2-4 hours	Original	649	51%	67%	86%	7%
	Software 505	460	72%	89%	96%	2%
4-6 hours	Original	630	51%	61%	80%	10%
	Software 505	428	77%	88%	95%	2%
6-8 hours	Original	409	52%	68%	85%	5%
	Software 505	325	88%	92%	94%	3%
8-10 hours	Original	296	53%	69%	84%	7%
	Software 505	305	86%	93%	97%	1%
10-12 hours	Original	253	58%	74%	89%	5%
	Software 505	198	89%	94%	98%	0%
12-14 hours	Original	37	32%	38%	65%	22%
	Software 505	1	100%	100%	100%	0%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## Calibration Stability

The System must be calibrated every 12 hours. To demonstrate performance of the System over a 12-hour calibration period, Systems were evaluated to verify that performance remains consistent over the 12-hour calibration period. Systems were evaluated in 2-hour increments after calibration. Performance was estimated at each 2-hour interval and stratified by glucose values by calculating the percentage of System readings within 15 mg/dL or 15%, 20 mg/dL or 20%, 30 mg/dL or 30%, 40 mg/dL or 40% and greater than 40 mg/dL or 40% of the YSI values in Tables 7-A and 7-B.

**Table 8-A. Sensor Stability Relative to YSI (Accuracy Over Time<sup>1</sup>) - (Adult)**

Day of Wear	Study <sup>2</sup>	Number of Paired CGM-YSI	Mean Absolute Percent Differences	Median Absolute Percent Differences	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
Day 1	Original	3023	16.7%	13.2%	59%	71%	86%	6%
	Software 505	680	10.7%	7.9%	77%	84%	96%	2%
Day 4	Original	3108	11.4%	8.2%	77%	87%	95%	2%
	Software 505	777	8.0%	6.4%	89%	96%	99%	0%
Day 7	Original	3021	11.9%	8.9%	76%	87%	95%	2%
	Software 505	806	8.5%	7.2%	90%	97%	99%	0%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 8-B. Sensor Stability Relative to YSI (Accuracy Over Time<sup>1</sup>) - (Pediatric, Ages 6-17 Years)**

Day of Wear	Study <sup>2</sup>	Number of Paired CGM-YSI	Mean Absolute Percent Differences	Median Absolute Percent Differences	Percent Within 15/15% YSI	Percent Within 20/20% YSI	Percent Within 30/30% YSI	Percent Greater Than 40/40% YSI
Day 1	Original	1016	21.2%	15.8%	48%	61%	78%	15%
	Software 505	740	12.7%	8.5%	75%	83%	91%	4%
Day 4	Original	810	16.0%	13.9%	52%	66%	87%	3%
	Software 505	795	8.1%	6.7%	89%	97%	100%	0%
Day 7	Original	1096	15.1%	11.3%	63%	76%	89%	4%
	Software 505	727	10.4%	8.4%	80%	91%	98%	1%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 8-C. Sensor Stability Relative to SMBG (Accuracy Over Time<sup>1</sup>) - (Pediatric, Ages 2-17 Years)**

Day of Wear	Study <sup>2</sup>	Number of Paired CGM-SMBG	Mean Absolute Percent Differences	Median Absolute Percent Differences	Percent Within 15/15% SMBG	Percent Within 20/20% SMBG	Percent Within 30/30% SMBG	Percent Greater than 40/40% SMBG
Day 1	Original	3216	18.8%	14.2%	53%	65%	81%	10%
	Software 505	893	14.8%	10.7%	64%	79%	91%	5%
Day 2	Original	2148	16.2%	12.4%	60%	74%	87%	6%
	Software 505	436	13.2%	10.4%	69%	81%	95%	3%
Day 3	Original	1977	15.2%	11.0%	63%	76%	89%	5%
	Software 505	441	13.8%	11.3%	66%	77%	91%	2%
Day 4	Original	2830	14.0%	10.9%	66%	79%	91%	4%
	Software 505	850	10.7%	8.5%	79%	91%	97%	1%
Day 5	Original	1768	15.4%	10.7%	67%	78%	90%	5%
	Software 505	374	11.4%	8.7%	74%	86%	96%	1%
Day 6	Original	1704	14.3%	9.8%	68%	79%	90%	4%
	Software 505	410	12.3%	9.2%	72%	80%	93%	2%
Day 7	Original	2675	12.4%	9.2%	72%	83%	94%	3%
	Software 505	860	11.3%	8.6%	79%	90%	96%	2%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

## Sensor Stability

### Relative to YSI

Sensors can be worn for up to 7 days. Performance was estimated by calculating the percentage of System readings within 15 mg/dL or 15%, 20 mg/dL or 20%, 30 mg/dL or 30% , 40 mg/dL or 40% and greater than 40 mg/dL or 40% of the YSI values at the beginning (Day 1), middle (Day 4) and end (Day 7) of the System lifecycle. The average and median of the absolute percent differences are

included in Tables 8-A and 8-B showing consistent accuracy and sensor stability over the 7-day life of the sensor.

## **Relative to SMBG (Pediatric Study)**

Performance was also estimated by calculating the percentage of system readings within various percentages of the SMBG values at each day of the sensor wear period (Table 8-C). The average and median of the absolute percent differences are included in the table.

## **Precision of System Readings**

A subset of subjects wore two Systems at the same time. This was to look at how similarly two Systems function on the same subject (sensor precision). Precision was evaluated by comparing the glucose readings from the two Systems worn on the same subject at the same time.

In the **Original Adult** Study, 36 subjects wore two Systems. Results showed that System readings from the two sensors generally agreed with each other within 9% (absolute percent difference) with a 7% coefficient of variation. In the **Original Pediatric** Study, all subjects wore two Systems. Results showed that System readings from the two sensors generally agreed with each other within 10% (absolute percent difference) with a 7% coefficient of variation. Only one System was worn in the **Software 505 Adult** and **Software 505 Pediatric** Studies so precision data was not collected.

## **Sensor Life**

Sensors may be worn for up to 7 days (168 hours). To estimate how long a sensor will work over 7 days, all sensors worn were evaluated to determine how many days/hours of readings each sensor provided.

In the **Original Adult** Study, 108 sensors were evaluated. Ninety-four percent (94%) of the sensors lasted until Day 7 (145-168 hours). There were 6 (6%) sensors that ended early, four of which lasted more than 3 days.

In the **Software 505 Adult** Study, 51 sensors were evaluated. Ninety-eight percent (98%) of the sensors lasted until Day 7 (145-168 hours). There was 1 (2%) sensor that ended early, which lasted until day 5 of the sensor wear.

In the **Original Pediatric** Study, 351 sensors were evaluated. Eighty-five percent (85%) of the sensors lasted until Day 7 (145-168 hours).

In the **Software 505 Pediatric** Study, 77 sensors were evaluated. Ninety-four percent (94%) of the sensors lasted until Day 7 (145-168 hours).

**Table 9-A. Number of Readings Provided by Each Sensor Over 7-Days (Adult)**

% of Total Possible Readings Provided	Study <sup>1</sup>	Total Readings Provided (Min-Max)	% of Systems Providing That Number of Readings
0-25%	Original	167-491	2%
	Software 505	0	0%
26-50%	Original	719-914	4%
	Software 505	856-856	2%
51-75%	Original	1267-1267	1%
	Software 505	1253-1253	2%
76-100%	Original	1811-1992	94%
	Software 505	1497-1992	96%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 9-B. Number of Readings Provided by Each Sensor Over 7-Days (Pediatric)**

% of Total Possible Readings Provided	Study <sup>1</sup>	Total Readings Provided (Min-Max)	% of Systems Providing That Number of Readings
0-25%	Original	103-427	3%
	Software 505	60-223	4%
26-50%	Original	569-954	3%
	Software 505	877-891	3%
51-75%	Original	1006-1484	9%
	Software 505	1131-1342	3%
76-100%	Original	1518-1992	86%
	Software 505	1623-1990	91%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 10-A. System Readings Within Wear Days (Adult)**

Statistic	Study <sup>1</sup>	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	All Days <sup>2</sup>
Mean	Original	98%	98%	98%	98%	97%	99%	95%	97%
	Software 505	98%	99%	98%	98%	96%	99%	97%	98%
Median	Original	100%	100%	100%	100%	100%	100%	100%	100%
	Software 505	99%	100%	100%	100%	100%	100%	100%	100%
Standard Deviation	Original	5%	3%	9%	8%	10%	3%	11%	8%
	Software 505	3%	2%	8%	11%	15%	2%	13%	9%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

<sup>2</sup>A total of 108 sensors were included with the **Original** Study and 51 sensors were included with the **Software 505** Study.

**Table 10-B. System Readings Within Wear Days (Pediatric)**

Statistic	Study <sup>1</sup>	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	All Days <sup>2</sup>
Mean	<b>Original</b>	97%	96%	96%	95%	94%	94%	92%	95%
	<b>Software 505</b>	96%	96%	95%	96%	93%	95%	93%	95%
Median	<b>Original</b>	99%	99%	99%	99%	99%	99%	98%	99%
	<b>Software 505</b>	99%	98%	99%	99%	97%	97%	98%	98%
Standard Deviation	<b>Original</b>	6%	10%	9%	12%	14%	14%	17%	12%
	<b>Software 505</b>	9%	6%	12%	10%	15%	7%	12%	11%

<sup>1</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

<sup>2</sup>A total of 108 sensors were included with the **Original** Study and 77 sensors were included with the **Software 505** Study.

## Number of Readings Provided

The System is capable of providing a reading up to every 5 minutes, or up to 288 readings per day. For a variety of reasons, the System may not display a glucose reading and readings are “skipped.” Tables 9-A and 9-B estimate the number of readings you can expect to receive from the System over the entire 7-day period after calibration. Tables 10-A and 10-B show the number of readings you can expect to receive from the System within each system wear day.

For the **Software 505 Adult** Study (SW10505), 96% of Systems provided between 1,497 and 1,992 valid glucose readings (or more than 75% of the expected number of readings) as seen in Table 9-A. Adjusted within each system wear-day, the System in the **Software 505 Adult** Study provided an average of 98% of all expected glucose readings (288) as seen in Table 10-A.

**Table 11-A. System Agreement to SMBG within CGM Glucose Ranges (Adult)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-SMBG	Percent Within 15/15% SMBG	Percent Within 20/20% SMBG	Percent Within 30/30% SMBG	Percent Greater Than 40/40% SMBG
Overall	Original	7508	69%	81%	94%	2%
	Software 505	2992	77%	87%	96%	1%
40-60	Original	731	75%	84%	92%	4%
	Software 505	221	73%	80%	87%	7%
61-80	Original	968	78%	86%	95%	1%
	Software 505	336	77%	85%	95%	1%
81-180	Original	3141	65%	78%	93%	2%
	Software 505	1362	74%	85%	96%	1%
181-300	Original	1960	68%	81%	94%	3%
	Software 505	826	80%	90%	97%	1%
301-350	Original	450	77%	88%	98%	1%
	Software 505	161	83%	93%	99%	0%
351-400	Original	258	75%	85%	95%	2%
	Software 505	86	90%	93%	98%	1%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 11-B. System Agreement to SMBG Within CGM Glucose Ranges (Pediatric)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-SMBG	Percent Within 15/15% SMBG	Percent Within 20/20% SMBG	Percent Within 30/30% SMBG	Percent Greater Than 40/40% SMBG
Overall	Original	16318	64%	76%	89%	5%
	Software 505	4264	73%	84%	94%	2%
40-60	Original	487	44%	55%	68%	19%
	Software 505	240	54%	71%	86%	7%
61-80	Original	1340	59%	70%	85%	7%
	Software 505	399	64%	76%	92%	2%
81-180	Original	7084	62%	74%	90%	5%
	Software 505	1650	72%	84%	95%	2%
181-300	Original	5627	69%	80%	90%	5%
	Software 505	1526	79%	89%	97%	2%
301-350	Original	1176	65%	77%	90%	4%
	Software 505	319	72%	83%	94%	2%
351-400	Original	604	58%	72%	86%	6%
	Software 505	130	69%	79%	86%	8%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

**Table 12-A. CGM System Difference to SMBG Within CGM Glucose Ranges (Adult)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-SMBG	Mean Percent Difference	Median Percent Difference	Mean Absolute Percent Difference	Median Absolute Percent Difference
Overall	Original	7508	-0.4%	-1.4%	14.0%	11.0%
	Software 505	2992	-2.6%	-2.7%	11.3%	8.6%
*40-60	Original	731	-9.3	-8.0	11.7	8.0
	Software 505	221	-10.3	-6.0	13.0	8.0
*61-80	Original	968	-1.0	1.0	10.7	8.0
	Software 505	336	-4.0	-2.0	10.1	7.0
81-180	Original	3141	1.4%	0.0%	14.2%	11.0%
	Software 505	1362	-2.6%	-3.1%	11.4%	8.9%
181-300	Original	1960	-0.7%	-2.8%	13.0%	10.3%
	Software 505	826	-1.4%	-2.0%	9.5%	7.4%
301-350	Original	450	-0.7%	-2.6%	10.5%	8.6%
	Software 505	161	-0.0%	0.0%	8.3%	6.0%
351-400	Original	258	5.0%	3.0%	11.9%	8.6%
	Software 505	86	3.9%	3.2%	8.1%	6.7%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

\*For CGM ≤ 80 mg/dL, the differences in mg/dL are included instead of percent differences (%).

**Table 12-B. System Difference to SMBG Within CGM Glucose Ranges (Pediatric)**

CGM Glucose Range <sup>1</sup> (mg/dL)	Study <sup>2</sup>	Number of Paired CGM-SMBG	Mean Percent Difference	Median Percent Difference	Mean Absolute Percent Difference	Median Absolute Percent Difference
Overall	<b>Original</b>	16318	2.2%	0.9%	15.3%	11.1%
	<b>Software 505</b>	4264	-0.7%	-1.1%	12.5%	9.5%
*40-60	<b>Original</b>	487	-22.1	-17.0	23.9	18.0
	<b>Software 505</b>	240	-15.9	-14.0	16.9	14.0
*61-80	<b>Original</b>	1340	-11.8	-8.0	17.0	11.0
	<b>Software 505</b>	399	-7.8	-6.0	13.7	10.0
81-180	<b>Original</b>	7084	1.1%	-1.0%	15.4%	11.4%
	<b>Software 505</b>	1650	-1.2%	-2.6%	12.1%	9.5%
181-300	<b>Original</b>	5627	5.7%	3.4%	13.5%	9.5%
	<b>Software 505</b>	1526	1.7%	0.9%	10.1%	7.7%
301-350	<b>Original</b>	1176	9.6%	7.2%	14.2%	10.4%
	<b>Software 505</b>	319	6.7%	5.9%	11.8%	8.9%
351-400	<b>Original</b>	604	12.7%	10.2%	16.1%	11.9%
	<b>Software 505</b>	130	12.0%	8.9%	15.7%	10.6%

<sup>1</sup>CGM readings are within 40 to 400 mg/dL, inclusive.

<sup>2</sup>Both sets of study data are presented and are labeled as **Original** (SW10050) or **Software 505** (SW10505).

\*For CGM  $\leq 80$  mg/dL, the differences in mg/dL are included instead of percent differences (%).

## Agreement and Accuracy Relative to SMBG

Agreement between the System and blood glucose values is also characterized using paired System and SMBG results (Tables 11-A/B to 12-A/B).

The System and SMBG values were compared by pairing the comparative SMBG value to a System glucose reading that occurred immediately after the SMBG was collected. These results characterize the performance subjects expect during real-time use of the System in their daily diabetes management when comparing the System readings to their home blood glucose meter results. For readings less than or equal to 80 mg/dL, the absolute difference in mg/dL between the two glucose

results was calculated. For values greater than 80 mg/dL, the absolute percent difference (%) from the SMBG values was calculated. The percentages of total readings within 15 mg/dL or 15%, 20 mg/dL or 20%, 30 mg/dL or 30%, 40 mg/dL or 40% or greater than 40 mg/dL or 40% were then calculated.

For example, if the System reads 100 mg/dL, it is between 81-180 mg/dL range and you can expect the System readings to be within 20% of the SMBG values 85% of the time for the **Software 505 Adult** Study, as seen in Table 11-A.

Overall, the System in the **Software 505 Adult** Study reads, on average, 2.6% lower (Mean Percent Difference) than SMBG values and 11.3% absolute different (Mean Absolute Percent Difference) than the SMBG values. The Median Percent Difference shows that half of the time the System reads lower in 2.7% or less than the SMBG values and the Median Absolute Percent Difference shows that half of the time the System reads about 8.6% or less different than SMBG values, as seen in Table 12-A.

## Adverse Events

No serious adverse events or device-related serious adverse events occurred during the studies. Mild to moderate skin irritation, such as erythema or edema, occurred at the sensor needle insertion area or around the adhesive area. No infection, bruising, or bleeding occurred at the sensor needle insertion area or the adhesive area.

## 18.2 Product Specifications

User is the single use operator in the home environment.

Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Do not touch the metal connectors on the bottom of the transmitter and other open connectors on the receiver, charging cable and charger.

## Sensor Product Specifications

Glucose Range	40-400 mg/dL
Sensor Life	Up to 7 days
Calibration	Commercially available blood glucose meter
Calibration Range	40-400 mg/dL
Storage Condition	Temperature: 36° F-77° F Humidity: 15%-85% RH
Sterilization	Sterile by radiation

## Transmitter Product Specifications

Part Number	9438-06
Dimensions (Including Sensor Pod)	Length: 1.5 inches Width: 0.9 inches Thickness: 0.5 inches
Weight (Including Sensor Pod)	0.4 ounces
Power Supply	Silver oxide batteries (not replaceable)
Operational Conditions	Ambient temperature is 10° C-42° C (50° F-107.6° F) Equilibrium temperature of less than 0.5° C (0.9° F) above ambient Humidity: 10%-95% RH
Storage Conditions	Temperature: 32° F-113° F Humidity: 10%-95% RH
Operating Altitude	-1300 feet to 13800 feet
Limited Warranty	3 months
Moisture Protection	IP28: Protection against insertion of large objects and immersion in water for up to 8 feet for 24 hours
Protection Against Electrical Shock	Type BF applied part

## Transmitter Performance Characteristics

Parameter	Performance Characteristic
<b>TX/RX Frequencies</b>	2.402-2.480 GHz
<b>Bandwidth</b>	1.02 MHz
<b>Maximum Output Power</b>	1.0 mW EIRP
<b>Modulation</b>	Gaussian Frequency-Shift Keying
<b>Data Rate</b>	1 Mbps
<b>Data Communication Range</b>	20 feet

The Dexcom G5 is safe for use on U.S. commercial airlines. The Dexcom G5 is an M-PED with emission levels that meet RTCA/DO160, Section 21, Category M. Per FAA Advisory, Circular #91-21, 1B, dated 8/25/06, any M-PED that meets this standard in all modes may be used onboard the aircraft without any further testing by the operator. This device can withstand exposure to common electrostatic discharge (ESD) and electromagnetic interference (EMI).

## Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The transmitter (P/N 9438-06) is intended for use in the electromagnetic environment specified in the next table. The customer or the user of the transmitter should ensure that it is used in such an environment.

## Transmitter Electromagnetic Immunity Specifications

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
<b>Electrostatic Discharge (ESD)</b> IEC 61000-4-2	± 8 kV Contact ± 15 kV Air	± 8 kV Contact ± 15 kV Air	The relative humidity should be at least 5%.
<b>Power Frequency (50/60 Hz) Magnetic Field</b> IEC 61000-4-8	30 A/m	30 A/m	Magnetic fields from common appliances are not expected to affect the system.

## Receiver Product Specifications

Part Number	MT22719
Reading Frequency	Every 5 minutes
Dimensions	Length: 4.0 inches Width: 1.8 inches Thickness: 0.5 inches
TX/RX Frequencies	2.402-2.480 GHz
Bandwidth	1.22 MHz
Maximum Output Power	2.5 mW EIRP
Modulation	Gaussian Frequency-Shift Keying
Data Rate	1 Mbps
Weight	2.4 ounces
Receiver Input	5V DC, 1A
Power Supply	MT21255
Communication Range	20 feet
Memory Storage	30 days of glucose data 7 days of tech support data
Re-Chargeable Battery Use	3 days
Charging Time	3 hours wall outlet The device behaves normally while being charged Do not hold the receiver while charging for over a minute There are no risks to connecting any part of the system to an MSO (Multiple Socket Outlet)
Storage/Operating Conditions	Temperature: 32° F - 104° F Humidity: 15% - 95% RH, (Storage 10% - 95% RH)
Operating Altitude	-1300 feet to 13800 feet

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<b>Medium Priority Alarm Audible Output</b>	50 dBa at 1 meter
<b>Moisture Protection</b>	IP22: Vertically falling drops Protection against insertion of large objects and dripping water
<b>Limited Warranty</b>	1 year
<b>Control Classification</b>	Class II equipment

No cleaning methods are recommended or tested for the receiver. The warranty life of the receiver is 1 year. The service life for the accessories is noted to be up to one year. If you have difficulty reading your receiver in bright sunlight, you may need to seek a shady location. Do not connect the receiver to any equipment not specified in instructions for use (IFU).

## Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The receiver (MT22719) is intended for use in the electromagnetic environment specified in the next table. The customer or the user of the receiver should ensure that it is used in such an environment.

### Receiver Electromagnetic Immunity Specifications


Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
<b>Electrostatic Discharge (ESD)</b> IEC 61000-4-2	± 8 kV Contact ± 15 kV Air	± 8 kV Contact ± 15 kV Air	Relative humidity should be at least 5%.
<b>Electrical Fast Transient/Burst</b> IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
<b>Surge</b> IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
<b>Surge</b> IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
<b>Voltage Dips, Short Interruptions and Voltage Variations on Power Supply Input Lines</b> IEC 61000-4-11 IEC 60601-1-11	0% $U_T$ for 1 cycle 0% $U_T$ for 0.5 cycle at 8 phase angles 70% $U_T$ (30% dip in $U_T$ ) for 25 cycles 0% $U_T$ for 250 cycles	0% $U_T$ for 1 cycle 0% $U_T$ for 0.5 cycle at 8 phase angles 70% $U_T$ (30% dip in $U_T$ ) for 25 cycles 0% $U_T$ for 250 cycles	Mains power quality should be that of a typical commercial or hospital environment.
<b>Power Frequency (50/60 Hz) Magnetic Field</b> IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

**NOTE:**  $U_T$  is the a.c. mains voltage prior to application of the test level.

## Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The Dexcom G5 is intended for use in the electromagnetic environment specified in the next table. The customer or the user of the Dexcom G5 should ensure that it is used in such an environment.

### System Electromagnetic Immunity Specifications

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
<b>Conducted RF</b> <b>IEC 61000-4-6</b> <b>(Receiver only)</b>	3 Vrms 150 kHz to 80 MHz	6 Vrms	Recommended Separation Distance $d = 1.2 \sqrt{P}$ 150 kHz to 80 MHz
<b>Radiated RF</b> <b>IEC 61000-4-3</b>	10 V/m at 80 MHz to 2700 MHz (AM Modulation)	10 V/m	Recommended Separation Distance $d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 2.5 GHz  Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).  Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey <sup>a</sup> should be less than the compliance level in each frequency range <sup>b</sup> .  Interference may occur in the vicinity of equipment marked with the following symbol:  

**NOTE 1:** At 80 MHz and 800 MHz, the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF

transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Dexcom G5 is used exceeds the applicable RF compliance level above, the Dexcom G5 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Dexcom G5.

b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

## Guidance and Manufacturer’s Declaration – Electromagnetic Emissions

The Dexcom G5 is intended for use in the electromagnetic environment specified in the next table. The customer or the user of the Dexcom G5 should ensure that it is used in such an environment.

### Electromagnetic Emissions Specifications

Emissions Test	Compliance	Electromagnetic Environment Guidance
RF Emissions CISPR 11	Group 1	The Dexcom G5 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class B	The Dexcom G5 is suitable for use in all establishments including domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

## Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the Receiver

The receiver is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the receiver can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the receiver as recommended in the next table, according to the maximum output power of the communications equipment. Portable and mobile RF equipment include: baby monitors, *Bluetooth* wireless headsets, wireless routers, microwave ovens, laptops with internal Wi-Fi adapters, GSM cell phones, RFID scanners and hand-held security metal detector often used by security screeners.

## Minimum Recommended Distance Between Other RF Transmitters and the Dexcom Transmitter/Receiver

Rated Maximum Output Power of Transmitter (W)	Separation Distance According to Frequency of Transmitter (m)		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance (d) in feet can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture.

**NOTE 1:** At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

## USB Charging/Download Cable\* Specifications

Part Number	MT20655
Input/Output	5V DC, 1A
Type	USB A to USB micro B
Length	3 feet

*\*The power supply/charger can be connected to the USB charging/download cable for charging using an AC power outlet. Misuse of the USB cable can present a strangulation risk. Isolation of system is by unplugging charger from wall.*

## Power Supply/Charger Specifications

Part Number	MT21255
Class	II
Input	AC Input 100-240 Vac, 50/60Hz, 0.2A, 0.2A rms at 100 Vac
DC Output	5V DC, 1A (5.0 Watts)

## 18.3 FCC Requirements

The transmitter and receiver covered by this user guide have been certified under FCC ID:

- Dexcom G5 transmitter: PH29715
- Dexcom G5 receiver: PH29496

Although the transmitter and receiver have been approved by the Federal Communications Commission, there is no guarantee that they will not receive interference or that any particular transmission from either device will be free from interference.

### Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

### **Warning (Part 15.21)**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. No modification of the equipment is allowed as it could create an unsafe condition.

### **FCC Interference Statement (Part 15.105 (b))**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This portable transmitter with its antenna complies with FCC/IC RF exposure limits for general population/uncontrolled exposure.

### **NOTE**

“Harmful interference” is defined by the FCC as follows:

Any emission, radiation or induction that endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communications service operating in accordance with FCC rules.

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# Chapter 19

Everything Else G5:

## Troubleshooting

### 19.1 Introduction

Sensor pod not sticking? Prompt won't go away? Not getting your sensor glucose readings? Don't know when to replace your transmitter? This chapter will help you figure it out!

Troubleshooting sections are categorized by function or system component. The solutions here are meant to be brief and not all-inclusive. Sometimes you may be notified there is an issue by an audible prompt but other times you may not. When more detailed answers or preventative measures are in a chapter, you'll get a brief explanation here, and then get directed to the applicable chapter and section.

After looking at the troubleshooting chapter, are you still not sure what to do? Or maybe your problem is related to the hardware (e.g., receiver or transmitter failure).

If your problem is not found here, follow the steps listed on your app screen, or call Technical Support.

Please call the Dexcom Technical Support Team, 24/7, toll free at **1.888.738.3646** or toll at **1.858.200.0200** if any of these errors continue and the instructions don't resolve the issue.

### 19.2 Safety Statements

Following are the Safety Statements for the Troubleshooting chapter.

#### **Warning**

**Do:** *Calibrate at least once every 12 hours.*

**Why:** Calibrating less often than every 12 hours might cause inaccurate sensor glucose readings.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### Precaution

**Do:** *Enter the exact BG value displayed on your BG meter within five minutes of a carefully performed fingerstick measurement.*

**Why:** Entering the wrong BG values, or waiting more than five minutes before entry, might affect sensor accuracy.

**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

### Precaution

**Don't:** Never prevent communication between transmitter and display devices.

**Do:** Keep smart device and receiver within 20 feet of transmitter and away from obstructions.

**Why:** If your transmitter and display device(s) are more than 20 feet apart or are separated by an obstruction, they might not communicate.


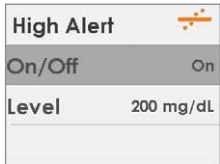
Types of obstruction differ and not all types have been tested. Obstructions can include water, walls, metal, etc.

Water (e.g., while swimming, surfing, bathing, etc.) can severely limit communication range.



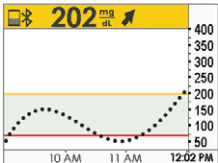
**Consequences:** Missing a severe low or high blood glucose event or making a treatment decision that results in injury.

## 19.3 Troubleshooting

### No Alarm/Alerts


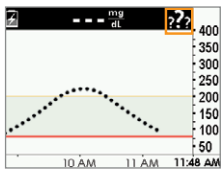


Device	What you see	Problem	What you do
Smart Device: In App		Not receiving Alarm/Alerts.	<p>See Chapter 11.</p> <p><b>Check</b> <i>Alarm/Alerts</i>, sound and/or vibrations for notifications are on.</p> <p><b>Check</b> your smart device is not on Silent or Do Not Disturb (if applicable).</p> <p><b>Check</b> your app is running in the background.</p> <p>Use your BG meter for treatment decisions during this time.</p>
Receiver			

## Sensor Glucose Readings

Device	What you see	Problem	What you do
BG Meter		Sensor readings and BG meter glucose values often don't show the same.	See Chapter 7. Differences are not uncommon. Readings from different body fluids reflect different numbers:
Smart Device: In App			<ul style="list-style-type: none"> <li>• <b>Meter</b> - from blood</li> <li>• <b>Sensor</b> - from interstitial fluid</li> </ul>
Receiver			<p><b>20/20 Rule:</b> If the meter shows 80 or less, CGM should read within <math>\pm 20</math> points. If the meter shows 80 or above, the CGM should read <math>\pm 20\%</math>.</p> <p>Example: a 202 mg/dL sensor reading and a 188 mg/dL glucose meter value = a 7% difference (this is still considered accurate).</p> <p>Outside of 20/20 rule: <b>Calibrate</b> again.</p>



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Device	What you see	Problem	What you do
Smart Device: In App		Not getting sensor glucose readings.	See Chapter 9. <i>Don't</i> calibrate. <b>Wait</b> for more prompts. System may correct problem itself and continue to provide sensor glucose readings.
Receiver			If 3 hours since last sensor reading, contact Technical Support (see Section 17.1).
Smart Device: In App		Not getting sensor glucose readings.	See Chapter 9. <b>Wait</b> System will often resolve itself.
Receiver			If this continues for an extended period of time, contact Technical Support to report error (see Section 17.1).

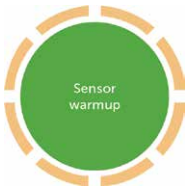

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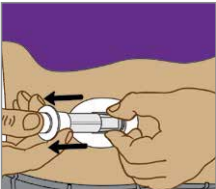

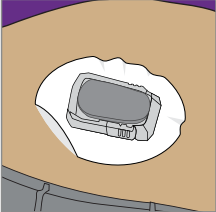
Device	What you see	Problem	What you do
<b>Smart Device: In App</b>	 <p>A black circular screen with the text "Signal Loss" in white and a blue question mark icon below it.</p>		<p>See Chapter 9.</p> <p><i>Don't</i> calibrate.</p> <p><b>Wait</b> 10 minutes.</p>
<b>Receiver</b>	 <p>The top part of the screen shows a "Signal Loss" message with a red "X" over a signal icon and the time "for 11:53:48". Below this is a graph showing a signal level over time, with a red line indicating the signal level. The graph has a y-axis ranging from 50 to 400 and an x-axis showing time from 11:53:48 to 11:54:00 AM.</p>	<p>System display device and transmitter not communicating.</p>	<p><b>Move</b> display device and transmitter within 20 feet of each other without obstruction.</p> <p><b>Wait</b> another 10 minutes.</p> <p><b>Smart device:</b></p> <ol style="list-style-type: none"> <li>1. <b>Restart</b> smart device.</li> </ol> <p>If error remains:</p> <ol style="list-style-type: none"> <li>1. <b>Open</b> your device's <i>Bluetooth settings</i>.</li> <li>2. <b>Delete</b> all Dexcom entries.</li> <li>3. <b>Pair</b> your transmitter.</li> </ol>

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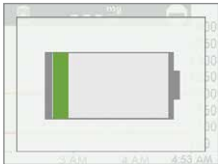
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Device	What you see	Problem	What you do
Smart Device: In App		No sensor glucose readings.	<p>See Chapter 7.</p> <p><b>Wait</b> up to 2 hours.</p> <p>System is counting down to when you do your initial calibration.</p> <p>Use your BG meter for treatment decisions during this time.</p>
Receiver			

## Applicator




Picture	Problem	What you do
	<p>Safety lock stuck.</p>	<p>See Chapter 6.</p> <p><b>Pull</b> <i>safety lock</i> straight out:</p> <ul style="list-style-type: none"> <li>• Away from your body</li> <li>• Follow direction of safety lock up arrow</li> </ul>
	<p>Collar won't pull up.</p>	<p>See Chapter 6.</p> <p><b>Use</b> force when pulling the collar up.</p> <p><b>Check</b> <i>white plunger</i> is completely down—flush to the applicator barrel.</p>
	<p>Can't remove transmitter latch.</p>	<p>See Chapter 6.</p> <p><i>Don't</i> pull it straight off.</p> <p><b>Hold</b> <i>sensor pod</i> with one hand.</p> <p><b>Twist</b> <i>transmitter latch</i> with other hand to break transmitter latch off.</p>
	<p>Sensor pod won't stick.</p>	<p>See Chapter 6.</p> <p><b>Put</b> medical tape over sensor pod's white adhesive patch (e.g., Blenderm).</p> <p><i>Don't</i> place tape over the transmitter.</p>

## Hardware Error




Device	What you see	Problem	What you do
Receiver		Won't turn on: Battery dead.	See Chapter 4. <b>Charge</b> <i>receiver</i> using electrical outlet, not computer/laptop. Full charge may take up to five hours.
Receiver		After full charge session: Won't turn on.	See Chapter 4. <b>Reset</b> <i>receiver</i> . <b>Connect</b> <i>receiver</i> to charger. <b>Insert</b> end of paper clip into small circular hole on receiver's back. <b>Push down</b> on paper clip. Receiver will vibrate. Processing screen appears. <b>Charge</b> <i>receiver</i> .
Receiver		Receiver low battery.	See Chapter 4. <b>Charge</b> <i>receiver</i> .

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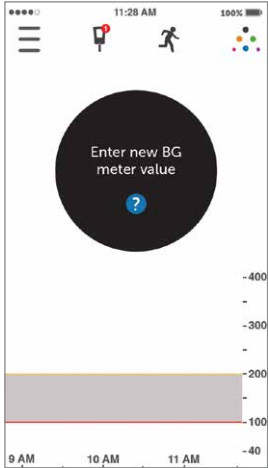

Device	What you see	Problem	What you do
Receiver		Corrupted database.	See Chapter 17. <b>Write down</b> error code. <b>Contact</b> Technical Support (see Section 17.1). <b>Check</b> BG value using BG meter.  Prompt: Vibrates one time for four seconds and four beeps.
Receiver		System Recovery.	See Chapter 17. Do nothing. Receiver is able to continue to work and recover from an error. App: <b>Tap OK</b> to confirm Alert. Receiver: <b>Press select button</b> to confirm Alert.
Smart Device: In App		No Bluetooth.	See Chapter 5. <b>Go</b> to smart device's <i>Settings</i> . <b>Make sure</b> Bluetooth is On.  If problem persists, please contact device's manufacturer.

## Calibration Error



Device	What you see	Problem	What you do
BG Meter		System will not accept calibration if outside of the 40-400 mg/dL range.	See Chapter 7. <b>Wait</b> until your glucose is between 40-400 mg/dL. <b>Calibrate</b> only when your BG meter values are between 40-400 mg/dL.
Smart Device: In App		System didn't accept recent calibration.	See Chapter 7. <b>Wait</b> 15 minutes. <b>Enter</b> 1 calibration.
Receiver		(Sensor Glucose Readings troubleshooting in Section 19.3 for a possible reason). No sensor glucose readings will be displayed until error is resolved.	If error screen still appears, <b>enter</b> 1 more BG meter value. <b>Wait</b> 15 minutes. If no sensor glucose readings appear on the display, the sensor needs to be replaced. <b>Contact</b> Technical Support to report error (see Section 17.1). App: Follow same instructions. <b>Tap question mark</b> to get more information.

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Device	What you see	Problem	What you do
<b>Smart Device: In App</b>	 <p>The screenshot shows a mobile app interface. At the top, there's a status bar with signal strength, time (11:28 AM), and battery (100%). Below the status bar are icons for a menu, a location pin, a person walking, and a multi-colored dot icon. The main screen features a large black circle with the text "Enter new BG meter value" and a blue question mark icon. To the right of the circle is a vertical axis with values -400, -300, -200, -100, and -40. Below the circle is a horizontal bar chart with a grey bar at the -200 level. At the bottom, there's a timeline with markers for 9 AM, 10 AM, and 11 AM.</p>	<p>System didn't accept recent calibration.</p>	<p>See Chapter 7.</p> <p><b>Wait</b> 15 minutes.</p> <p><b>Enter</b> 1 BG meter value.</p> <p><b>Wait</b> 15 more minutes.</p> <p>If error screen still appears, <b>enter</b> 1 more BG meter value.</p> <p><b>Wait</b> 15 minutes.</p> <p>If no sensor glucose readings appear on the display, the sensor needs to be replaced.</p>
<b>Receiver</b>	 <p>The screenshot shows a receiver display. It features a large orange drop icon in the center. The background is a light blue grid. At the bottom, there's a timeline with markers for 9:53 AM, 10:00 AM, and 10:03 AM.</p>		<p><b>Contact</b> Technical Support (see Section 17.1) to report error.</p>

## Transmitter Error:

Device	What you see	Problem	What you do
Smart Device: In App		Transmitter not working.  Sensor session automatically stopped.  No sensor glucose readings displayed.	See Chapter 17.  <b>Contact</b> Technical Support to report issue (Section 17.1).  <b>Start checking</b> BG value using BG meter.  App: <b>Tap OK</b> to confirm Alert.  Receiver: <b>Press select button</b> to confirm Alert.  Will not re-alert once confirmed.  <b>Order new transmitter.</b>
Receiver			



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Device	What you see	Problem	What you do
Smart Device: In App		Pairing failed.	<p>See Chapter 6.</p> <p><b>Check transmitter SN</b> in display device is correct.</p> <p>If wrong:</p> <p><b>Stop</b> <i>sensor session</i>.</p> <p><b>Re-enter</b> correct transmitter SN.</p> <p>App:</p> <p>Menu &gt; Trans SN &gt; <b>Enter</b> correct SN</p> <p>Receiver:</p> <p>Settings &gt; Trans SN &gt; <b>Enter</b> correct SN</p> <p>If SN correct:</p> <p>Contact Technical Support (see Chapter 17).</p>
Receiver			

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Device	What you see	Problem	What you do
Smart Device: In App	 <p>Your transmitter battery is low. The transmitter will stop working in about three weeks.</p> <p>If you haven't already, please order a new transmitter.</p>	Transmitter low battery.	<p>See Chapter 17.</p> <p><b>Contact</b> Technical Support:</p> <ul style="list-style-type: none"> <li>• TechSupport@dexcom.com</li> <li>• Toll free: <b>1.888.738.3646</b></li> <li>• Toll call: <b>1.858.200.0200</b></li> </ul>
Receiver	 <p>Low Battery Order New Transmitter</p>		

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





# Chapter 20

Everything Else G5:

## Symbols on Package Labels

















The following symbols may be found on the sensor, transmitter, and receiver packaging. These symbols tell you about the proper and safe use of the Dexcom G5.

Some of these symbols may not have meaning in your region, and are listed for informational purposes only. This table shows what each symbol means.

	Use By Date		Batch/Lot Number
	Caution		Part/Catalog Number
	Date of Manufacture		Sterile by Radiation
	Do Not Reuse		Temperature Limitation
	Serial Number		IP28: Protection Against Insertion of Large Objects and Immersion in Water
	Class II Equipment		IP22: Protection Against Insertion of Large Objects and Dripping Water
	Alternating Current		Direct Current

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	Type BF Applied Part		Authorized Representative in the European Community
	Manufacturer		Non-Ionizing Radiation
	Humidity Limitation		Marking Certifies Device Meets European Council Directive 93/42/EEC
	European Union WEEE Directive 2012/19/EU		Do Not Use If Package Is Damaged
	Electrical Equipment Designed Primarily for Indoor Use		Ship By Date
	Input		Prescription Required
	Keep Dry		MR Unsafe
	Refer to Instruction Manual/Booklet		<i>Bluetooth</i>

# 5

## SHARING IS CARING

- Dexcom Share

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# Chapter 21

*Sharing Is Caring:*

## Dexcom Share

### 21.1 Learning About Dexcom Share

#### Glossary

<b>Airplane Mode</b>	A setting on a smart device where wireless features are disabled in order to comply with airline regulations.
<b>App Store</b>	Internet store for downloading applications to a smart device.
<b>Blood Glucose Meter</b>	A medical device used to measure how much glucose is in the blood.
<b>Default</b>	A manufacturer's preset option for a device setting.
<b>Delay</b>	Amount of set time that passes before a notification is sent to a Follower.
<b>Dexcom Follow App</b>	Gets the Sharer's glucose information and notification data from the Dexcom Share Cloud.
<b>Dexcom Share</b>	Secondary notification using the following parts: <ul style="list-style-type: none"><li>• Dexcom G5</li><li>• <i>Bluetooth</i> wireless technology</li><li>• Sharer's smart device</li><li>• G5 Mobile app</li><li>• Internet</li><li>• Follower's smart device</li><li>• Dexcom Follow app</li></ul>

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<b>Dexcom Share Cloud</b>	A secure online storage server where Dexcom Share feature information is stored and then shared with Followers.
<b>Do Not Disturb</b>	<p>A setting on a smart device where all incoming calls, alerts, and notifications are silenced.</p> <p>Do Not Disturb can be set to specific times and can be set to allow exceptions (people who can disturb you).</p>
<b>Follow Dashboard™</b>	On the Dexcom Follow app, the Follow Dashboard shows the glucose information of up to five (5) Sharers.
<b>Follower</b>	A person that gets the Sharer's shared information in the Dexcom Follow app.
<b>Follower's Smart Device</b>	Runs the Dexcom Follow app.
<b>Invite/Follow Invitation Email</b>	An email request for a person to download the Dexcom Follow app and get the Sharer's shared information.
<b>Mobile Data Connections</b>	Cellular networks, such as 3G, 4G and LTE™, used by a smart device to access the Internet.
<b>No More Data Notification</b>	Notifies the Follower when the Sharer is unable to share glucose information.
<b>Not Sharing</b>	When the Sharer chooses to temporarily not share glucose data with the Follower.
<b>Obstruction</b>	An object that stops the wireless communication between devices, such as wall thickness or radio waves.
<b>Profile</b>	Located in the Follow Dashboard; displays the Sharer's glucose information, trend arrow, and profile picture.
<b>Prompt</b>	A visual message that appears on the screen of the Follower's smart device. Prompt may also include a sound, depending on the smart device's settings.

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<b>Range</b>	Maximum distance two devices can communicate wirelessly without obstruction.
<b>Real-Time CGM</b>	Data the Sharer receives on the G5 Mobile app.  Although your Dexcom Follow app might be similar to what you see on your G5 Mobile app, it cannot be considered real-time because there are layers of communication between the G5 Mobile app and the Dexcom Follow app.
<b>Repeat</b>	Amount of time the Follower chooses before he/she wishes to receive a repeat notification.
<b>Secondary Display</b>	Any device a Follower uses to get Sharer's sensor glucose information. The secondary display can be any smart device that has the downloaded Dexcom Follow app.
<b>Sensor Glucose Reading</b>	A glucose measurement taken by the Dexcom G5.
<b>Sharer</b>	The person who uses the Dexcom G5 and the Dexcom Share app.
<b>Sharing</b>	The act of electronically transmitting glucose information from the Sharer's smart device to the Follower's smart device.
<b>Simultaneous Voice and Data</b>	The ability to make a phone call and access the Internet on the same cellular connection at the same time.
<b>Smart/Mobile Device</b>	An electronic, mobile device that can connect to networks over Wi-Fi or a cellular data connection (3G, 4G, etc.) to operate the G5 Mobile app or the Dexcom Follow app.  Examples of smart/mobile devices are smartphones and tablets. For a list of compatible smart devices, see <a href="http://dexcom.com/compatibility">dexcom.com/compatibility</a>
<b>Standard Home Glucose Monitoring</b>	Self-monitoring of BG using blood taken from the finger and a BG meter.

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<b>Trend Arrow</b>	The arrow next to the Sharer's glucose value, located on the Sharer's profile on the Dexcom Follow app.  This is the same trend arrow that is found on the Dexcom G5 receiver.
<b>Trend Graph</b>	Displays the pattern of the Sharer's glucose information.
<b>Wi-Fi or Wireless Internet</b>	A technology that allows electronic devices to wirelessly access the Internet. These networks can include your home Internet or one found at a public location.

## 21.2 Dexcom Share Overview

Dexcom Share is a feature within the G5 Mobile app. It allows for remote monitoring of Dexcom G5 data from one person, the Sharer, to another person, the Follower.

Dexcom Share includes:

- Dexcom G5 sensor and transmitter
- Sharer's smart device
- G5 Mobile app
- Internet connection
- Follower's smart device
- Dexcom Follow app

You cannot use the Share feature if only using the Dexcom G5 receiver. You need a smart device with the G5 Mobile app to take advantage of this feature.

Once the Sharer activates the Share feature in his/her G5 Mobile app, the smart device transfers sensor glucose readings to the Dexcom Share Cloud using either Wi-Fi or a cellular data plan. Then, the sensor glucose readings are sent from the Dexcom Share Cloud to the Follower's smart device using Wi-Fi or the Follower's cellular data plan.

The Sharer must be within 20 feet of his/her smart device in order to send data to the Follower or it will not work.

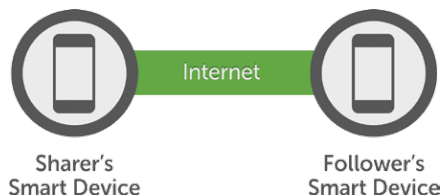










Figure 8. Sharing

## Dexcom Share Parts

	Sharer's smart device* <sup>1</sup>
	Follower's smart device* <sup>1</sup>
	G5 Mobile app
	Dexcom Follow app

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	Dexcom G5 transmitter
	Dexcom G5 Mobile/G4 PLATINUM sensor
	Internet/Wi-Fi or mobile data service/3G/4G/LTE*
	<i>Bluetooth</i>

*\*Must be purchased separately.*

*<sup>1</sup>A list of compatible devices can be found at [dexcom.com/compatibility](https://dexcom.com/compatibility).*

## Conditions Affecting Use

Once sharing is active, make sure the Sharer's and Follower's smart device settings are not altered.

Make sure the Sharer's and Follower's smart devices have:

- Enough battery power to maintain sharing
- An active Internet connection
- Notifications turned on
  - If turned off, Follower will not receive any notifications

Dexcom recommends charging the smart device when sharing.

## 21.3 Risks and Benefits

### Risks

Dexcom Share is a feature of the G5 Mobile app. The main risks involved with using the Dexcom Share feature are based on misunderstanding its purpose.

Remember that the Dexcom Share feature in the G5 Mobile app is a secondary notification feature. With the secondary display, there might be delays in getting your sensor readings.

When Dexcom Share is enabled in the G5 Mobile app, you will be able to share your glucose information and notifications with up to five (5) other people. Shared sensor glucose readings and information can add another level of awareness.

Using the wrong glucose information for treatment decisions could lead to low or high glucose. Dexcom G5 sensor glucose readings and BG values from a BG meter may differ from the information displayed on the Dexcom Follow app. Treatment decisions should never be made using Share or Follow. See Chapter 13 on how to use the Dexcom G5 for treatment decisions.

Followers who are concerned by notifications on the Dexcom Follow app should contact the patients and remind them to check their Dexcom G5 sensor glucose readings or BG with a BG meter before driving a car or making any treatment decisions, such as taking insulin or eating fast-acting carbohydrates.

Sharers should not rely on Followers to notify them about low or high glucose.

Any problems with smart device(s), *Bluetooth*, wireless Internet connection, mobile data connection, Dexcom Share Cloud, or not being in the communication range could cause data to not be shared with the Follower. In addition, if the delay setting is too long, the Follower might not be aware of glucose level changes in a reasonable time. Therefore, the Dexcom Share feature should be used only to give a secondary level of awareness and should not be expected to always communicate and transfer sensor glucose readings and information.

## Benefits

Patients usually respond when their CGM systems alert them.

However, experts advise that an additional CGM alert to another person may be helpful in increasing the detection of low glucose or high glucose values, especially at night. The Dexcom Share feature enables this additional awareness, even when the Sharer and Follower are not in the same place.

The Dexcom Share feature may provide improved quality of life and greater peace of mind to patients, their caregivers, and their support team by allowing the Dexcom G5 Alarm, Alerts, and trend graph to be checked remotely.

## 21.4 Safety Statement

### Intended Use

The purpose of Dexcom Share secondary displays is to notify another person, the Follower, of the patient's Dexcom G5 sensor glucose information.

The secondary display is intended for providing secondary notification of a continuous glucose monitoring system and does not replace real-time continuous glucose monitoring (Dexcom G5) or standard home BG meter. Secondary displays aren't intended to modify or analyze data received from the continuous glucose monitoring system, nor are they intended to instruct, or to transmit information to the continuous glucose monitoring system.

Secondary displays aren't intended to serve as a replacement for a primary display device for a continuous glucose monitoring system. Secondary displays aren't intended to receive information directly from the sensor or transmitter of a continuous glucose monitoring system.

### Important User Information

Please review the indications, contraindications, precautions, cautions, warnings, and other important information in the Dexcom G5 user guide (See Chapter 2). Dexcom Share is a feature of the Dexcom G5.

### CONTRAINDICATIONS



Do not bring the smart device (e.g., mobile phone, tablet computer) into a room containing medical equipment such as Magnetic Resonance Imaging (MRI), Computed Tomography (CT), or diathermy.

These smart devices have not been tested with this equipment. Exposure to these types of equipment could heat and damage the smart devices so that they are unable to send or receive glucose information.

### WARNINGS

Treatment decisions should not be made based on the secondary display device (Dexcom Share). The user should follow instructions on the continuous glucose monitoring system (Dexcom G5).

The secondary display is not intended to replace self-monitoring practices advised by a physician.

Dexcom Share does not work alone. Dexcom Share does not replace the Dexcom G5 and requires Share to be turned “On” to communicate glucose information to the Follower.

You cannot use secondary displays to make treatment decisions, such as how much insulin to take. Secondary displays do not replace the Dexcom G5 or a BG meter. Always use the values from the Dexcom G5 or a BG meter for treatment decisions.

## **PRECAUTIONS**

Do not use secondary displays as the main source of CGM glucose trend information. Use the Dexcom G5 receiver and/or the G5 Mobile app as the main device to track sensor glucose information, notifications, and alarms.

At times, the patient will be unable to share data using the Dexcom Share feature, and the Follower might miss helping the patient in the event of low or high BG values. Do not rely solely on the Follower to alert the patient of low or high glucose events or other important information. At times, the Follower may not receive data, and the patient will not be notified of this fact.

When using Dexcom Share, make sure Share is turned “On.” If not, the patient will be unable to share data, and the Follower might miss helping the patient in the event of low or high BG values.

Do not use Dexcom Share unless both the patient’s and Follower’s smart devices have active Internet connections in order to share data. If either the patient or the Follower does not have a connection, loses their connection, turns off the connection (“Airplane Mode”), or if the smart device is in Do Not Disturb mode, the patient will be unable to share data, and the Follower might miss helping the patient in the event of low or high BG values. To check this, make sure that the Follower’s smart device can receive text messages. Follow notifications and text messages work by a similar process.

Make sure the patient’s and Follower’s smart devices have charged batteries or are connected to electrical outlets. If the smart device shuts down due to low battery, the patient will be unable to share data, and the Follower might miss helping the patient in the event of low or high BG values.

If the patient’s smart device is powered off or restarted, make sure the G5 Mobile app is reopened after the smart device is turned back on in order to resume sharing. If the G5 Mobile app is not reopened, the patient will be unable to share data, and the Follower might miss helping the patient in the event of low or high BG values.

Do not turn off sounds in the Follower's smart device at any time that he or she wants Follow notifications to be heard. The smart device settings override the Dexcom Follow app, and all notifications will be silent even if the Follower has selected a Dexcom Follow app notification sound. If the smart device has a vibrate feature and vibrate is On, the Dexcom Follow app notifications will only vibrate.

Check the delay settings on the patient's smart device to make sure they are not too long. The Follower will not receive notifications until after the time period in the delay has passed, and the Follower might miss helping the patient in the event of low or high BG values if the delay is too long.

The patient should not choose to "Not Share" with the Follower at any time when he or she wants the Follower to get notifications. During the time the patient chooses to "Not Share," the Follower will not receive notifications and might miss helping the patient in the event of low or high BG values.

Check the Dexcom Follow app's trend graph if the Follower's smart device has been off or if there is no data connection (e.g., Internet/Wi-Fi or mobile data service/3G/4G/LTE is lost, connection is turned off in Airplane Mode, or smart device touch is placed in Do Not Disturb mode). When the smart device is turned back on, the Follower will only receive the most recent notification and might miss helping the patient in the event of prior low or high BG values.

Sharers and Followers should check whether their cellular service carriers support voice and data at the same time (simultaneous voice and data). If their carriers do not support simultaneous voice and data, the G5 Mobile app may not be able to share glucose readings and the Dexcom Follow app may not be able to receive notifications or glucose readings during phone calls.

Dexcom Share will resume sharing after the phone call has ended, and the Follower will receive any waiting notifications after the phone call has ended.

## 21.5 Setting Up Dexcom Share

### Dexcom Share Description

#### **What Dexcom Share does:**

- Connects your smart device with your Follower's smart device via either a Wi-Fi or mobile data connection (connect to Wi-Fi through a secured network to maintain data security)
- Invites and sends Followers your setting recommendations
- Displays the status of your smart device, and the Dexcom Share Cloud
- Confirms your sensor glucose readings are being shared with your Follower(s)



#### **What Dexcom Share doesn't do:**

- Let you know when the Follower is not receiving your sensor glucose readings and information

#### **Tips**

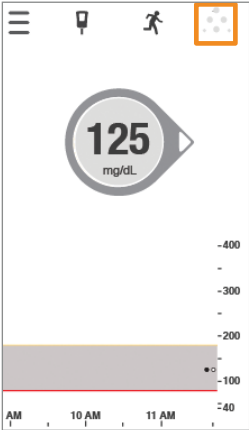

- Read the rest of the Dexcom G5 user guide before using Dexcom Share
- Check the status screen after turning Dexcom Share "On" on the smart device to make sure it is working
- If you stop sharing with a Follower, the Follower will no longer receive data or notifications

## Installing the G5 Mobile App

Step	What you see	What you do
1		<p>Download the G5 Mobile app from your app store.</p> <p>See your smart device's user manual for instructions.</p> <p>Download the G5 Mobile app to use Dexcom Share.</p>
2		<p>Launch the G5 Mobile app.</p> <p>Set up your smart device before sharing (see Chapter 5 for steps to set up your smart device).</p> <p>Once your app has been set up, activate Dexcom Share.</p>


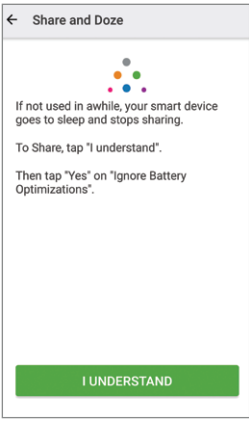
A series of screens walk you through the features of Dexcom Share, highlighting important information.

## Activating Your Share Feature

Step	What you see	What it means	What you do
1		Activates Dexcom Share.	<p><b>Tap</b> <i>Dexcom Share icon</i> in the upper right corner of your smart device's home screen.</p> <p>If Dexcom Share icon is gray, your Share feature has not been turned on.</p>
2		Dexcom Share Welcome Screen.	<p>Read screen.</p> <p><b>Tap</b> <i>Next</i> when done.</p>

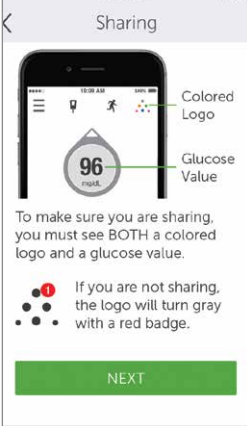
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Step	What you see	What it means	What you do
3		<p>Message about Internet access.</p>	<p><b>Tap <i>Next</i>.</b></p>
4a		<p><b>Android:</b></p> <p>A power-saving feature can interrupt Share when your device is idle.</p>	<p><b>Tap <i>I Understand</i>.</b></p>

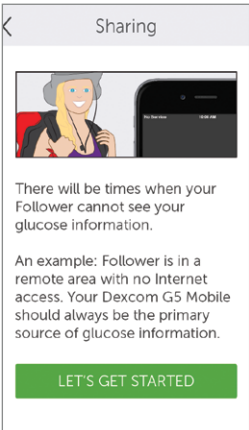
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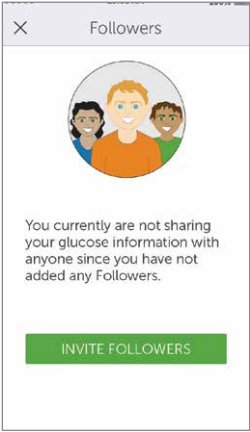

Step	What you see	What it means	What you do
4b	<p><b>Ignore battery optimizations?</b></p> <p>Let app Dexcom CGM stay connected in the background? This may use more battery.</p> <p>NO YES</p>	<p><b>Android:</b></p> <p>Your permission is needed to share at all times.</p>	<p><b>Tap</b> Yes for Share to work best.</p>
5	<p>Sharing</p>  <p>To make sure you are sharing, you must see BOTH a colored logo and a glucose value.</p> <p>If you are not sharing, the logo will turn gray with a red badge.</p> <p>NEXT</p>	<p>How to know you are sharing your data.</p>	<p><b>Tap</b> Next.</p>

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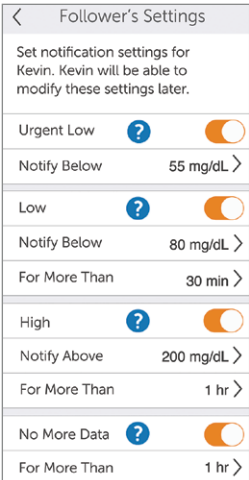








Step	What you see	What it means	What you do
6	 <p>There will be times when your Follower cannot see your glucose information.</p> <p>An example: Follower is in a remote area with no Internet access. Your Dexcom G5 Mobile should always be the primary source of glucose information.</p> <p>LET'S GET STARTED</p>	How to know your Follower is not getting your sensor data.	<b>Tap</b> <i>Let's Get Started</i> to move on and invite your Followers.

## Inviting Followers

Step	What you see	What you do
1		<p><b>Tap <i>Invite Followers</i></b> to set up your Followers.</p>
2		<p><b>Enter</b> the Follower's nickname and email address.  <b>Confirm</b> Follower's email address.          The Follower will get a Follow Invitation email.  <b>Make sure</b> the Follower can access this email account from his/her smart device.  <b>Tap <i>Next</i>.</b></p>

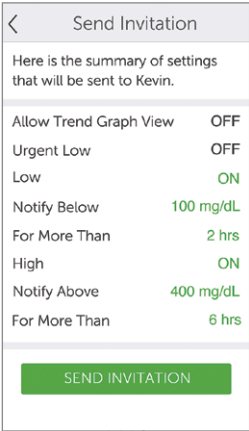
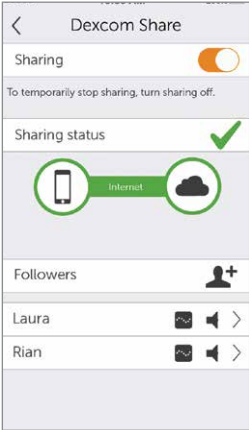
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Step	What you see	What you do
3	 <p>← Trend Graph View</p> <p>Set trend graph access for Kevin.</p> <p>Allow Trend Graph View </p> <p>When switched off, Kevin will only be able to see your current glucose value and not your trend graph.</p> <p>NEXT</p>	<p><b>Slide</b> <i>Allow Trend Graph View</i> on/off switch if you want Follower to see your trend graph.</p> <p><b>Tap</b> <i>Next</i>.</p> <p>Turned off: Follower sees only your sensor glucose reading and trend arrow.</p> <p>Turned on: Follower sees your sensor glucose reading, trend arrow, and trend graph.</p>
4	 <p>← Follower's Settings</p> <p>Set notification settings for Kevin. Kevin will be able to modify these settings later.</p> <p>Urgent Low  </p> <p>Notify Below 55 mg/dL &gt;</p> <p>Low  </p> <p>Notify Below 80 mg/dL &gt;</p> <p>For More Than 30 min &gt;</p> <p>High  </p> <p>Notify Above 200 mg/dL &gt;</p> <p>For More Than 1 hr &gt;</p> <p>No More Data  </p> <p>For More Than 1 hr &gt;</p>	<p><b>Choose</b> if you want your Follower to get your Urgent Low, Low, and High sensor glucose Alarm/Alerts.</p> <p><b>Choose</b> if you want your Follower to get notifications if not receiving your sensor glucose readings.</p> <p><b>Select</b> what Alarm/Alerts your follower gets and how long you are low/high or not sharing data (for example, if you want your Follower to know when your glucose is above 200 mg/dL for more than 2 hours, you can set this up in the Follower's Settings menu).</p> <p><b>Tap</b> <i>Save</i> for each Follower's Setting "Save."</p> <p><b>Tap</b> <i>Next</i> when done.</p>

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Step	What you see	What you do
5		<p>Before Follower invitation is sent, <b>review</b> the summary screen.</p> <p><b>Tap <i>Send Invitation</i>.</b></p> <p>After sending invitation, you cannot adjust the Follower's settings.</p>
6		<p>To add more Followers:</p> <p><b>Tap <i>Followers</i> tab on the Sharing Status screen.</b></p> <p>Invite up to a total of five (5) Followers.</p>

## 21.6 Using Dexcom Share

### Dexcom Share Status

You can look at the Dexcom Share icon on your home screen to see if Dexcom Share is working. After turning on Dexcom Share, check its status.

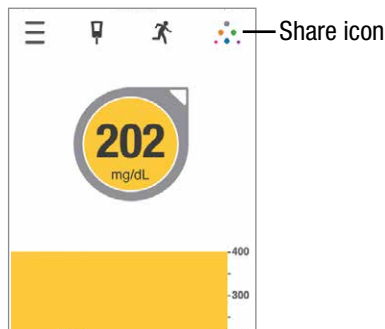





Figure 9. G5 Mobile App Home Screen

### Dexcom Share Status Icons

Status tab	What it is
	The Share icon is in color when Dexcom Share is sending sensor glucose readings and information.
	The Share icon is dark gray with a red circle when Dexcom Share is not working. The Sharer should tap on the dark gray icon when Share is not working to get further information about the error.
	The Share icon is light gray when Dexcom Share has not been activated. The Sharer should tap the light gray icon to get started using Dexcom Share.

When a device or connection is not working, Dexcom Share will not work. The Sharer will not be able to send his/her sensor glucose readings and data to the Follower.

## Troubleshooting Sharing Status Issues

The Dexcom Sharing status bar is a useful tool. It can help identify if there is a problem and Dexcom Share is not working. The following table provides troubleshooting tips for the Sharing status bar.

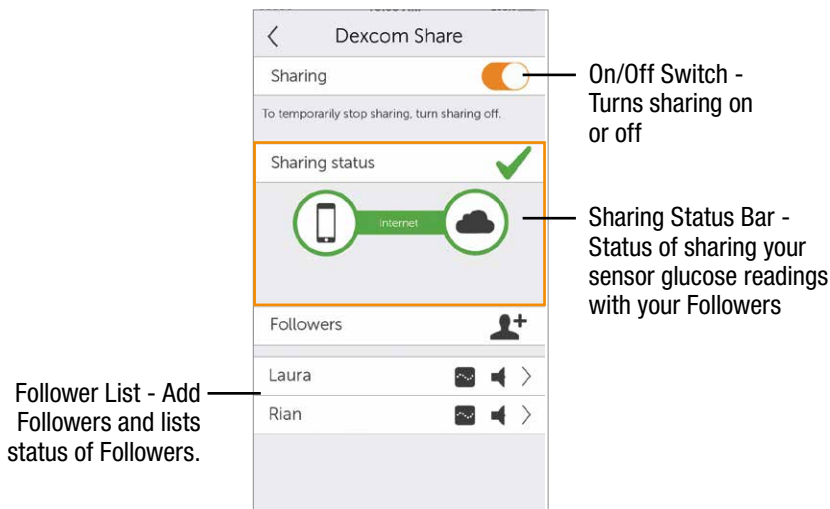
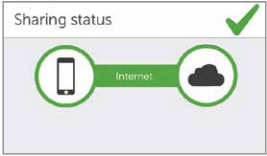
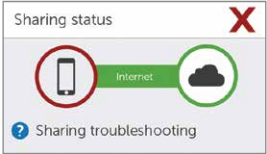


Figure 10. Dexcom Share Screen

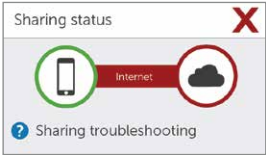
**NOTE:** Whether or not Dexcom Share is working and the Followers are receiving glucose Alarm/Alerts, you must always refer to your Dexcom G5 display device(s) for your sensor glucose readings and Alerts.

## Troubleshooting Sharing Status

What you see	What it means	What you do
	<p>Green check mark: All connections are working</p>	<p>N/A.</p>
	<p>Issue with:</p> <ul style="list-style-type: none"> <li>• Sharer's CGM data</li> <li>• Sharer's smart device</li> </ul>	<p>The Sharer should make sure:</p> <ul style="list-style-type: none"> <li>• A glucose value is on the smart device</li> <li>• Transmitter is in range of the smart device</li> <li>• <b>Tap</b> on blue “?” to learn more about how to troubleshoot this issue</li> <li>• Allow up to 10 minutes for status to turn green and a green check mark to appear</li> </ul> <p>If the Sharer continues to see this, the Sharer should turn off Share and then turn it back on.</p>

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What you see	What it means	What you do
 The screenshot shows a 'Sharing status' window with a red 'X' in the top right corner. Below the title bar, there is a diagram showing a smartphone icon connected to an 'Internet' cloud icon by a red line. The 'Internet' cloud icon is circled in red. At the bottom left, there is a blue question mark icon followed by the text 'Sharing troubleshooting'.	<p>Issue with:</p> <ul style="list-style-type: none"><li>• Sharer's Internet connection</li><li>• Dexcom Share Cloud</li></ul>	<p>The Sharer should make sure:</p> <ul style="list-style-type: none"><li>• Their Wi-Fi or cellular connection is ON</li><li>• They are in an area that has cellular reception</li><li>• They are not on a voice call</li><li>• They can access the web via a browser</li><li>• Check later or follow up with their Internet connectivity provider</li><li>• <b>Tap</b> on blue "?" to learn more about how to troubleshoot this issue</li></ul>




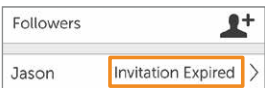

## Follower List

The Follower list allows the Sharer to manage his/her Followers.

In the Follower list you can:

- Invite a new Follower
- See the status of Followers you have invited
- Glance at what options your current Followers have

## Follower Icon/Status

What you see	What it means
	Invite a new Follower.
	Follower is set to get notifications from Sharer.
	Follower is able to view Sharer's trend graph.
	<p>Follower did not accept Sharer's Follow Invitation email within 7 days.</p> <p>Sharer can invite Follower again by pressing on the + icon in the top right corner of the screen.</p>
	Follower has been sent a Follow Invitation email but has not accepted it yet.
	<p>Sharer stopped sharing with Follower.</p> <p>Follower will not get any of Sharer's glucose information, Alarm/Alerts, or trend graph updates.</p>

## Editing/Removing Followers

Tap on a Follower to edit the Follower's profile (nickname or ability to view trend graph) or remove a Follower. Remove a Follower by tapping "Remove Follower." Once removed, the Follower won't get glucose information or Alarm/Alerts.

**NOTE:** The Sharer cannot change any Follower settings after the Follow Invitation email is sent.

## Stop Sharing

The Sharer can swipe the On/Off switch to temporarily stop glucose information and Alarm/Alerts from being sent to Followers. Sharing stops until the Sharer turns the On/Off switch back on.

For reasons of safety and intended use, the Follower will get a message saying the Sharer's data was set to Not Sharing. The Follower's Dashboard will show the Sharer has stopped sharing glucose information.

## 21.7 Dexcom Follow App

### Dexcom Follow App Description

The Dexcom Follow app is a separate app from the G5 Mobile app. Your Followers only need to download and install the Dexcom Follow app.

#### **What the Dexcom Follow app does:**

- Allows the Follower to view the Sharer's glucose information
- Allows the Follower to get Alarm/Alerts
- Allows the Follower to view the Sharer's trend graph

#### **What the Dexcom Follow app does not do:**

- Provide treatment advice
- Interact with the G5 Mobile app

### Receiving Dexcom Follow Invitation Email

After getting the Sharer's Follow invitation by email, the Follower sets up his/her smart device.

### Glucose Alarm and Alerts

A glucose notification is a visual message saying "Glucose notification from [Sharer's name]" that appears on the screen of the Follower's smart device. The notification may include sounds, depending on the smart device's settings.

Notifications your Followers get:

- Low Sensor Glucose Reading

- Urgent Low Sensor Glucose Reading (<55mg/dL)
- High Sensor Glucose Reading

Your Follower can change some of the initial settings to fit his/her needs. The Follower cannot change your permission settings to see your trend graph.

### *Sharer Status Changes That Notify the Follower*

Some Sharer status changes will notify your Followers.

- **Not Sharing** - Sharer decides to temporarily stop sharing
- **Removed by Sharer** - Sharer removes Follower
- **No More Data** - Notification sent when active glucose sharing is stopped for any reason, other than the Sharer turning Share “Off”. The Follower should contact the Sharer for more information about the data interruption

### *The Follower Dashboard*

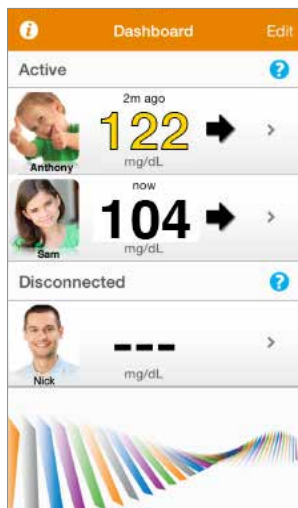


Figure 11. Follower Dashboard

If you don't allow your Followers to see your trend graph, they will only see your glucose reading and trend arrow.



Figure 12. Follower Information

If you choose to have your Followers see your trend graph, they see:

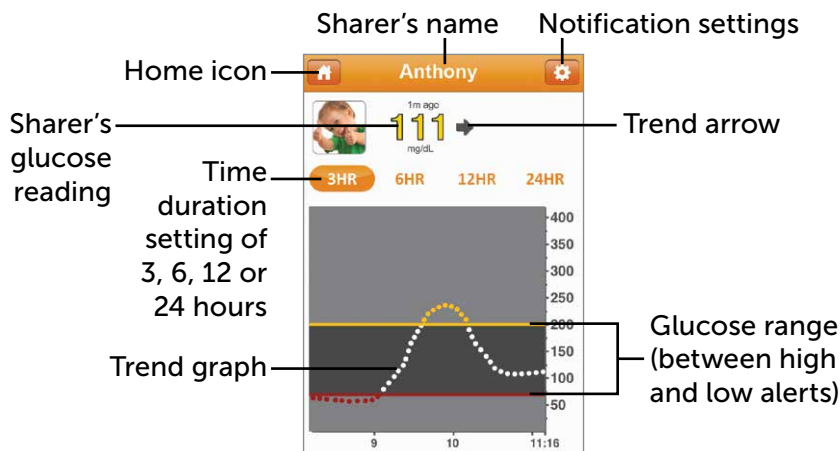


Figure 13. Follower Information With Trend Graph

If your sensor glucose readings are outside of the 40-400 mg/dL range, your Followers will not receive sensor readings, just a “LOW” (less than 40 mg/dL) or “HIGH” (greater than 400 mg/dL).

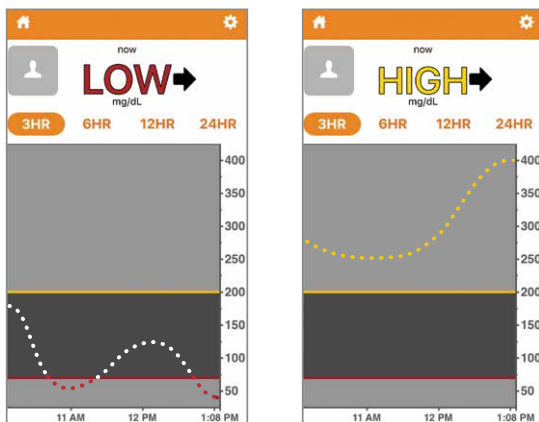


Figure 14. Follower Information

## 21.8 Troubleshooting

### Dexcom Share Troubleshooting

Troubleshooting Sharing Status - See the Troubleshooting Sharing Status Issues portion of Section 21.6.

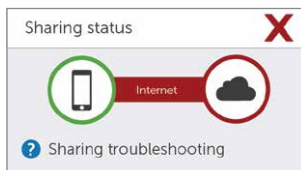


Figure 15. Sharing Status Troubleshooting

## Sharing Checklist

To share, make sure that:

- Smart device works with the G5 Mobile app
  - To see a list of supported smart devices and operating systems, go to: [dexcom.com/compatibility](https://dexcom.com/compatibility)
- G5 Mobile app is open or running in the background
- Smart device has an active Internet connection (Wi-Fi, 3G, 4G, LTE)
  - Check to see if the Internet connection is working by trying to open a web page on your smart device
  - If on a phone call using your smart device, your CGM information may not upload into the Share Cloud while on your call
- Airplane Mode is turned off
- Do Not Disturb is turned off
- Smart device sound is on in order to hear prompts
- Smart device is sufficiently charged or charging
- Smart device is within 20 feet of the transmitter
- Smart device has 35 MB of available memory or storage space
- Refer to your smart device user manual for further instructions

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