



Read this important information before taking:

Lantus (insulin glargine)

Brought to you by the Institute for Safe Medication Practices

[Extra care is needed because Lantus is a **high-alert medicine**.]

High-alert medicines have been proven to be safe and effective. But these medicines can cause serious injury if a mistake happens while taking them. This means that it is very important for you to know about this medicine and take it exactly as directed.

Top 10 List of Safety Tips for Lantus

When taking your medicine



- ❑ 1 **Know your insulin.** Lantus is a **long-acting insulin** that should be injected below the skin once daily as directed by your doctor. On rare occasions, your physician may direct you to take Lantus two times daily. Take Lantus the same time every day.



- ❑ 2 **Prepare your insulin.** A rapid- or short-acting insulin is often prescribed with Lantus. However, Lantus should never be mixed in the same syringe with other insulins before injection. Do not vigorously shake insulin before use.



- ❑ 3 **Don't reuse or recycle.** Dispose of used syringes/needles, pens, and lancets in a sealable hard plastic or metal container (e.g., empty detergent bottle, sharps container from your pharmacy). When the container is full, seal the lid before placing it in the trash. Do not reuse or recycle syringes/needles or lancets.



- ❑ 4 **Don't share.** Even if you change the needle, sharing an insulin pen or syringe may spread diseases carried in the blood, including hepatitis and HIV.

To avoid serious side effects



- ❑ 5 **Avoid mix-ups.** If you use more than one type of insulin, make sure each vial or pen looks different to avoid mix-ups. Lantus is a long-acting insulin that may look like a rapid- or short-acting insulin. For example, Lantus and Apidra (a rapid-acting insulin) are both clear medicines in elongated vials (or insulin pens) that look similar. To make them look different, put a rubber band around one type of insulin.



- ❑ 6 **Check your medicine.** There are many types of insulins that come in similar looking vials, cartons, or pens. When you pick up your insulin at the pharmacy, be sure it's the right type of insulin.



- ❑ 7 **Treat low blood sugar (hypoglycemia).** Always carry a quick source of sugar, such as glucose tablets, candy, or juice, to treat low blood sugar. Signs of low blood sugar are listed on the other side of the page.



- ❑ 8 **Test your blood sugar.** Ask your doctor how often you should test your blood sugar. Keep a log of your blood sugar levels and how much insulin you take each day. Bring the log each time you visit the doctor.



- ❑ 9 **Get a periodic lab test.** You should have a hemoglobin A1c test at least twice a year to determine how well your diabetes is being controlled. The test shows an average of your blood sugar control over a 6- to 12-week period. Your goal is a hemoglobin A1c of 7% or less.

When you should call your doctor



Call

- ❑ 10 **Call for illness or changes in habits.** Your insulin needs may change because of illness, stress, changes in eating habits or physical activity, and other medicines you take. Call your doctor if you experience these conditions. Never change your insulin dose unless advised by your doctor.

If using an OptiClik pen...



Figure 1. Pen held upside down.

Figure 2. Pen held correctly.

The pen could be dialed to the wrong dose if it is held upside down. For instance, if the pen is held upside down when dialing a dose of 25 units (Figure 1), the actual dose that will be given is 52 units (Figure 2, the same pen held correctly). Be sure you are holding the pen correctly when viewing the dose in the pen's window.

Too much insulin causes hypoglycemia



Signs of hypoglycemia (low blood sugar)

- hunger
- feeling shaky
- fast heartbeat
- lightheadedness
- dizziness
- sweating
- headache
- confusion
- irritability

Hypoglycemia is caused by too much insulin or increased work or exercise without eating. Symptoms of hypoglycemia may be different for each person and can change from time to time. Hypoglycemia can affect your ability to think and react quickly, so driving a car could be risky. Severe hypoglycemia can lead to loss of consciousness, seizures, brain damage, or even death. Know the symptoms of hypoglycemia and treat it quickly by drinking juice or a sugar-containing beverage, or eating sugar or candy. Talk to your doctor if hypoglycemia is a problem for you.

Topics	Fast Facts
Generic name	■ insulin glargine (pronounced IN soo lin GLAR jeen) (no generic available)
Common brand names	■ Lantus, Lantus SoloSTAR (prefilled pen) ■ OptiClik pens are used with Lantus cartridges
Type of insulin, onset, duration	■ Long-acting; begins working in 3 to 4 hours and lasts up to 24 hours or more
Uses	■ Treatment of type 1 and type 2 diabetes mellitus to improve control of blood glucose
When to take the insulin	■ Lantus should be injected under the skin once daily at the same time each day ■ In rare circumstances, Lantus may be taken twice daily if prescribed by your doctor
Usual dose	■ The frequency and dose of insulin are unique to each individual ■ Daily doses of insulin are based upon body weight, diet, activity level, age, individual sensitivity to insulin, type of diabetes (1 or 2) ■ Monitor glucose levels more closely during the first few weeks of taking Lantus
Injecting the insulin	■ Do not dilute or mix Lantus with other insulins ■ Ask your doctor, nurse, or pharmacist to show you how to draw your dose of insulin into a syringe and inject it, or how to select the dose on a pen device and inject the insulin ■ Lantus should not be used with an insulin pump or injected into a vein ■ If using an OptiClik pen, be sure you are not holding the pen upside down when viewing the dose in the window (see pictures on bottom of other side of page) ■ Before injecting a dose, take the chill off refrigerated insulin by gently rolling the vial, pen, or cartridge between the palm of both hands (do not shake the insulin vigorously) ■ Inject the insulin below the skin (not in the muscle) in the upper thighs, upper arms, buttocks, or abdomen; the injection site should be changed (rotated) with each dose ■ Don't use Lantus if the insulin appears cloudy instead of clear and colorless
Special instructions and precautions	■ Inject Lantus at the same time each day ■ Follow the diet prescribed by your doctor; keep your eating habits and exercise regular ■ Tell the doctor who prescribes insulin about any new medicines you are taking ■ Do not share insulin pens, cartridges, or syringes/needles with others
Safety during pregnancy/breastfeeding	■ Talk to your doctor about managing your diabetes during pregnancy and breastfeeding
Storage and disposal	■ Store unopened vials, cartridges, and pens in the refrigerator until first use (do not freeze) ■ After first use, store vials in the refrigerator or at room temperature; discard after 28 days ■ After first use, store cartridges and insulin pens at room temperature (do not refrigerate); discard after 28 days ■ Safely dispose of used syringes/needles, pens, and lancets (safety tip #3, other side)
Most common side effects	■ Hypoglycemia (low blood sugar); see signs and treatment of hypoglycemia above ■ Low potassium blood levels, fast heart rate, fatigue, headache, hunger, weight gain
Other conditions to report to your doctor	■ Chest pain or palpitations, persistent fatigue, confusion, numbness of mouth, lips, or tongue, muscle weakness or tremors, vision changes, swelling of feet, flu-like symptoms ■ Swelling, itching, redness, warmth, or pain at the injection site
Herbals that should not be taken with Lantus	■ These herbals can lower your blood glucose: chromium, garlic, gymnema
Prescription medicines that should not be taken with Lantus	■ <u>Many</u> prescription medicines can affect your blood sugar levels and insulin needs ■ Tell your doctor about <u>all</u> the medicines you take, particularly new medicines
Special tests your doctor may prescribe	■ Patients are often asked to test their own blood glucose using home testing equipment, test their urine for sugar and acetone, and take their blood pressure regularly ■ To monitor your diabetes, your doctor may periodically test your blood levels for hemoglobin A1c, potassium, cholesterol, and substances that measure kidney function

This information does not replace the need to follow your doctor's instructions and read the drug information leaflet provided with your prescription.

This project was supported by grant number R18HS017910 from the Agency for Healthcare Research and Quality. The content is solely the responsibility of the authors and does not represent the official views of the Agency for Healthcare Research and Quality.