

# Outreach Resources

## Warning Signs of Type 1 Diabetes

### Type 1 Diabetes

Type 1 diabetes (T1D) can occur at any age, but is most commonly diagnosed between infancy and the late 30s. T1D is an autoimmune disease in which a person's pancreas stops producing insulin, a hormone that enables people to get energy from food. It occurs when the body's immune system attacks and destroys the insulin-producing cells in the pancreas, called beta cells. While its causes are not yet entirely understood, scientists believe that both genetic factors and environmental triggers are involved. People with T1D must inject insulin several times every day or continuously infuse insulin through a pump.

### T1D Symptoms May Occur Suddenly and Include:

- Extreme thirst
- Frequent urination
- Drowsiness or lethargy
- Sugar in urine
- Sudden vision changes
- Increased appetite
- Sudden weight loss
- Fruity, sweet, or wine-like odor on breath
- Heavy or labored breathing
- Stupor or unconsciousness

If you think you or your child has T1D, call a doctor immediately. Drink fluids WITHOUT SUGAR, if you are able to swallow, to prevent dehydration.

If you or your child has not been diagnosed with T1D but you are concerned that blood-glucose levels could be too low or too high, the following information may help determine the existence of a blood-glucose abnormality.

The normal range of blood glucose in humans is estimated to be between 70 and 100mg/dl before eating.

After eating, the blood sugar usually rises between 30 and 60mg/dl but should drop back to normal range within two hours. No matter when blood sugar is tested, a glucose level close to or above 200mg/dl should be viewed as abnormal.

If you suspect that your or your child's blood sugar is abnormal, make an appointment to see a doctor as soon as possible. The doctor may prescribe an Oral Glucose Tolerance Test (OGTT) that requires special dieting 24 hours in advance and includes blood-sugar testing every half hour over 2 to 4 hours. This test will clearly map your typical blood-sugar range and help to diagnose any abnormality.

### Low–Blood-Sugar Emergency

Those already diagnosed with T1D are at risk for high– and low–blood-sugar emergencies that may come on suddenly. The ideal blood-sugar range for someone with T1D is usually between 90 and 130 mg/dl before meals. However, a range of factors, including illness, stress, too much exercise, or too little food, can push blood-sugar levels dangerously low.

### Warning Signs of Low–Blood-Sugar Emergency

- Headache
- Sweating
- Pale, moist skin
- Cold and clammy
- Extreme/sudden hunger
- Weakness/dizziness
- Fatigue/drowsiness
- Rapid pulse rate
- Blurred/double vision
- Shallow breathing
- Confusion/inattention
- Loss of coordination

### Treatment

- If alert, take 2–4 glucose tablets, or eat or drink a fast-acting carbohydrate like sugar (at least two packets), honey, or 4 ounces of fruit juice or regular soda. Retest blood sugar after 15 minutes and repeat this treatment if needed.
- Do not take insulin.
- If person is unconscious or having a seizure, call 911 immediately and DO NOT give anything by mouth.