

Division of Developmental Disabilities Health Care Services

Diabetic Ketoacidosis (DKA)

Health Information Fact Sheet



Diabetic Ketoacidosis (DKA) is a serious complication of diabetes. It can be life-threatening. DKA develops when your body doesn't have enough insulin to allow blood sugar into your cells to use as energy. Instead, your liver breaks down fat for fuel, a process that produces acids called ketones. When too many ketones are produced too fast, they can build up to dangerous levels in your body. DKA is most common among people with type 1 diabetes. People with type 2 diabetes can also develop DKA.

Fact Sheet guidelines have been provided as general information, not as a substitution for medical treatment from a physician.

Causes:

Very high blood sugar and low insulin levels lead to DKA.

- *Illness*—Due to not being able to eat or drink as much as usual, which can make blood sugar hard to manage
- Missed *insulin* shots, a clogged insulin pump, or the wrong insulin dose
- Heart attack or stroke
- Physical injury
- Alcohol or drug use
- Certain medicines, such as some diuretics (water pills) and corticosteroids (used to treat inflammation in the body)

Signs and Symptoms:

Early Symptoms:

- Being very thirsty
- Urinating (peeing) a lot more than usual
- You have high ketones in your urine shown on a urine ketone test strip or as diagnosed by your doctor

Severe Symptoms:

- Fast, deep breathing
- Dry skin and mouth
- Flushed face
- Fruity-smelling breath
- Headache
- Muscle stiffness or aches
- Being very tired
- Nausea and vomiting
- Stomach pain

Emergency:

Go to the emergency room or call 9-1-1 right away if you have any of these signs:

Elevated ketones are a sign of DKA. This is a medical emergency that needs to be treated right away.

- Your blood sugar stays at 300 mg/dL or above
- Your breath smells fruity
- You are vomiting and can't keep food or drinks down
- You're having trouble breathing
- You have multiple signs and symptoms of DKA

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Prevention:

DKA is a serious condition, but you can take steps to help prevent it:

- Check your blood sugar often
- Keep your blood sugar levels in your target range as much as possible
- Take medicines as prescribed, even if you feel fine
- Talk to your doctor about how to adjust your insulin based on what you eat, how active you are, or if you are sick

Treatment:

You will be treated in the emergency room or admitted to the hospital if you have DKA. Your treatment will likely include:

- Replacing *fluids* you lost through frequent urination (pee) and diluting excess sugar in your blood
- Replacing *electrolytes* (minerals in your body)
- Receiving *insulin*
- Taking *medicines* for any underlying illness that caused DKA, such as antibiotics for an infection