



# The effect of diabetes on vision

## Tips to protect your eyes

Diabetes affects the body's ability to use blood sugar or glucose. The most common form of diabetes is type 2, where the body does not properly use insulin, a hormone that helps turn blood sugar into energy. This is called insulin resistance. At first, the pancreas produces extra insulin to make up for it, but over time, it isn't able to produce enough to keep blood sugar at normal levels.



There are about 34 million people who have diabetes in the U.S. today. This includes about 7 million people who do not know they have it.<sup>1</sup>

**Having diabetes can increase your risk for eye conditions,** such as retinopathy, cataracts, and glaucoma, which can affect your vision.

### Retinopathy

The retina is the layer at the back of the eye with cells that are sensitive to light. Retinopathy occurs when the blood vessels in the retina swell and leak fluid. New blood vessels can also grow on the retina, leaking fluid and stopping light from reaching it. This causes blurry vision and, in more serious cases, blindness.

### Cataracts

A cataract is a clouding of the eye lens, which lies behind the iris and pupil. The lens inside the eye works much like a camera lens, focusing light onto the retina for clear vision. It also adjusts the eye's focus, helping to see things clearly up close and far away. The lens is mostly made of water and protein. The protein helps keep the lens clear and allows light to pass through it. As people age, the protein may clump together and start to cloud part of the lens. This is a cataract.

### Glaucoma

This is pressure in the eye, which causes harm to the optic nerve. Without treatment, people with glaucoma will slowly lose their peripheral (side) vision, making them unable to see objects to the side and out of the corner of their eye. It feels like looking at things through a tunnel. Over time, straight-ahead (central) vision may become worse until it is lost completely.

## Diabetes and light sensitivity

People with diabetes are more sensitive to the sun than those who don't have it. Drugs taken by people who have diabetes, such as those for high blood pressure, increase light sensitivity. Protecting your eyes from the sun's UV rays is not only for people with diabetes. All people should take safety precautions to protect their vision by:

- **Wearing sunglasses** that block 100% of UV rays, even on cloudy days.
- **Choosing Transitions® lenses for prescription glasses.** They are as clear as regular lenses indoors, but turn dark like sunglasses outdoors — reducing glare and making the eyes more comfortable. They also block 100% of UVA and UVB rays. If you wear contact lenses, select ones that filter out UV.
- **Choosing bigger, wraparound sunglasses to help protect the area around the eyes,** and wearing a wide-brimmed hat to block UV rays from the top and sides of your face.

## The need for yearly eye exams

If you have been diagnosed with diabetes, taking the right medicine, watching your blood sugar levels, eating healthy, and exercising can help you control it. It's also important to schedule yearly eye exams that include dilation.

With dilation, an eye care professional places drops in each eye to widen the pupil, which is the opening at the center of the colored part of the eye called the iris. Dilation is a key part of a comprehensive eye exam because it allows your eye care professional to see the inside of the eye.

Regular eye exams can help protect your eyesight and eye health because they can catch issues earlier when they are easier to treat.<sup>2</sup>

**If you have diabetes, your Blue View Vision<sup>SM</sup> network eye care provider is here to help protect your vision. Contact them if you have questions or to schedule an eye exam.**



<sup>1</sup> All About Vision. *What vision issues are unique to women?* (January 2020): [allaboutvision.com](http://allaboutvision.com).

<sup>2</sup> Centers for Disease Control and Prevention. *Common Eye Disorders and Diseases* (June 2020): [cdc.gov](http://cdc.gov).

