

# The risks of eyelash extensions aren't pretty, from cornea erosion to cancer-causing glue

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Ultra long, thick eyelashes might be in vogue, but are they worth the expense—and the risk to health?

Our natural eyelashes perform important functions. The eye is exposed to the elements, so it's a window for bacteria and viruses to enter the body—potentially causing death. Eyelashes protect our eyes by diverting air away from the surface of the eyeball, keeping airborne particles out of the eye by making us blink, as well as making sure the eyeball [stays lubricated](#).

Eyelash extensions are individual fibers that are attached to each natural lash, one at a time. Eyelash extensions can be made of different types of material, including [natural fibers](#) such as silk and hair from mink or horses or synthetic fibers such as nylon or plastic. The extensions are attached using [glue](#), which can cause problems.

Most technicians will do a pre-appointment patch test, usually on the wrist or behind the ear, to check for allergies to the glue; however, even if there's no allergic reaction, the chemicals in the glue can still be irritating on the sensitive eye area and the weight of the glue can cause irritation of the eyelashes.

Proper application is paramount. There have been reports of people [gluing](#) their eyelids together with eyelash adhesive. Concerningly, given that the adhesive is applied so close to the eye, eyelash glue should never come into contact with the eye's surface.

According to [one study](#), over 60% of women reported keratoconjunctivitis— an [eye condition](#) that involves inflammation of both your cornea and conjunctiva at the same time—after getting eyelash adhesive in their eyes. The same study reported 40% of women had an allergic reaction to the glue.

There are instances where [nail glue](#), which is much stronger and more potent, has been sold as eyelash glue or used in its place. In one of the most shocking instances of misapplication, one woman's eyelids were

stuck together [after superglue](#) was used to apply her eyelash extensions.

Eyelash adhesives can pose a different health hazard. [One study](#) tested 37 consumer and professional eyelash glues for formaldehyde, which is a [recognized cancer-causing chemical](#).

The research found that 75% of the 20 professional glues tested released formaldehyde and four of the 17 consumer glues also contained the chemical. Some of the glues containing formaldehyde did not declare it in their ingredients.

Preservatives in the [glue can cause toxic conjunctivitis](#) and [conjunctival erosion](#)—when the layer of cells on the surface of the cornea, called epithelium, loosens from the layer underneath. This condition is painful and can affect sight.

The most commonly reported complication of eyelash extensions, however, is [blepharitis](#)—inflammation or irritation of the eyelids. The edges of the eyelids contain the follicles from where eyelashes grow, and within the follicles are two types of glands that produce antimicrobial products to prevent buildup of bacteria around the eyes.

Changes to the natural lashes prevent this from happening and lead to blepharitis--causing buildup of [bacteria](#). Alterations to the natural lash can cause styes, as the glue or bacterial build up can block follicle secretions.

Poor salon hygiene can lead to a lash mite infestation. Most people have a number of [Demodex](#) mites living on them, but they can move from host to host and poor lash tool hygiene may cause an infestation, especially if natural lash function is impaired.

Even the most professional removal of eyelash extensions can take its

toll on [natural lashes](#).

Some people have shunned extensions in favor of eyelash serums. Eyelash growth serums containing prostaglandin, for example, have become popular because they can significantly increase the length, thickness and darkness of natural lashes.

These serums have developed from treatment for [glaucoma](#), where fluid buildup in the eye affects vision. It was discovered that glaucoma patients using prostaglandin eye drops developed thicker, longer, darker lashes.

Recently, the use of [prostaglandin analogs](#)—similar molecules—has become common. However, both types of products can pose health risks. They can [change iris color](#), potentially permanently, and they can result in loss of fat tissue [around the eye](#)—known as [prostaglandin-associated periorbitopathy](#), which can give eyes a hollow look and worsen the appearance of dark circles.

If you want to invest in eyelash enhancements, be sure to go to an experienced technician at a professional salon with scrupulous hygiene—and, if you value your natural lashes, don't make it a regular habit.

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