

## Wrinkles

Wrinkles and sagging are age-related skin changes. Lifestyle has a major effect on the skin's tendency to wrinkle. Sun exposure and smoking are the most common causes of premature skin wrinkling. If you limit sun exposure and avoid smoking, you can reduce the amount of wrinkles you develop.

### Wrinkles and age

Elastin and collagen fibres give the skin suppleness and strength. The numbers of these fibres in the skin are reduced as we age, causing wrinkles. Our skin has a layer of fat just below the surface (subcutaneous layer), which gives form and structure. This layer of fat thins out as we age, causing the skin to sag.

### Wrinkles and sun exposure

Sun exposure is the most common cause of skin damage and wrinkling. Exposure to the ultraviolet (UV) radiation in sunlight causes changes to the skin. In addition to fine lines and wrinkles, UV damage causes brown spots and pigment irregularity, as well as broken capillaries and red blotches. All of these changes make the skin look older.

UV rays prompt the formation of free radicals within the skin, which damage elastin fibres in the skin, and contribute to wrinkling and skin cancer. People with fair skin have less protection against UV-induced skin changes and tend to develop more wrinkles than people with dark skin.

The best way to prevent wrinkling caused by sun exposure is to:

- Wear protective clothing.
- Avoid the sun around the middle of the day.
- Use sunscreen for the parts of skin that can't be protected by clothing.

### Smoking and wrinkles

As well as all the other health risks associated with smoking, smokers will have more wrinkles. These changes may not show up till you are in your 30s or 40s. Fine lines around the mouth are most common. Research has shown that people who have never smoked have less wrinkles than smokers.

### Frowning and squinting and wrinkles

Squinting is the most common cause of crow's feet around the eyes. Frowning, especially when done frequently, may cause deep wrinkles, especially on the forehead.

### Treatment for wrinkles

Daily use of a high SPF sunscreen (SPF 15 plus or SPF 30 plus) is the most effective thing you can do to prevent wrinkles. There are a number of cosmetic creams that help conceal wrinkles and disguise age-related changes. The effects of these creams are temporary and only last for a day or so.

Other treatments include:

- Injection of botulinum toxin paralyses the muscles under the skin responsible for deep wrinkles, as well as fine lines around the eyes and mouth. The effects of a single injection may last six to nine months. Experience is required by the doctor performing the procedure to make sure there is no loss of power to the muscles responsible for facial expression.
- Injection of filler into the base of the wrinkle can elevate the skin and flatten the wrinkle. The effects generally last six to nine months, depending on the site, the product and the volume of the product injected.
- Fractionated laser is a walk-in walk-out procedure that causes multiple tiny invisible wounds in the skin. The wound healing promotes collagen regeneration and gradually fades wrinkles. Four to six treatments spaced four to six weeks apart are generally required.
- Laser resurfacing and threading are specialised cosmetic procedures that are also used for fine lines and wrinkles.
- Face lifting and threading are procedures performed by plastic surgeons for facial rejuvenation.

## Where to get help

- Your doctor
- Dermatologist

## Things to remember

- UV radiation from sunlight is the major factor in wrinkling skin in Australians.
- Cigarette smoking is a factor in premature facial wrinkling. Squinting and habitual frowning also contribute to wrinkling.

**This page has been produced in consultation with, and approved by:**

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