



[Authoritative facts](#) about the skin from the [New Zealand Dermatological Society Incorporated](#).

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Moles

Moles are common usually harmless skin lesions. They are correctly called melanocytic [naevi](#) (American spelling 'nevi') as they are due to a proliferation of the pigment cells, melanocytes. Moles may be flat or protruding. They vary in colour from pink flesh tones to dark brown or black. The number of moles a person has depends on genetic factors and on sun exposure; most New Zealanders have 20–50 of them.

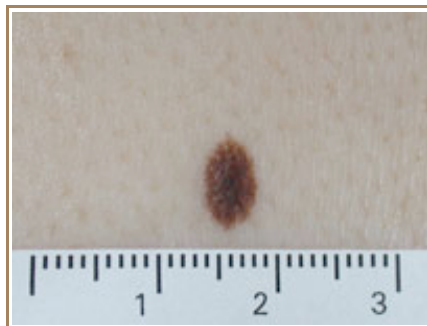
Melanocytic naevi may be present at birth ([congenital](#)) but more usually begin to grow during childhood although new ones can appear at any age, sometimes in crops. Early naevus cells form nests on the junction between the epidermis (outer layer of the skin) and the dermis (inner layer) so are known as junctional naevi. These are flat colourful moles. With maturity, nests of naevus cells can also form in the dermis (compound naevi) or may only be found in the dermis (intradermal naevi). These naevi are thickened and often protrude from the skin surface. Non-pigmented dermal naevi may also be called cellular naevi. Heavily pigmented dermal naevi appear blue ([blue naevi](#)).

Moles may darken following sun exposure or during pregnancy. During adulthood they often lose their pigmentation, and they may even disappear in old age.

Moles



Multiple naevi



Junctional naevus



Cellular naevus

Congenital pigmented naevus

A mole present at birth is called a [congenital pigmented naevus](#). One in a hundred babies have a congenital pigmented naevus varying in size from a few millimetres in diameter to covering half the baby's skin. There may be an increased risk of melanoma developing within congenital nevi, especially very large ones, so if any change has been noted it should be checked by a doctor.

Halo naevus

Sometimes the skin around a mole loses its colour so the mole appears to be surrounded by a white ring. This [halo naevus](#) occurs most often in children and teenagers. It is harmless, and with time the central mole and the white ring disappear. Loss of colour may also be seen in melanoma, so if in doubt, it should be checked by a dermatologist.

Freckles

[Freckles](#) are small pale brown flat marks, more common in fair skinned individuals, especially those with red hair and blue eyes. They occur in sun exposed areas of skin, and are darker and more numerous during the summer months.

Atypical naevi

[Atypical naevi](#), also called Clark's nevi, are moles that have unusual features such as an indistinct edge and/or larger size, often resembling a cancerous mole (melanoma), but are actually benign. Because of their worrying appearance, they are often removed, although this is not always necessary. People with atypical naevi may have an increased risk of developing melanoma, especially if there has been a close family member who has had a melanoma.

Change in a mole

[Malignant melanoma](#) is a cancerous growth occurring in melanocytes (pigment cells). A melanoma may look quite like a harmless mole.

If a mole changes size, shape or colour, or a new one develops in adult life it should be evaluated by a doctor or preferably by a dermatologist. The dermatologist may examine the mole by [dermoscopy](#). It is not always possible to tell whether the lesion is a melanoma, so sometimes it is necessary to cut the mole out for pathological examination.

Removal of moles

Although most moles are harmless and can be safely left alone, moles may be treated under the following conditions:

- Possible malignancy: a mole that has bled, has an unusual shape, is growing rapidly or changing colour.
- Nuisance moles: a mole that is irritated by clothing, comb or razor.
- Cosmetic reasons: the mole is unsightly.

Shave biopsy

Treating a protruding mole is simple using a procedure called a [shave biopsy](#). After numbing the skin with local anaesthetic the doctor removes the projecting part of the mole with a scalpel or by electrosurgery (e.g. Surgitron method). The wound heals to leave a flat white mark, but sometimes the colour remains the same as the original mole.

Excision biopsy

[Excision biopsy](#) is necessary if the mole is a flat one or melanoma is suspected. The full thickness of the skin is removed and the wound is sutured (stitched). The specimen should always be sent to the laboratory for pathological examination (histology). The resulting scar may be just a thin line, but is sometimes more noticeable than the mole was.

The coarse hair that sometimes grows in a mole can be removed by shaving. Plucking may cause inflammation resulting in a painful lump under the mole. The hair can only be removed permanently by [electrolysis](#) or excision of the whole mole.

Skin examinations

- Perform a [self skin examination](#) monthly: report significant changes in moles or new lesions to your doctor or dermatologist.
- Arrange to have a skin examination regularly if you have numerous moles, atypical moles, previous skin cancer or your doctor recommends this.
- Photographic records can be useful if there are numerous moles &/or atypical naevi. Sophisticated digital mole mapping systems including dermoscopic images are of particular value in the diagnosis of melanoma as subtle changes can be detected on repeat scanning.

Prevention of skin cancer

[Sun protection](#) is important.

- Cover up. Wear a hat, long sleeves and long skirt or trousers. Choose fabrics designed for the sun (UPF 40+) when outdoors in summer between 10am & 5pm.
- Apply sunscreen. Choose broad spectrum high protection (SPF 30+) [sunscreens](#), applied frequently to exposed areas.

Related information

On DermNet NZ:

- [Melanoma](#)
- [Atypical naevi](#)
- [Basal cell carcinoma](#)
- [Squamous cell carcinoma](#)
- [Self skin examination](#)
- [Halo moles](#)
- [Dermoscopy](#)

Other websites:

- [Nevus Outreach, Inc.](#): A non-profit organization dedicated to improving awareness and finding a cure for Congenital Nevi and Neurocutaneous Melanosis.
- [MoleMap New Zealand](#)
- [Melanocytic nevi](#) - emedicine dermatology, the online textbook

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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