Sun safety in children

Information and advice for care givers and patients

Dermatology

There is a strong association between ultraviolet (UV) radiation exposure in childhood and development of skin cancer. Sunburn in childhood is a crucial factor in the development of malignant melanoma.

Good sun safety education and practice starting in childhood promotes good practice in adolescence and later life.

People get half of their cumulative lifetime exposure to UV by the time they are 19 years old.

Top tips for protecting your child in the sun

No sunscreen can provide 100% protection, it needs to be used in conjunction with other sun- protection measures.

1. Avoid being outside between 11am-3pm (UK, March - October)
   a) Spend time in the shade (remember UV rays can come through leaves/trees)
   b) Avoid direct strong sunlight
   c) Babies less than 6 months old should be kept out of direct sunlight
2. Wear sun–protective clothing
   a) Wide brim hat
   b) Tight weave, loose fitting clothes eg cotton
   c) UV-absorbing sunglasses with wrap around lenses (European or British Standard marking)
   d) Protect prams and buggies using shading accessories
3. Sunscreen Minimum SPF (sun protection factor - for more information see orange box below) 50 and high UVA protection (5 star) even when it is cloudy
   a) Generously apply sunscreen on all parts of the skin not protected by clothing such as face, lips, nape of neck, arms and hands.
   b) Approximately 1 teaspoon for the face and neck
   c) Approximately 5 teaspoons for the whole body
   d) Apply 15-30 minutes before going out
   e) Reapply every 2 hours and immediately after swimming or sweating
   f) Avoid fragranced sunscreens to reduce the risk of irritant/allergic reaction

Frequently Asked Questions

What's the difference between UVA and UVB rays?

UV rays are produced by the sun. We can't see UV rays but they can damage the skin.

There are 2 types of UV radiation that predominantly contributes to skin cancer:

- **UVA** - has a longer wavelength and is associated with skin ageing.
- **UVB** - has a shorter wavelength and is associated with skin burning.

Protection from both types is needed as both damage the deoxyribonucleic acid (DNA) in skin cells which can lead to skin cancer (as well as premature ageing). A major risk factor of skin cancer is prolonged exposure to UV. Tanning sun-beds also emit UV rays.

What's the difference between chemical and mineral (physical) sunscreens?

Chemical sunscreens work by absorbing the UV rays, they are not visible on the skin after they are rubbed in. Mineral (also known as physical) sunscreens work by reflecting and absorbing the UV rays they usually contain zinc oxide or titanium oxide. They are visible on the skin after application. Younger children can enjoy using mineral sunscreens as they can come in different colours.

What is the difference between adult and children's sunscreens and is it safe to use adult sunscreen on children?

The main difference in most sunscreen made for children is a mineral (physical) sunscreen whereas for adults sunscreens are usually chemical or chemical/mineral combination. Mineral (physical) sunscreens contain zinc oxide, titanium dioxide or a combination of both are recommended over chemical sunscreens for children. This is because chemical sunscreens may be absorbed through the skin into the blood stream and can also be irritant to the skin. Overall mineral sunscreens are the suggested for children over chemical sunscreens but can be used if a mineral sunscreen is not available.

Can I use sunscreen on my baby?

For babies under 6 months sunscreen application is best avoided. The advice is to keep infants under 6 months out of direct sunlight and wearing protective clothing. Sunscreen can be applied on small areas like the face and hands if protective clothing/shade is not available. After 6 months sunscreen can be applied to all areas. If the sunscreen is irritating your child try a different brand or a physical (mineral) sunscreen.

Do I have to apply sunscreen on a cloudy day?

Yes - About 80% of UVA rays can get through cloud.

If the sunscreen applied is water-resistant do I still need to reapply?

Yes - swimming, sweating, rubbing from clothing/towels will remove sunscreen from the body. Ideally, sunscreen needs to be applied every 2 hours and immediately after swimming/sweating. Similarly once-a-day sunscreens need regular application throughout the day as areas are regularly missed on first application and the sunscreen can be rubbed/washed off in everyday activities.

Can you get UV radiation through windows?

Yes, UVA can get through glass. Practice sun protection with clothing and sunscreens on car journeys or during time spent by
a window.

Will my child get enough vitamin D?

Vitamin D deficiency as a result of sun protection has not been proven in studies. Even when wearing high factor sunscreens some UVB rays still reach the skin. Vitamin D can also be absorbed in the gut and can be replaced in diet and supplements.

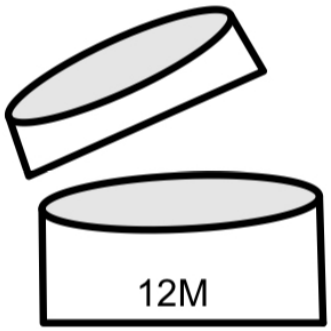
However if your child has a skin condition requiring strict sun protection it is important to regularly check their Vitamin D levels with your GP/ dermatologist to ensure adequate levels are maintained.

Is getting a tan safe?

In most cases skin colour changes from tanning is not advised from the sun or sunbed use.

Does sunscreen have an expiry date?

Yes - There will be a jar icon on the sunscreen packaging to see how many months the product is effective after it has been opened. Write on the bottle the day you open it. Store the sunscreen in a cool place away from direct sunlight.



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Is a spray on sunscreen okay to use on my child?

Ideally no. Cream–based sunscreens are recommended over spray on products. This is for several reasons:

- spray-on sunscreens often dry fast and it is hard to tell where sunscreen has been applied
- when applying outdoors the wind can disperse the sunscreen so it is not applied to the skin properly
- aerosol sunscreens are flammable and also carry the risk of potential inhalation

Tips on applying sunscreen for children

- Check sunscreen is applied to the easy-to-miss areas – ears, tops of feet and hands.
- Try different sunscreens to see which one works best for your child.
- Apply sunscreen indoors before leaving for the day. In the excitement outside, it can get forgotten. Application 15 to 20 minutes before sun exposure is best and then reapply throughout the day.
- Make it a game for your child to wear sunscreen:
  - For example: write words, draw shapes or pictures on to your child's skin in sunscreen and get them to join the dots or rub the picture out.
  - Try distraction techniques like watching their favourite TV programme or song when applying sunscreen.
  - Try a coloured sunscreen – this is fun for your child but also makes it easier to spot missed areas.

Take these things into account when thinking about what to dress your child in to protect them from the sun:

- **Colour** - dark or bright colours absorb UV and offer more protection than lighter shades.
- **Fabric** - Cloth that is more densely woven (eg cotton, denim, wool) are more protective than loose weave cloth. Unbleached cottons act as UV absorber. Shiny lightweight satin/silks or polyesters can be protective as they reflect the UV.
- **Fit** - loose fitting clothes provide more protection as tight stretched cloth allows more UV through as the cloth fibres are pulled apart.
- **Coverage** - the more skin that is covered the better the protection. Long sleeves and long trousers/skirts are recommended. For swimming consider a sun-protective suit with sleeves and shorts/leggings rather than traditional swimming costume/ trunks bikini.
- **Activity** - if fabric is getting stretched or wet it will lose some of its sun-protection properties eg sports activities which cause fabric to become wet.
- **Ultraviolet Protection Factor (UPF)** - Like sunscreen which uses SPF (sun protection factor) ratings, clothing can have a UPF which tells you how much UV is blocked by the garment eg a shirt with UPF 80 will block 80% of the UV from the sun.
  - All clothing offers some UPF but specialist UPF sun protective clothes can offer more. It is worth remembering that UPF reduces significantly when the clothing is wet and to follow the manufacturer instructions when laundering. The skin cancer foundation defines a UPF of 30 to 49 as very good protection, while UPF 50+ is excellent. UPF clothing is available from several high street shops and also online.

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