

## UVR Protection for Babies and Toddlers

*Cancer Council ACT recommends that babies under 12 months not be purposely exposed to direct sunlight when UV levels reach 3 and above. A baby's skin is thin, extremely sensitive and can damage easily.*

*When babies and toddlers are participating in outdoor activities and events when UV levels reach 3 and above, always use a combination of sun protection measures to keep them well protected from the sun's UVR. Aim to minimise outdoor activities and events between 11am and 3pm during the daylight saving/summer period of the year when UV levels are at their strongest. Sun protection behaviour can be relaxed when UV levels are 'low' (under 3), however if your baby is spending extended time outdoors then sun protection is still recommended.*

### Sun protection

A baby's skin is thinner than an adult's skin<sup>1</sup>. It is extremely sensitive and will burn easily, so sun protection is needed as soon as the baby is exposed to ultraviolet (UV) radiation.

#### 1. Shade

When UV levels reach 3, babies need to be kept in the shade<sup>1</sup>. Even while in the shade, UV radiation can **reflect** from surfaces such as water, sand and concrete, so it is important for your baby to wear a hat, appropriate clothing and sunscreen as well. As the sun moves, so does the shade, so keep a watch to make sure your child is still well protected from direct UV radiation.

When travelling, use a shade visor or hang a blanket over the side windows in the car. Side and back windows don't offer as much protection as the front windscreen, which usually has a UV protection factor (UPF) of about 15<sup>2</sup> or less, blocking up to 93% of UV radiation. To provide adequate sun protection, products should have a UPF of 15 or higher<sup>2</sup>.

When buying a pram, pusher or stroller, check sure that the hood can be adjusted, so that it can be moved to block out the direct sun. Pram shade covers must provide maximum protection from UV radiation while being practical by allowing the baby to see out, and parent to see in.

For best protection, pram shade covers should:

- completely cover the pram – this gives full body protection
- be able to be fastened all around the pram and have no gaps where sunlight can enter
- be made of closely woven fabric which combines a mesh section – so the baby can see out and air can circulate – and a shade fabric section. The fabric section should block close to 100% of UV radiation (UPF 50+) and the mesh section should block at least 70% of UV radiation (UPF 3.3).

#### 2. Clothing

Covering as much of the baby's skin as possible with cool, loose fitting clothes and wraps is an excellent form of sun protection. The higher the UPF number, the greater the protection provided by the fabric. If possible, buy

clothing that has a UPF close to 50. If buying clothing that doesn't have a UPF label, look for fabrics which:

- are closely woven: close weave prevents more UV radiation from getting through
- are made of natural fibres: these are usually the coolest type of fabric
- are polyester or nylon: these have some natural UV radiation absorbing properties
- are cotton or cotton/polyester: these provide protection equal to about UPF 20 (which is about 95% protection from UV radiation).

#### 3. Hats

Hats should protect the face, neck and ears. If the hat is secured with a long strap and toggle, it may be best to place the strap at the back of the child's head so it doesn't become a choking hazard. Many babies and toddlers do not like to wear hats and so persistence is needed to teach them that a hat is part of their outside routine.

When trying a new hat design, keep in mind its size and comfort and make sure it still allows the child to see and hear clearly.

Suitable sun protection hats include:

- a soft legionnaire style hat, with a flap at the back that meets at the front peak. For young babies, choose a design that will crumple easily when the baby puts their head down
- a bucket hat with a deep crown that sits easily on the child's head and still allows them to see and hear clearly
- a broad-brimmed hat.

Baseball caps do NOT offer enough protection to the face, ears and neck and are therefore not recommended.

#### 4. Sunglasses

It is important to protect children's eyes. Babies and toddlers may wear sunglasses that have soft elastic to keep them in place. It is important to choose a style that stays on securely so that the arms don't become a safety hazard. Again your child may be reluctant to wear sunnies and may prefer them as a toy to play with! By acting as positive role models parents and carers can lead by example.

Toy or fashion labelled glasses do not meet the requirements for sunglasses under the Australian Standard<sup>3,4</sup> and therefore should not be used to provide sun protection.

If using sunglasses, look for ones that:

- are close fitting
- wrap around and cover as much of the eye area as possible
- meet the Australian Standard 1067 (Sunglasses: Category 2, 3 or 4)
- are preferably marked eye protection factor (EPF) 10<sup>5</sup>.

## 5. Sunscreen

Sunscreen screens out UV radiation but does not completely block it out. Some of the sun's UV radiation still gets through to the skin. Apply sunscreen to those small areas of the body that are not already covered by a hat and clothing.

The Australasian College of Dermatologists recommends the use of a sunscreen 'at any age when there is unavoidable exposure to the sun (ie when UV levels are 3 and above) and states that sunscreen is safe to use on babies<sup>6</sup>.

Many brands of sunscreen have a babies or toddlers formula that offers the same degree of protection, but is much gentler on their skin. Sunscreens with titanium dioxide or zinc oxide work largely by reflecting the UV radiation away from the skin, and are less likely to cause problems with sensitive skin as it is designed to sit on the skin surface<sup>6</sup>.

Sunscreen tips:

- It is always best to keep babies and toddlers out of the direct sun when UV levels are 3 and above, or well-protected using other forms of sun protection, so that sunscreen use is minimal.
- Test the sunscreen on a small area of the baby or toddler's skin to make sure there won't be any reaction.
- Use an SPF 30+ broad spectrum, water resistant sunscreen.
- Apply the sunscreen 20 minutes before going outside and reapply every two hours (even if the stated water resistance is longer than two hours).
- Only use sunscreen with other forms of sun protection. It doesn't offer enough protection if it's used on its own.
- Sunscreen should never be used to extend time in the sun

## Role modelling

Children often copy those around them and learn by imitation. Research shows that if adults adopt sun protection behaviours, the children in their care are more likely to do the same<sup>7</sup>.

## Nappy rash

For skin affected by nappy rash, recommendations include frequent nappy changing, applying barrier creams to the affected areas and exposing the inflamed area to the open air, as much as possible<sup>8</sup> – but not the sun. Exposing a baby to the sun puts them at risk of skin and eye damage.

## Vitamin D

Some UV radiation exposure is important for vitamin D production. Vitamin D is needed for bone, joint, muscle and brain function. It is produced in the skin by exposure to UVB radiation. A balance is required between avoiding an increase in the risk of skin cancer and getting enough UV radiation to maintain adequate vitamin D levels.

## Jaundice

Neonatal jaundice generally only causes concerns in about 10% of babies<sup>8</sup>. Jaundice should be treated under medical supervision in a controlled environment. Exposing babies to direct sunlight (UVR) is not recommended to treat neonatal jaundice.

## SunSmart Early Childhood Service Program

Cancer Council's **SunSmart Early Childhood Program** offers local services a nationally recognised SunSmart status for developing and implementing a comprehensive sun protection policy which acknowledges the environment, behavior and education when it comes to balance between sun protection and Vitamin D.

If your child's service is not already part of the program or would like more information about joining the program please contact Cancer Council ACT on 6257 9999 or simply visit us online to download an application form at [www.actcancer.org](http://www.actcancer.org).

## References

- 1 World Health Organization. *Ultraviolet Radiation and the Intersun Program*. Geneva: World Health Organization 2001.
- 2 Australian Radiation Protection & Nuclear Safety Agency (ARPANSA). *Resource Guide for UV Products*. Yallambie: ARPANSA 2003, Ref. 10, Ref. 13.
- 3 Choice. Eye safety. Sunglasses. *Choice Magazine* 1999; 8–11 October.
- 4 Australian Standard AS 1067 (2003) (Sunglasses and Fashion Spectacles).
- 5 Cains S. Royal Australian College of Ophthalmologists policy statement on sunglasses. *Med J Aust* 1992;157: 343–4.
- 6 Sullivan JR. *A-Z of Skin: Baby and Toddler Protection*. Australasian College of Dermatologists, 2001. Retrieved from [http://www.dermcoll.asn.au/public/a-z\\_of\\_skinbaby\\_toddler\\_protection.asp](http://www.dermcoll.asn.au/public/a-z_of_skinbaby_toddler_protection.asp) on 31 October 2006.
- 7 National Sun Survey, Sun Protection and Sunburn Incidence of Australian Children (0–11 Years). Sydney: The Cancer Council Australia, 2003–04.
- 8 Harrison S, Buettner P, MacLennan R. Why do mothers still sun their infants? *J Paediatr. Child Health*.1999;35: 296.