Skin cancer prevention presents a major opportunity for schools to safeguard the health of their pupils - it forms part of the wider agenda of 'whole child' wellbeing and self-care and responsibility. Schools have a fundamental role to play in ensuring children and young people are aware of the harm caused by overexposure to ultraviolet rays from the sun and sunbeds.

**Fastest growing cancer**
Skin cancer is almost entirely preventable but is now the second most common cancer in 15-34 year olds. Rates of malignant melanoma (the most deadly type of skin cancer) have quadrupled in the last 30 years, and in Devon it accounts for 1 in every 200 deaths. Although skin cancer rates are more common overall in older people, malignant melanoma is disproportionately high in young people. Malignant melanoma is associated with intense, intermittent exposure to UV light, or 'binge-tanning' (rather than longer-term accumulation of moderate exposure that may lead to non-melanoma skin cancers). Although survival rates for skin cancer are good if it is caught early enough, it often involves disfiguring and life-changing surgery, the impact of which cannot be underestimated.

In Devon, we have the fourth highest incidence rates in the UK of malignant melanoma making it a pressing local priority. Partners from education, environmental health, trading standards and health, coordinated by public health, have recently developed the Devon Skin Cancer Prevention Strategy, which initially targets teenagers as a priority group.

Currently in draft form and due to be released in spring 2011, the strategy builds on research led by the South West Public Health Observatory and the Peninsula Cancer Network, and is informed by guidance released in January 2011 by the National Institute for Health and Clinical Excellence (NICE), called 'Skin cancer prevention: information, resources and environmental design'.

**NICE guidance on skin cancer prevention**
The new NICE guidance directs key recommendations at national and local partners, including the education sector, and advises on the delivery, content and targeting of low-cost provision of information and messaging. Messages should include a simple explanation of how UV exposure can damage the skin, how someone can assess their own level of risk and the importance of checking the skin regularly, and they should give a balanced picture of both the risks of overexposure and the benefits of being out in the sun. For example, benefits can include boosting vitamin D levels and increasing the likelihood of being physically active, but it is important to note that an individual would never have to burn or tan deeply to top up their vitamin D levels - incidental exposure or approximately 15 minutes per day in the
midday sun is plenty for a fair-skinned person.

The key protection messages should include a range of options including:

- Avoid getting sunburnt. Sunburn can double the risk of skin cancer.

- When and how to protect: protect the skin when it is sunny, both in the UK and abroad, by spending time in the shade between 11am and 3pm. Where possible, wear clothing that protects areas which may be vulnerable to burning and apply sunscreen. This includes a broad-rimmed hat, long-sleeved top and trousers, and close-weave fabrics that don't allow the sun through.

- Sunscreens are not the only form of protection and should not be used as an excuse to stay out longer. No sunscreen offers 100% protection against the sun. Choose a 'broad-spectrum' sunscreen that protects against both UVA and UVB rays. It should be at least SPF 15 and have at least a '4 star' rating.

- Sunscreen application: apply liberally half an hour before going out in the sun. Reapply at least every two hours and immediately after being in water, sweating or towel-drying. If applied adequately, SPF15 should be enough. Many sunscreens go out of date within 1-2 years so replace them regularly.

**Embedding the recommendations**

Skin cancer prevention is not simply another topic to give out information on, but must be embedded into the whole school lifestyle, until it becomes a cultural norm. Based on social marketing research by the University of the West of England (UWE), the following behavioural insights need to be taken into account when trying to change teenagers' behaviour:

**Behavioural insights - teenagers**

- Teenagers have the lowest skin protection rate of any age group and as a result they are identified as a primary target

- Knowledge of the potential dangers of excessive sun exposure does not result in sun protection-related behaviours

- The perception is that a tan is 'sexy' increasing perceived attractiveness and raising self-esteem

- They believe it is 'worth' getting sunburnt in order to get a tan and that less protection is needed as tan progresses

- The emphasis of immediate interventions should be on obtaining a tan safely as changing perceptions of the acceptability of tanning will require considerable resources to be invested over time

- They are most likely to respond to appearance-based appeals, including indicators of premature ageing or wrinkling

Messages must be relevant to young people and take into account their lifestyles, preferences, motivators and barriers.

**Message requirements for teenagers**

- Safe ways to achieve a tan, e.g. - the use of fake-tanning products

- Myth busting, e.g. - that using sunbeds prepares your skin for tanning

- Show the ageing impact of the sun and artificial UV exposure

- Use of 'skin age'

- Show the disfiguring impact of skin cancer surgery

- Need to see young people who have had skin cancer

- Emphasise that melanoma rates are disproportionately high in younger people
The current fashion towards tanning will not change overnight, but encouraging alternatives such as fake tanning will steer teenagers away from sunbeds and sunbathing. One example of an appearance-based intervention is taking a UV facial scanner into schools, which visibly demonstrates how the sun can damage skin, combined with advice on how to keep skin healthy. NHS Dorset successfully piloted this approach with beauty students in Weymouth College, and in Devon we are planning a similar project in Exeter College in May 2011. Results will be published on the Skin Cancer Hub website.

Examples of early success indicators
There are a number of good existing resources that can help schools embed skin cancer prevention in their day to day activities. South West Healthy Schools Plus already include skin cancer awareness as one of their topic choices for schools and have a useful resource sheet to help schools integrate skin cancer prevention work into their everyday activities. They emphasise the importance of evaluation and measurement, and provide the following indicators as examples of early success:

Process indicators of early success
(adapted from WHO Evaluating School Programmes, 2003)

- Development of a school sun protection policy with involvement of parents/carers
- Parent/carer involvement in sun protection, such as supplying sun cream and hats
- Provision of outdoor shaded areas
- Ensuring sun protection advice is given for school trips and outdoor sports
- Schemes of work and lesson plans that cover the topic and allow for discussion of the issue by teachers and young people
- Monitoring changes in frequency of young people getting sunburn, both during school-based activities and after school

Impact indicators of early success - signs of healthier behaviour

- Decrease in the number of young people who report incidences of sunburn and are absent from school as a result of sunburn
- Increase in sun safe behaviour by young people, through wearing hats, covering up with clothing, application of sun cream and making use of shaded areas, term by term until the outcome is met
- A term by term increase in the number of young people who know the signs and symptoms of skin cancer until the outcome is met

Skin cancer rates will not be reversed overnight, but individuals and organisations can start to turn the tide by setting an example and beginning to change cultural norms. The goal is for everyone to be able to know their skin and enjoy the sun safely, gaining the benefits of being outdoors while avoiding the serious risks of burning and overexposure.

For more information about skin cancer prevention, see:

www.sunsmart.org.uk
www.swpho.nhs.uk/skincancerhub
For more information about the Devon Skin Cancer Prevention Strategy please contact Sarah Bird at sarahbird1@nhs.net or Dr Annette Lyons at annette.lyons@devon.gov.uk