

# National



# UV and Skin Cancer Strategy

Preventive work  
**Competence**  
Reduce  
**skin cancer**  
Increase  
awareness

The national UV and skin cancer strategy will strengthen skin cancer preventive work done by the health authorities, the health service and the municipalities. The strategy will contribute to increase and raise competence and awareness of making own, reflected and well-considered choices, and facilitate for making these choices. The strategy includes several measures to reduce the incidence and mortality of skin cancer, caused by ultraviolet (UV) radiation from the sun and from sunbeds.



The Norwegian Radiation and Nuclear Safety Authority (DSA) has, on assignment from the Ministry of Health and Care Services, prepared this National UV and Skin Cancer Strategy together with the Norwegian Directorate of Health, the Norwegian Institute of Public Health, the Cancer Registry of Norway, the Ministry of Local Government and Modernisation and Bærum municipality. The final strategy is endorsed by the Government. The strategy applies for a five-year period from 2019 to 2023.

Norway is among the countries with the highest incidence and mortality of melanoma in the world, in which melanoma is the most lethal form of skin cancer. Furthermore, skin cancer is one of the types of cancer that has increased the most in the course of the past ten years. It is a well-established fact that ultraviolet (UV) radiation from the sun and sunbeds is the most important cause for the development of skin cancer. Increased risk is linked to both episodes of intense exposure causing sunburn and to total exposure over time.

The annual total costs for the society associated with skin cancer are estimated to be in the magnitude of 6.5 BNOK. The treatment costs alone are estimated to be around 450 MNOK. With an increasing proportion of older people and access to new, life-prolonging medicines, the costs associated with skin cancer are expected to increase in the years to come.

Skin cancer can be prevented, and it is much more cost effective to prevent rather than treat skin cancer. Treatment prognosis is good when skin cancer is detected early, and the treatment becomes less comprehensive. For melanoma, early detection is vital with respect to survival.

We need some sun exposure, and there are only positive effects related to fresh air and physical activity outdoors. However, many people expose themselves too much to the sun or sunbeds and experience too many sunburns, both when sunbathing deliberately and unintentionally in everyday life. The society must facilitate making healthy choices and ensure that the population receives knowledge about UV radiation, sun and skin cancer from an early age. Each person should be enabled to translate this knowledge into behaviours with less risk and notice suspicious lesions at an early stage.

# Aim

The strategy's aim is to reduce the increase in incidence of skin cancer in Norway by 25% by the year 2040, versus 2018. Further, it shall contribute to reduce mortality by detecting tumours at an early stage. The goal is to reduce the average thickness of melanoma tumours on diagnosis from 1.0 mm (today's thickness) to under 0.8 mm in the year 2040. Thinner tumours at the point of diagnosis give a better prognosis for survival.

# 6,5

billion NOK

is the annual total costs for the society concerning skin cancer

# 450

million NOK

is the annual costs of skin cancer treatment

# 11,5

billion NOK

will be the costs for the society in 2034

*without* measures

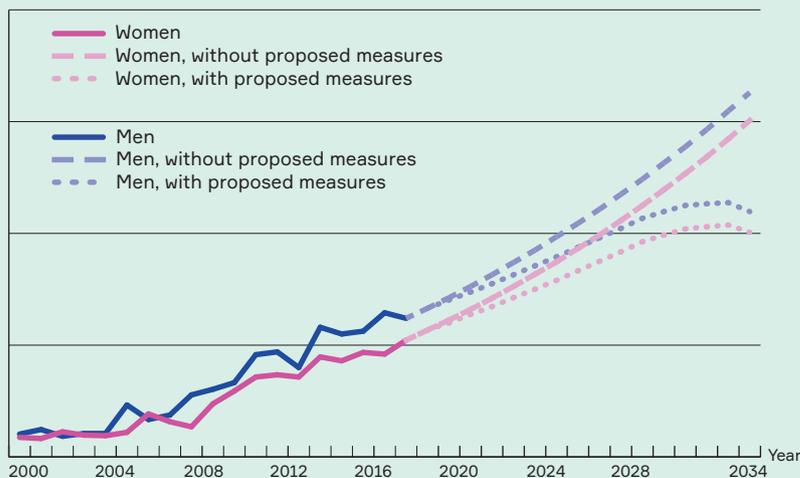
# 8,7

billion NOK

will be the costs for the society in 2034

*with* measures

## Incidence of skin cancer



GOAL

# 25 %

reduction in the skin cancer increase

within 2040



# Measures

To succeed, the Governmental Authorities and the society must carry out a cross-sectorial public health work with the means, resources and measures, as proposed in the sub-strategies.

# Measures to achieve the goals are proposed within three target areas:

## GOAL 1: Prevention of skin cancer through Governmental, county and municipal administration

Efforts to prevent skin cancer must be supported by and put into operation at several levels of administration, including systematic and long-lasting measures in the administration of the regulations for health, planning and building, working environment and education.

### Measure 1

Establish a national interdisciplinary coordination group in 2019, which will follow up the strategy under the leadership of the Norwegian Radiation and Nuclear Safety Authority (DSA).

### Measure 2

Include prevention of skin cancer in the cooperation forum «Partnership against cancer».

### Measure 3

Consider revising guidelines, circulars and national expectations associated with relevant legislation to ensure that prevention of skin cancer is included within the year 2020.

### Measure 4

Facilitate inclusion of skin cancer prevention in local systematic public health work within the year 2021.

### Measure 5

Bring skin cancer prevention on the agenda and increase the competence about skin-cancer prevention within network and cooperation fora for public health at local, regional and national levels.

### Measure 6

Change the Act on Radiation Protection by adding a legal basis for demanding closure if requirements connected to age verification are violated.

## GOAL 2: Increased knowledge and awareness about prevention of skin cancer in the population

Knowledge and awareness about the significance of one's own tanning behaviour and its harmful health effects are important to communicate to the general population, persons with increased risk of skin cancer and persons who may be exposed to excess UV radiation at work or in their leisure time. Target groups also include parents, employers and other caretakers. The measures must be targeted and evidence-based, as well as being evaluated with respect to the anticipated effect.

Measure 1	DSA should cooperate with childcare, schools and other relevant occupational sectors to contribute to increase knowledge about skin cancer prevention in children and the relevant occupations.
Measure 2	Prepare clear and targeted communication about skin cancer prevention for the general population and particular risk groups.
Measure 3	Implement information campaigns regarding primary and secondary skin cancer prevention.
Measure 4	Facilitate development and use of apps and other technology for personalized skin cancer prevention, for example for UV forecasting and personalized sun protection guidelines.
Measure 5	Perform regular monitoring of available research regarding preventive skin cancer measures, and follow trends in exposure, knowledge and behaviour among the public.
Measure 6	The coordination group is given the assignment to identify research needs and challenges related to skin cancer prevention.
Measure 7	Establish PROMs (Patient Reported Outcome Measures) for melanoma
Measure 8	DSA should stimulate Norwegian researchers to apply for research grants from the Norwegian Research Council and the Framework program for research and innovation from EU to achieve more precise and targeted skin cancer prevention.



## GOAL 3: Targeted and earlier detection of skin cancer

Early identification of a lesion can lead to less extensive treatment (simple surgery). For melanoma, early detection is vital with respect to survival. Measures at all stages are needed, starting with each person recognizing signs of skin cancer at an early stage, to short waiting time before tumour diagnostics and treatment.

Measure 1	Increase knowledge and awareness about potential malignant lesions and responsibility for own skin health through reliable and easy understandable information and use of evidence-based communication measures.
Measure 2	Increase knowledge and awareness about potential malignant lesions among general practitioners and employees in the health and care services.
Measure 3	Ensure that necessary and precise information is included in the referrals to specialists (pathologist, dermatologist, surgeon) to reduce delay in diagnosis and treatment.
Measure 4	Assess possibilities of implementing teledermatology/dermatoscopy as an alternative part of the referral process.

You can access  
the strategy at  
[www.dsa.no](http://www.dsa.no).

A cross-sectoral working group has prepared this strategy. Participants are from the Norwegian Radiation and Nuclear Safety Authority, the Norwegian Directorate of Health, the Norwegian Institute of Public Health, the Cancer Registry of Norway, the Ministry of Local Government and Modernisation and Bærum municipality. Furthermore, relevant authorities and experts, voluntary organizations and interest groups were invited to participate in a reference group.