



Skin Cancer Prevention Plan2019-2022





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Introduction

This first national Skin Cancer Prevention Plan is a landmark commitment, arising from our National Cancer Strategy 2017-2026¹, and aimed at tackling the most common type of cancer in Ireland. Over 11,000 cases of skin cancer are diagnosed annually². This is twice the number compared to 10 years ago and is projected to more than double again by 2045³. Yet most skin cancers could be prevented.

Cancer prevention is a cornerstone of the National Cancer Strategy as it offers the most cost effective, long term approach for cancer control. Addressing this rising incidence of skin cancer, the strategy prioritises the need to develop and implement a national skin cancer prevention plan.

National Cancer Strategy 2017 - 2026 Recommendation 31

The Department of Health will develop a national skin cancer prevention plan and oversee its implementation as a priority. The plan will prioritise children, outdoor workers, sunbed users and those who pursue outdoor leisure activities.

Aligning with the Healthy Ireland framework and the National Cancer Strategy, this plan sets out to enhance cross-sectoral collaboration to increase awareness and adoption of skin cancer preventative behaviours. This builds upon the foundation of the Irish Cancer Prevention Network which brings organisations together to support cancer risk reduction initiatives (Appendix 2).

The focus of this plan is on primary prevention, which means reducing our exposure to risk factors that increase the risk of developing skin cancer. Secondary prevention (promoting early detection of a disease) and tertiary prevention (reducing the negative impact of disease) are encompassed in National Cancer Strategy recommendations on early detection and survivorship. This plan will work alongside secondary and tertiary prevention.

The aim of this plan, through cross-sectoral collaboration, is to develop and implement evidence-based strategies which will increase awareness and adoption of skin cancer prevention behaviours.

Developing the plan

This plan follows the Healthy Ireland framework by taking a 'whole-of-government', 'whole-of-system' approach to harness the energy, creativity and expertise of everyone whose work promotes health and wellbeing, and encourage all sectors of society to get involved in making Ireland a healthier place to live, work and play ⁴. Government Departments, statutory bodies, healthcare services and professionals, non-governmental organisations (NGOs) and public-patient representatives were involved in the development of this plan.

Development process

Collaboration: A cross-sectoral Skin Cancer Prevention working group was

convened by the Department of Health and the National Cancer

Control Programme.

Evidence Review: International skin cancer prevention strategies and national data on

skin cancer incidence and behaviours were collated and reviewed to

inform plan development.

Consultation: International experts on skin cancer prevention were consulted. Key

stakeholders were invited to feedback on the plan development

through a consultation event and invited submissions.

Building on this collaborative approach, a cross-sectoral group will be formed to drive implementation of this plan.

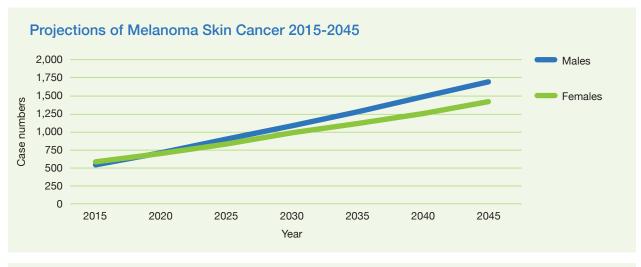
Skin Cancer in Ireland

Skin cancer is the most common form of cancer in Ireland. With over 11,000 cases diagnosed each year it accounts for over one-third of all cancers diagnosed annually². It is generally classified into two groups: melanoma and non-melanoma skin cancer (NMSC).

In Ireland each year over 1,000 people are diagnosed with melanoma. Although it is not the most frequently diagnosed skin cancer, it is associated with significant ill-health, is much more likely to spread to other parts of the body and can be fatal.

Non-melanoma skin cancer (NMSC) includes basal cell carcinoma and squamous cell carcinoma and accounts for over 10,000 cases per year. This skin cancer is much more common but is a less aggressive cancer which slowly progresses over months or years.

The number of people being diagnosed with skin cancer in Ireland is rising rapidly (Figure 1). Between 2015 and 2045, it is predicted that the number of cases of melanoma per year among males will increase to 1,678 (+207%), and for females to 1,400 (+140%). The number of people diagnosed with NMSC over the same time period is predicted to increase to 16,623 (+177%) for males and 13,503 (+189%) for females⁵.



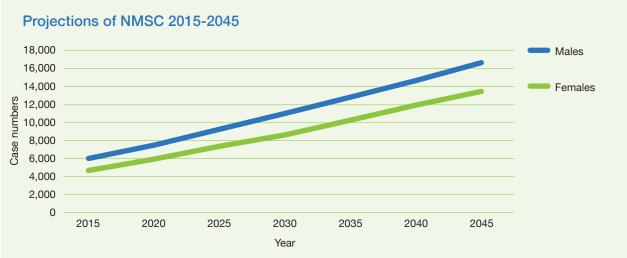


Figure 1: Skin Cancer Future Projections for Ireland 2015-2045⁵

Skin Cancer Risks

Ultraviolet Radiation Exposure

Ultraviolet (UV) radiation is the main risk factor responsible for skin cancers. It is emitted naturally from the sun and also comes from artificial sources such as sunbeds. UV radiation is divided by wavelength into three regions: UVA, UVB, and UVC. Sunlight exposes skin to UVA and UVB; UVC is not present in the sunlight that reaches the earth's surface. Harmful exposure to UV radiation damages DNA which leads to skin cancer. The International Agency for Research on Cancer (IARC)⁶ classifies UV radiation as class 1 carcinogenic (cancer-causing) to humans, (Appendix 4).

UV Radiation from the Sun

The sun emits UV radiation naturally. The UV index is an international standard measurement used by the World Health Organization to quantify the level of UV from the sun at the surface of the earth at a particular place and time. The higher the UV index the greater the risk of skin damage. When the UV index is 3 or above you need to protect your skin.

Figure 2 shows the UV index at Met Éireann's Valentia Observatory in Co. Kerry across 2018. Values 3 and above are predominantly seen between April – September. The highest UV index values were recorded during June and July with peak values approaching 8.

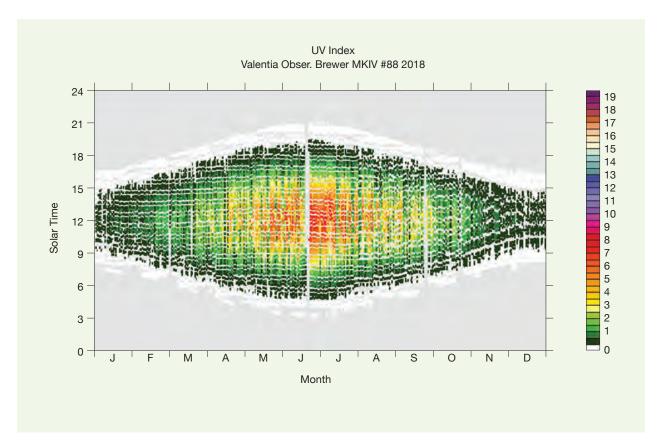


Figure 2: UV index at Met Éireann's Valentia Observatory in Co. Kerry in 2018

Both occasional and chronic sun exposure can be harmful. Exposure causing sunburn is the most damaging, but frequent non-burning exposures also significantly increase the risk of skin cancer ^{7,8}. By adopting skin protective behaviours the majority of skin cancers caused by harmful UV sun exposure could be prevented.

UV from Artificial Sources

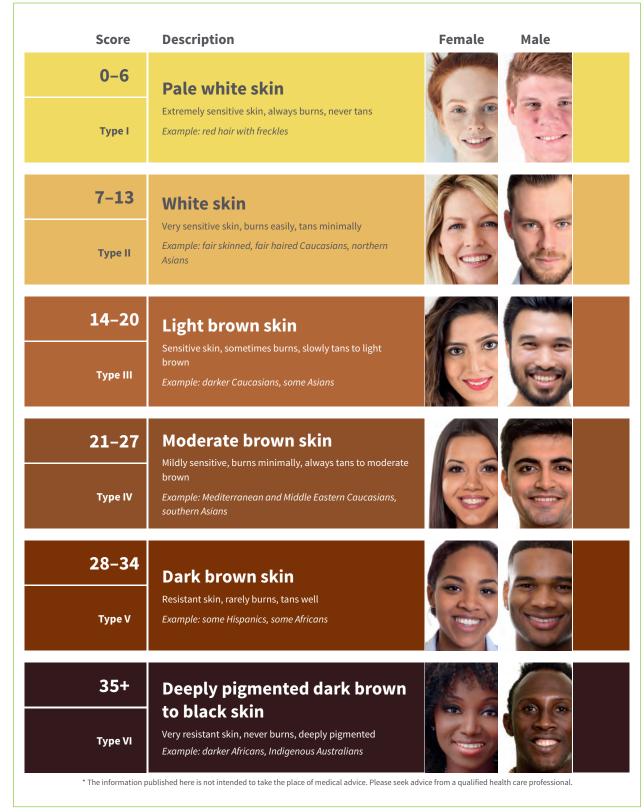
Sunbeds are the most common type of artificial sources of UV. Sunbeds work by exposing the user to UV radiation. Exposure to sunbeds increases the risk of developing skin cancer, a risk which can be avoided by not using sunbeds. IARC classifies the use of UV-emitting tanning devices, such as sunbeds, as carcinogenic to humans ^{6,9}.

UV Exposure and Skin Type

The effects of UV exposure on skin are not the same for everyone. A person's natural skin colour influences their risk of UV damage and skin cancer. Skin type can be classified on the "Fitzpatrick skin type classification scale" (Figure 3). The scale ranges from 1 (high risk) to 6 (low risk). It considers skin colour (pale to black) and how the skin reacts to UV (i.e. whether it burns easily or tans)¹⁰. A person's skin type is genetically determined and does not change based on level of tanning¹¹. Most people living in Ireland have fair skin - Fitzpatrick skin type 1 or 2¹². People with this skin type burn easily and tan poorly so are particularly vulnerable to UV damage and, as a result, are at a higher risk of skin cancer.

UV Exposure in Childhood

Exposure to UV radiation during childhood is particularly harmful. Children and young people are particularly vulnerable. UV exposure during the first 10–15 years of life makes a disproportionately large contribution to lifetime risk of skin cancer¹⁴. Severe sunburn during childhood (3 or more instances before the age of 20) is associated with a 2-4 times higher risk of developing melanoma in later life¹⁵. To minimise this risk, skin protection during childhood is extremely important.



Source as from the Commonwealth of Australia, Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Figure 3: Fitzpatrick skin type classification scale¹³

International Skin Cancer Prevention

Skin cancer is largely preventable by protecting skin from UV. Internationally, there have been significant efforts to reduce the incidence of skin cancer, through implementation of various strategies and initiatives to increase skin protective behaviours in the population.

The state of Victoria in Australia has succeeded in decreasing the rates of skin cancer among young people, preventing skin cancer and saving lives¹⁶. Cancer Council Victoria ran the Slip! Slop! Slap! programme from 1980 to 1988 followed by the "SunSmart"¹⁷ programme running from 1988 to present (Figure 4).

For more than 20 years these programmes have been in place to tackle skin cancer, illustrating the importance of long term commitment required to instigate change. The success of the programme is underpinned by two key principles: research and evaluation, and consistency and continuity of implementation. Cross-sectoral collaboration between key groups began a process of broad cultural change educating key professional groups, encouraging organisations to adopt sun protection policies and practices, examining ways to remove cost barriers to sun protection and mass media—driven efforts to influence community attitudes.

It is estimated to have prevented more than 43,000 skin cancers and 1,400 deaths in Victoria between 1988 and 2011. In addition, it is also extremely cost effective, with the Victoria programme reporting a \$2.20 return for every dollar spent¹⁸.



Figure 4: SunSmart Australia

A number of other countries are implementing comparable programmes. Since 1993 New Zealand have adopted a "SunSmart" campaign, with parallel core messaging of "Slip, Slap, Slop, Wrap". The programme reports melanoma rates are now levelling off for people less than 35 years of age in New Zealand¹⁹. In 2011 Northern Ireland published their "Skin Cancer Prevention Strategy and Action Plan 2011-2021". The strategy established "Care in Sun"²⁰, a multi-agency approach to promote skin protection messaging and provide practical supports for schools, outdoor workers and sports agencies.

This Skin Cancer Prevention Plan 2019-2022 incorporates international learning by recognising the importance of research and evaluation, consistency and continuity, and cross sectoral collaboration.

While reversing the rising incidence in skin cancer will take time due to years of over exposure to UV, it is clear from the international experience that taking more concerted action now will help prevent future cases of skin cancer in Ireland.



Skin Cancer Prevention Protective Behaviours

A robust body of evidence highlights the key skin cancer prevention protective behaviours. These behaviours are adopted by international programmes and tailored to their population. The key skin cancer prevention behaviours adapted for the Irish population are:

- Know the UV index: When the UV index is 3 or above you need to protect your skin. In Ireland, the UV index is usually 3 or above from April to September, even when it is cloudy. Stay safe by limiting time in the sun when UV is strongest, typically between the hours of 11:00am-3:00pm
- Slip on clothing: Cover skin as much as possible, wear long sleeves, collared t-shirts, clothes made from close-woven material that does not allow sunlight through.
- Slop on broad-spectrum (UVA/UVB) sunscreen. Apply sunscreen with a sun protection factor (SPF) of at least 30+ for adults and 50+ for children, with high UVA protection, and water resistant. Reapply regularly. No sunscreen can provide 100% protection, it should be used alongside other protective measures such as clothing and shade
- · Slap on a wide brimmed hat: Protect your face, ears and neck
- Seek shade: Seek protection from direct sunlight. Use a sunshade on your buggy or pram, sit in cover of trees to avoid direct sunlight. Keep babies and children out of direct sunlight
- · Slide on sunglasses: Guard your eyes from harm by wearing sunglasses with UV protection
- Do not deliberately try to get a suntan
- Avoid getting a sunburn
- Never use a sunbed

Skin Cancer Prevention Plan

The vision of the Skin Cancer Prevention Plan is to increase awareness and adoption of skin cancer prevention behaviours, in order to reverse the rising incidence of skin cancer in Ireland. An overview of the plan is illustrated in Figure 5.

The implementation of the plan requires a collaborative and supportive effort. Cross governmental agencies, statutory bodies, healthcare professionals, non-governmental organisations, patients, private sector organisations, and the wider public must work together.

What and How

The plan sets out areas that are distinct yet complementary building blocks to reverse the rising incidence of skin cancer in Ireland. By employing a combination of targeted strategies including education, media campaigns, environmental measures and policy changes across multiple settings the plan aims to:

- Increase awareness of skin cancer prevention
- Improve adoption of skin cancer preventative behaviours
- Monitor change and evaluate plan effectiveness

Who

Prevention initiatives are population-wide, with a focus upon targeting high risk groups:

- Children and young people
- Outdoor workers
- Those who pursue outdoor leisure activities i.e. sport and tourism
- Sunbed users

Skin Cancer Prevention Plan

Vision

Increase awareness and adoption of skin cancer preventative behaviours

Reverse the rising incidence of skin cancer in Ireland

Collaborative effort through cross-governmental agencies, statutory bodies, healthcare professionals, non-governmental organisations, public-patient involvement and private sector

What

Increase awareness of skin cancer prevention

Improve adoption of skin cancer preventative behaviours

Monitor change and evaluate plan effectiveness

How

Conduct research into skin cancer prevention awareness

Agree evidence-based messages

Develop resources to increase awareness of skin cancer prevention

Integrate skin cancer prevention resources into existing education avenues

Establish communications plan

Conduct research into skin cancer prevention behaviours

Develop and support legislation, policy and implementation of skin cancer prevention behaviours such as:

- Protect skin when UV index is greater than 3
- Wear protective clothing, wide-brimmed hats, sunglasses
- Apply sunscreen
- Provide shade
- · Eliminate sunbed use

Collate and conduct research to monitor change in awareness and behaviours

Identify and pursue research needs to support and monitor implementation of plan

Produce an annual update on progress

Review plan implementation to inform future direction

Who

Priority Populations

Children and young people

Outdoor workers

Sunbed users

Outdoor leisure activities

Figure 5: Ireland's Skin Cancer Prevention Vision and Plan

Skin Cancer Prevention Plan: Action Areas

The thematic areas detailed below elaborate on specific actions to be undertaken to implement the plan and how priority populations will be engaged.

Action Area 1: Establish oversight for implementation of skin cancer prevention plan

Action Area 2: Increase national awareness of skin cancer prevention and improve

adoption of skin cancer preventative behaviours

Action Area 3: Children and Young People

Action Area 4: Outdoor Workers

Action Area 5: Outdoor Leisure

Action Area 6: Sunbeds and other artificial UV sources

Action Area 7: Monitoring, research and evaluation

Action Area 1: Establish oversight for implementation of skin cancer prevention plan

Effective mechanisms for oversight and collaboration need to be in place and aligned with the implementation of the National Cancer Strategy to deliver this plan. The establishment of a cross-sectoral group will strengthen implementation and provide expert guidance. Partnership working between Government Departments, health services, local authorities, statutory bodies, voluntary and community organisations is crucial to the success of the plan. Coordination of the various elements of the plan and regular review is needed to ensure effective implementation and continuous applied learning.

Ref	Action	Lead Responsibility	Partners	Timeframe
1.1	Establish governance and reporting structure aligned with the National Cancer Strategy	DoH, NCCP		2019
1.2	Assign skin cancer prevention plan co- ordinator	NCCP		2019
1.3	Establish a cross-sectoral advisory group to guide and implement plan	DoH, NCCP	Implementation group	2019
1.4	Identify and build relationships with stakeholders to implement plan	DoH, NCCP	Implementation group	On-going
1.5	Undertake annual review of implementation of plan	NCCP	Implementation group	Annually

Action Area 2: Increase national awareness of skin cancer prevention and improve adoption of skin cancer preventative behaviours

Establishing baseline measures of national awareness of skin cancer prevention and engagement in prevention behaviours will guide interventions. Data from the National Cancer Registry Ireland will be utilised to inform and guide implementation. A core set of evidence based, standardised messages for skin cancer prevention will provide content for consistent communications and education. Collaborative working with cross-sectoral government agencies, NGO's and private sector organisations will provide avenues to reach and empower all those living in Ireland to adopt skin cancer prevention behaviours and ensure tailoring to target audiences.

Ref	Action	Lead Responsibility	Partners	Timeframe
2.1	Agree evidence based key messages for skin cancer prevention in Ireland	DoH, NCCP	Implementation group	2019
2.2	Develop skin cancer prevention resources to increase awareness and support behavioural interventions for use by all stakeholders	DoH, NCCP/ HSE	Implementation group	2019-2021
2.3	Develop an annual communications plan	DoH/NCCP/ HSE	Implementation group	2020-2022
2.4	Integrate skin cancer prevention education into existing educational and training avenues	Implementation group	Professional education and training bodies, including healthcare professional training bodies	2019-2022
2.5	Provide access to support for organisations and communities to implement skin cancer prevention interventions	Implementation group	All stakeholders	2019-2022
2.6	Explore feasibility of evidence-based fiscal measures in support of skin cancer prevention behaviours	DoH	Department of Finance	2019-2022

Action Area 3: Children and Young People

Children and young people are particularly vulnerable to UV exposure. Children have lower concentrations of the protective skin pigment melanin and thinner skin, therefore are more susceptible to the dangers of UV. Severe sunburn during childhood (>3 instances before the age of 20) is associated with a 2-4 times higher risk of developing melanoma in later life¹⁵. Early Learning and Care (ELC) and School-Age Children (SAC) settings and schools offer the ideal setting for educational and behavioural interventions to be implemented. Behaviours learned at a young age are more likely to be adopted for life. The existing Social, Personal Health Education (SPHE) and Science curricula at both primary and post-primary levels provide the vehicle to address key UV and skin cancer prevention information and messaging in schools. The development of resources and tools to support the ELC, SAC and school sectors will be progressed under this plan.

Ref	Action	Lead Responsibility	Partners	Timeframe
3.1	Develop a comprehensive profile of school-children's risk and protective behaviours relating to UV exposure to inform the implementation of the plan	IPH NUIG	NCCP	2019
3.2	Develop skin protection resources for use by school, Early Learning and Care (ELC) and School-Age Children (SAC) settings	NCCP, Implementation Group	DCYA, DES, ELC, SAC and school settings	2019-2022
3.3	Include children and young people in the development of resources and implementation of programmes in which they are key stakeholders	DoH	DCYA	2019-2022
3.4	In line with the updating of the Quality and Regulatory Framework/s for ELC settings, include current messages and advice about skin cancer prevention for young children	Tusla/DCYA	Implementation group	2019-2022
3.5	Communicate up to date messages and advice about skin cancer prevention for young children in Tusla communications with ELC and SAC settings including periodic newsletters, with a particular focus on how ELC and SAC settings can incorporate this into their work	Tusla/DCYA	Implementation group	2019-2022

Ref	Action	Lead Responsibility	Partners	Timeframe
3.6	Identify opportunities to include messages about skin cancer prevention for babies, children and young people in communications with parents, including through initiatives identified in First 5 Strategy	DCYA, DoH, HSE	Implementation group	2019-2022
3.7	Develop resources to increase awareness of UV risk and protection among young children attending ELC settings, in line with the roll-out of Aistear, the National Curriculum for Early Childhood	DES, DCYA	Implementation group	2019-2022
3.8	Ensure the provision of shade is prioritised in the Universal Design Guidelines for Early Learning and Care Settings	DCYA	Implementation group	2019-2022
3.9	Disseminate and promote resources to support the curriculum in relation to skin protection for use in primary and post primary schools, including through the official Scoilnet portal	DES	Implementation group	2019-2022

Action Area 4: Outdoor Workers

Outdoor workers are identified as a high risk group for the development of skin cancer. Due to the nature of their occupation they are exposed to high levels of UV radiation from the sun. Engaging with the Health and Safety Authority (HSA), farming, fishery and construction industries, and wider healthy workplaces initiatives will provide an opportunity to raise awareness and engage outdoor workers to adopt sun protective behaviours.

Ref	Action	Lead Responsibility	Partners	Timeframe
4.1	Identify and pursue opportunities to raise awareness of UV risk and protection among outdoor workers through employer bodies and employee groups and fora	Implementation group	Employer bodies, Employee representative groups, HSA	2019-2020
4.2	Develop resources to support employers to adopt policies for UV protection for outdoor workers	Implementation group	Employer bodies, Employee representative groups, HSA	2020-2021
4.3	Incorporate skin cancer prevention messaging and behaviours into healthy workplaces initiatives	DoH	Implementation group, Healthy Workplace partners	On-going

Action Area 5: Outdoor Leisure

Skin cancer risk increases with higher levels of recreational sun exposure. Thus, a priority for skin cancer prevention is outdoor leisure settings, for example sporting events, tourist sites, public parks, beaches, waterways and greenways. Increasing awareness and adoption of skin cancer prevention behaviours requires collaboration with key stakeholders involved in outdoor leisure such as tourism bodies, local authorities, Sport Ireland and the Office of Public Works.

Ref	Action	Lead Responsibility	Partners	Timeframe
5.1	Promote evidence informed messages for those who participate in, or spectate at, outdoor sport, physical activity or leisure activities through the governing bodies, local sports partnerships and relevant sports	Implementation group, Sport Ireland	Sport national governing bodies, Local Sports Partnerships	2019-2020
5.2	Develop resources for use by organisations responsible for outdoor leisure to support adoption of policies for UV protection	Implementation group	Sport national governing bodies, Local Sports Partnerships	2020-2021
5.3	Work with groups responsible for management of outdoor recreation areas to identify means of maximising UV protection	Implementation group	All stakeholders	2020-2022

Action Area 6: Sunbeds and other artificial UV sources

The International Agency for Research on Cancer (IARC) classifies UV-emitting tanning devices as a Group 1 carcinogen. People who use sunbeds for the first time before the age of 35 increase their risk of developing melanoma by 75 per cent⁹. The Department of Health monitors and reviews implementation and enforcement of the Public Health (Sunbeds) Act 2014. This plan will continue to build on work already underway to reduce demand for sunbeds and other artifical sources of UV.

Ref	Action	Lead Responsibility	Partners	Timeframe
6.1	Increase awareness of risk of sunbed use delivering consistent messages in line with Schedule 1 of the Public Health (Sunbeds) (Health Information) Regulations 2015	Implementation Group	HSE, NCCP, implementation group, DoH	On-going
6.2	Monitor and review implementation and enforcement by the HSE Environmental Health Service of the Public Health Sunbeds Legislation.	DoH	HSE Environmental Health Service	On-going
6.3	Examine the feasibility of eliminating sunbed use	Implementation Group		2020-2022
6.4	Identify other emerging artificial sources of UV	Implementation Group		On-going

Action Area 7: Monitoring, research and evaluation

A monitoring framework for the plan will be developed, utilising baseline data to identify key outcome measures. Further research needs will be identified as the plan progresses. Learning from ongoing review of implementation will also inform the development of future plans.

Ref	Action	Lead Responsibility	Partners	Timeframe
7.1	Agree outcome measures and develop a monitoring framework	NCCP, DoH	Implementation Group, NCRI, IPH	2019
7.2	Collate and conduct research to monitor changes in skin cancer prevention awareness and behaviours	NCCP, DoH	Implementation Group	2019
7.3	Identify and pursue research needs to support and monitor implementation of plan	NCCP, DoH	Implementation group, Met Éireann, Research bodies	On-going
7.4	Produce an annual update on progress	NCCP, DoH	Implementation Group	On-going
7.5	Review plan implementation to inform future direction	NCCP, DoH	Implementation Group	2022

Appendix 1:

Abbreviations used

DCYA: Department of Children and Youth Affairs

DES: Department of Education and Skills

DoH: Department of Health

IARC: International Agency for Research on Cancer

ICPN: Irish Cancer Prevention Network

NCCP: National Cancer Control Programme

NGO: Non-Governmental organisations

UV: Ultraviolet

SPF: Sun Protection Factor

NMSC: Non-Melanoma Skin Cancer

Appendix 2:

Irish Cancer Prevention Network

The Irish Cancer Prevention Network (ICPN) brings together collaborative working between organisations with the aim to reduce cancer risk for the people of Ireland. The network was established by the National Cancer Control Programme, Marie Keating Foundation, Irish Cancer Society and Breakthrough Cancer Research.

The ICPN will bring those specifically working in cancer prevention together to:

- align with Ireland's National Cancer Strategy 2017-2026
- · support national programmes with a unified voice
- · collaborate on cancer prevention initiatives in Ireland
- · agree consistent evidence based cancer prevention public awareness messages
- disseminate up to date cancer prevention research
- · support members and organisations in cancer prevention queries
- facilitate peer learning

Irish Cancer Prevention Network









Appendix 3:

Working Group Members

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Appendix 4:

International Agency for Research on Cancer (IARC): Carcinogen Classifications

The International Agency for Research on Cancer (IARC), part of the World Health Organization, provides high quality and reliable evidence, pooling research from large-scale international studies on cancer causing agents. IARC identifies causes of human cancer, classifying substances into one of the following groups:

Group 1 Carcinogenic to humans

Group 2A Probably carcinogenic to humans

Group 2B Possibly carcinogenic to humans

Group 3 Not classifiable as to its carcinogenicity to humans

Group 4 Probably not carcinogenic to humans

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Notes





