



2024 Survey on Parents'/Guardians' Attitudes, Behaviours, Knowledge and Awareness of Sun Protection in Ireland.

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1 Introduction

1.1 Introduction

The National Skin Cancer Prevention Plan (2023-2026)¹ aims to tackle the most common type of cancer in Ireland. The plan emphasises that most skin cancers can be prevented by protecting the skin from the sun and avoiding sunbed use.

A key focus of the plan is on high-risk groups, including children (aged 0-12 years) as outlined in action area 2. Specifically, action 2.1 seeks to ‘involve parents/guardians and parent groups in the development and promotion of skin protection resources for babies and children’. Children are particularly vulnerable to UV radiation, with their skin being more susceptible to damage that accumulates over a lifetime. UV exposure during the first 10–15 years of life significantly increases the risk of developing skin cancer later on².

Currently, over 11,000 cases of skin cancer are diagnosed annually in Ireland³. This is double the number recorded 10 years ago, and this figure is projected to more than double again by 2045⁴.

Research indicates that experiencing severe sunburn during childhood (three or more instances before the age of 20) increases the risk of developing melanoma skin cancer by two to four times⁵. Given this heightened risk, effective sun protection during childhood is crucial. However, studies show that self-reported levels of childhood sunburn in Ireland remain high⁶.

Parents and guardians play a key role in protecting children’s skin from harmful UV exposure by ensuring adequate sun protection measures are in place. They also serve as role models, influencing their children’s attitudes and behaviours toward sun safety both now and in the future⁷.

¹ Department of Health and HSE National Cancer Control Programme (2023). National Skin Cancer Prevention Plan 2023-2026. Dublin: Department of Health.

² Cancer Institute New South Wales. (2012). NSW Skin Cancer Prevention Strategy 2012-15. <https://www.cancer.nsw.gov.au/getattachment/bd23da9f-1219-4e96-9da2-437a08217194/nsw-skin-cancerprevention-strategy-2012-15.pdf>

³ National Cancer Registry of Ireland (2024). Cancer in Ireland 1994-2022: Annual statistical report of the National Cancer Registry. NCRI, Cork, Ireland.

⁴ National Cancer Registry of Ireland. (2019). Cancer incidence projections for Ireland 2020-2045. www.ncri.ie

⁵ Markovic, S. N., Erickson, L. A., Rao, R. D., Weenig, R. H., et. al. (2007). Malignant melanoma in the 21st century, part 1: epidemiology, risk factors, screening, prevention, and diagnosis. Mayo Clinic proceedings, 82(3), 364–380. <https://doi.org/10.4065/82.3.364>

⁶ McAvoy, H., Rodriguez, L., Költő, A and NicGabhainn, S. (2020). Children’s exposures to ultraviolet radiation - a risk profile for future skin cancers in Ireland. Institute of Public Health in Ireland. <https://publichealth.ie/wp-content/uploads/2020/06/20200616-Childrensexposure-to-UV-report-final.pdf>

⁷ Diehl K, Thoonen K, Breitbart EW, Pfahlberg AB and Gorig T. Sun Protection Behaviours in Caregivers: Prevalence, Determinants, and Associations with Children’s Behaviours. International Journal of Environmental Research and Public Health 2022;19; 6876 <https://doi.org/10.3390/ijerph19116876>

To support the objectives of the National Skin Cancer Prevention Plan, the Health Service Executive (HSE) National Cancer Control Programme (NCCP) commissioned Amárach Research to conduct a national survey exploring the attitudes, behaviours, knowledge, and awareness of sun protection among parents of primary school children in Ireland.

1.2 Research Objectives

The primary objectives of this research are to:

- Gather nationally representative data on attitudes, behaviours, knowledge, and awareness of sun protection among parents of primary school children in Ireland.
- Provide insights to support the monitoring and implementation of the National Skin Cancer Prevention Plan, guiding future policy, campaigns, and research aimed at reducing skin cancer risk.

The research also aims to:

- Examine demographic characteristics and skin types of parents and children to understand their influence on sun protection behaviours and attitudes.
- Assess experiences of sunburn among parents and their children.
- Evaluate sun protection behaviours and sunbed use among parents.
- Investigate attitudes toward tanning and the desirability of a tan.
- Assess knowledge of skin cancer risks and protective measures.
- Explore perceptions of effective communication methods for sun protection messages targeted at parents of primary school-aged children.

2 Methodology

2.1 Research Methodology

The research adopted a quantitative approach, using a nationally representative sample of parents with primary school-aged children, typically aged between 4 and 12 years.

The online survey was hosted by Amárach Research and fieldwork took place between 12th November and 3rd December 2024, achieving 591 successful interviews.

2.2 Sampling Approach

The sampling approach used was a quota-based methodology, similar to those employed in many large-scale national surveys. To ensure a nationally representative sample of parents with primary school-aged children, quotas were set based on the demographics of the parents and the age of their children.

2.2.1 Parent Demographics

Quotas were established for parents of primary school-aged children based on gender, age, socio-economic status and region (CSO 2022/2023):

Gender

| | |
|--------|-----|
| Male | 49% |
| Female | 51% |

Age

| | |
|-------|-----|
| 18-24 | 8% |
| 25-34 | 16% |
| 35-44 | 48% |
| 45-54 | 25% |
| 55+ | 4% |

Socio-economic status

| | |
|------|-----|
| ABC1 | 51% |
| C2DE | 49% |

Region

| | |
|------------------|-----|
| Dublin | 26% |
| Rest of Leinster | 29% |
| Munster | 27% |
| Connaught/Ulster | 18% |

2.2.2 Age of Primary School Children

Minimum quotas were also set to ensure representation across specific child age groups (CSO 2023).

| Age of primary school children ⁸ | |
|---------------------------------------------|-----|
| 4 - 6 years (early childhood) | 30% |
| 7 - 9 years (middle childhood) | 34% |
| 10 - 12 years (late childhood) | 36% |

This approach ensured that the sample accurately reflected the demographics and experiences of parents with children in these age ranges.

2.2.3 Sample Achieved

The research achieved a sample of 591 completed interviews. The margin of error for this sample size is +/- 4.0% at a 95% confidence interval.

While all efforts were made to achieve a fully representative survey sample (using the quota controls outlined above), certain variables were weighted to proportionately reflect the population of parents of primary school-aged children. The weighting was carried out within accepted parameters to ensure the data accurately represents the broader population.

2.3 Survey Instrument

Amárach collaborated with NCCP to design the online survey (Appendix A). The NCCP steering group provided a draft of the main survey instrument, and Amárach worked closely with them to review and finalise the questions, ensuring the survey had an appropriate length and structure. The final version was approved by the NCCP and subsequently scripted for data collection using Voxco, an international industry-standard software.

A soft launch was conducted prior to the main launch to test the survey for clarity, functionality, and timing, ensuring a smooth experience for respondents in the main data collection phase. During the main fieldwork, the average survey completion time was approximately 10 minutes.

2.3.1 Recruitment / Consent

Survey respondents were presented with a detailed consent form at the start of the survey. This form outlined the survey's purpose, explained how the data would be used, and informed respondents of their right to withdraw from the survey at any time without obligation.

⁸ Source: Population and Migration Estimates (CSO 2023)

Before commencing the survey, respondents were reassured of the following:

- All data provided would be fully anonymised during processing, analysis and reporting.
- Confidentiality would be upheld at every stage of the process.
- All data would be securely stored.

3 Nationally Representative Survey Results

This section of the report presents the findings from the nationally representative online survey of parents of primary school-aged children in Ireland.

Please note: Percentages in this report have been rounded to the nearest one decimal place for consistency and readability.

3.1 Respondent Profile

3.1.1 Gender and Age

The sample was representative of parents with primary school-aged children. Quotas were set for gender, age, socio-economic status, and region to align with the Central Statistics Office's (CSO) 2022 census data.

In line with these quotas, 49% of parents in the sample were male, and 51% were female. The age distribution, also pre-determined, is shown below in Figure 3.1. Nearly half of the parents (48%) were aged between 35 and 44, while 24% were younger parents aged 18-34, and 28% were aged 45 or older.

(Base: All respondents – 591)

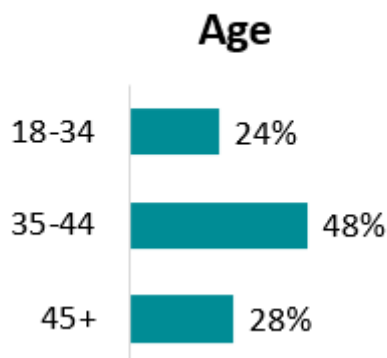


Figure 3-1 Age distribution of respondents

3.1.2 Socio-economic Group

The majority of parents (51%) belonged to the socio-economic group ABC1 (professionals, managers, and higher-income households), while 49% were in the C2DE (skilled and unskilled workers, lower-income households) group. Once again, these proportions were determined by quotas to ensure the sample was representative.

3.1.3 Region

The sample was also representative of parents across the four regions. Dublin residents accounted for 26% of respondents, 29% were from the Rest of Leinster, 27% from Munster, and 18% from Connacht/Ulster.

(Base: All respondents – 591)

Region

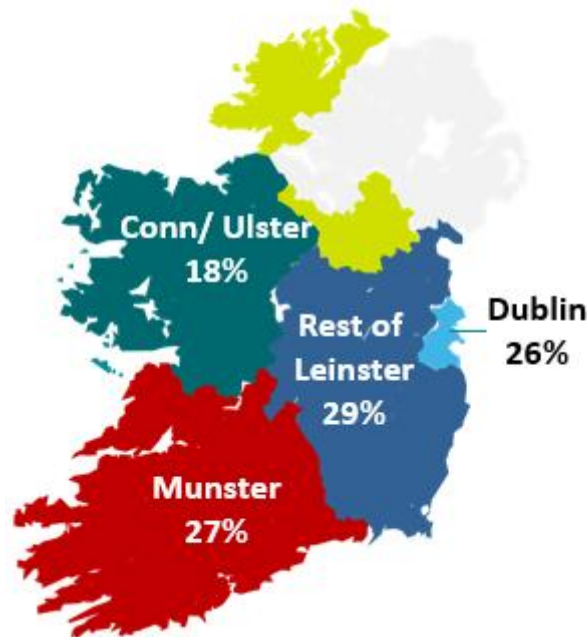


Figure 3-2 Regional distribution of respondents

3.1.4 Age Bands of Primary School Children

Minimum quotas were also established to ensure adequate representation of parents with children in specific primary school age groups. Over 4 in 10 parents (41%) had at least one child aged 4-6 in the early childhood group, 51% had a child aged 7-9 in the middle childhood group, and 52% had a child aged 10-12 in the late childhood group.

3.2 Parents of Primary School-aged Children

3.2.1 Skin Type

At the beginning of the survey, respondents were introduced to the Fitzpatrick Skin Type Scale⁹ (Appendix B). This numerical classification system categorises human skin based on the amount of melanin present, helping to predict the risk of sunburn.

When asked to describe their natural (non-sun-exposed) skin colour, nearly two-thirds (64%) identified as having 'white skin,' 16% selected 'pale white skin,' and 14% chose 'light brown skin.' A small minority (6%) reported having a darker skin tone (Figure 3.3).

⁹ Fitzpatrick TB. "The validity and practicality of sun-reactive skin types I through VI." Archives of Dermatology. 1988 Jun;124(6):869-71. PubMed: 3377516

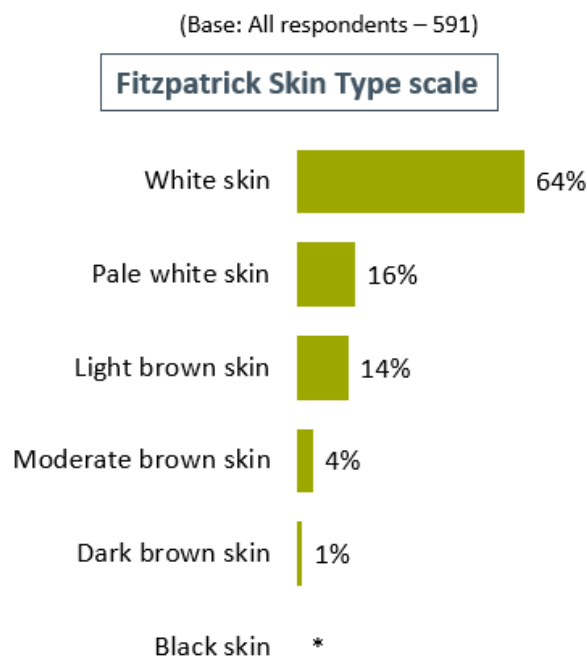


Figure 3-3 Self-reported natural (non-sun-exposed) skin colour

Respondents were asked to describe how their skin reacts to sun exposure without protection. Not surprisingly given their skin colour, the majority reported strong or moderate sun sensitivity: 13% claimed their skin ‘burns very easily, never tans,’ 23% said their skin ‘burns easily, rarely tans,’ and the largest proportion (39%) stated their skin ‘sometimes burns, gradually tans.’ A smaller proportion reported low sun sensitivity: 18% felt their skin ‘rarely burns, tans easily,’ while a small minority (7%) claimed their skin ‘rarely or never burns’ and ‘tans darkly’ (Figure 3.4). Interestingly, although only 5% of respondents self-identified as having skin type IV or above, 25% reported sun sensitivity consistent with these darker skin types.

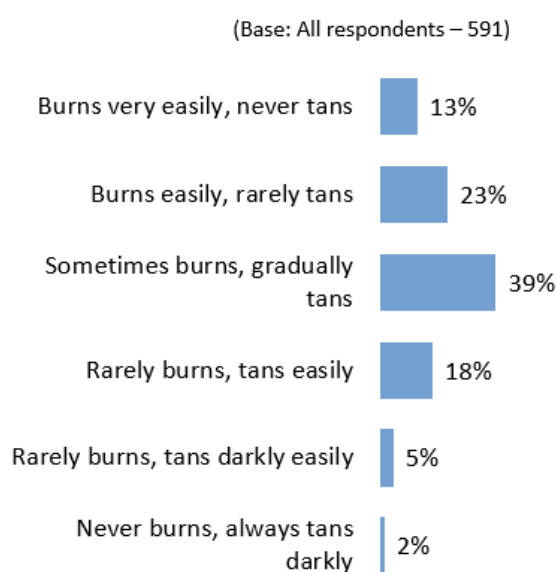


Figure 3-4 What happens to skin when exposed to sun as reported by respondents

3.2.2 Time Spent Abroad or on Sunny Holidays

Approximately two-thirds (68%) of respondents have spent time abroad this year (2024) or on holidays in typically sunny locations, with 60% spending one week or longer in such places. Nearly a third (32%) have not spent any time abroad or on holidays in sunny destinations (Figure 3.5).

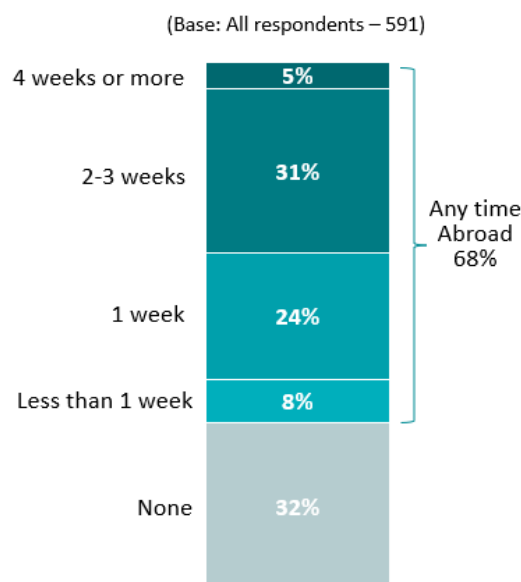


Figure 3-5 Number of weeks spent abroad or on holidays in sunny places

Table 3.1 shows the number of weeks spent abroad or on holidays in sunny places, broken down by demographics. Males (78%), ABC1s (79%), and Dublin residents (76%) were the most likely to have spent time abroad or on holidays in typically sunny locations, while females (58%) and C2DEs (56%) were the least likely.

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | | SOCIAL CLASS | | REGION | | | |
|------------------|-------|--------|--------|-------|-------|-----|--------------|-----------|--------|-------------------------|---------|-------------|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ | ABC1 F50+ | C2DE F50- | Dublin | Leinster (excl. Dublin) | Munster | Conn/Ulster |
| N= | 591 | 290 | 301 | 142 | 284 | 166 | 302 | 290 | 154 | 171 | 160 | 107 |
| 4 weeks or more | 5% | 7% | 4% | 2% | 6% | 7% | 6% | 5% | 9% | 6% | 5% | 1% |
| 2-3 weeks | 31% | 37% | 25% | 31% | 28% | 34% | 39% | 22% | 40% | 25% | 32% | 26% |
| 1 week | 24% | 24% | 23% | 23% | 23% | 26% | 25% | 22% | 24% | 23% | 23% | 27% |
| Less than 1 week | 8% | 10% | 6% | 16% | 6% | 4% | 9% | 6% | 4% | 9% | 9% | 10% |
| None | 32% | 22% | 42% | 28% | 36% | 29% | 21% | 44% | 24% | 37% | 32% | 37% |

Table 3-1 Number of weeks spent abroad or on holidays in sunny places

3.2.3 Incidence of Sunburn: Frequency This Year (2024)

When asked about sunburn occurrences this year (either at home or abroad), the largest proportion of parents (37%) reported not getting sunburned at all. Approximately one-third (32%) experienced sunburn once, while 31% reported being sunburned multiple times (Figure 3.6).

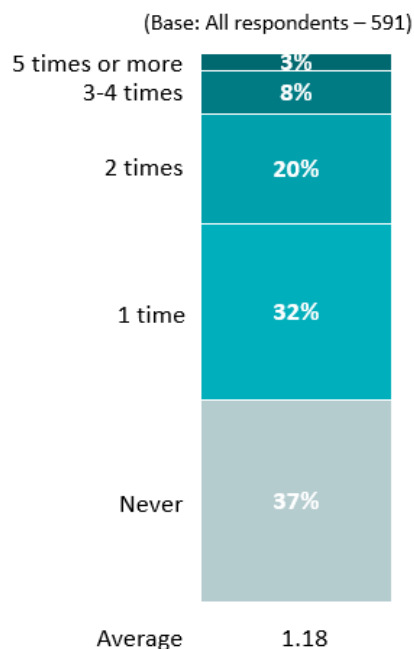


Figure 3-6 Frequency of sunburn this year (at home or abroad)

Table 3.2 shows the number of sunburn occurrences this year, broken down by gender and age. Parents in the younger cohort (aged 18-34) were the most likely to report multiple sunburns, with an average of 1.57 occurrences so far this year, compared to the total sample average of 1.18.

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | | REGION | | | |
|-----------------|-------|--------|--------|-------|-------|------|--------|-------------------------|---------|--------------|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ | Dublin | Leinster (excl. Dublin) | Munster | Conn/ Ulster |
| N= | 591 | 290 | 301 | 142 | 284 | 166 | 154 | 171 | 160 | 107 |
| 5 times or more | 3% | 2% | 4% | 5% | 3% | 2% | 4% | 3% | 3% | 3% |
| 3-4 times | 8% | 9% | 7% | 7% | 10% | 4% | 7% | 6% | 9% | 11% |
| 2 times | 20% | 22% | 18% | 36% | 14% | 17% | 21% | 24% | 16% | 19% |
| 1 time | 32% | 30% | 34% | 28% | 35% | 31% | 32% | 27% | 36% | 34% |
| Never | 37% | 36% | 38% | 24% | 38% | 46% | 36% | 40% | 36% | 34% |
| Average | 1.18 | 1.20 | 1.16 | 1.57 | 1.14 | 0.90 | 1.23 | 1.10 | 1.17 | 1.25 |

Table 3-2 Frequency of sunburn this year (at home or abroad)

3.2.4 Sun Protection Behaviours

The next section of the survey focused on sun protection behaviours among parents of primary school-aged children. Respondents were asked how often they use various sun protection measures when spending time outdoors at home in Ireland and while abroad or on holidays in a sunny country (if applicable). They were also asked about the sun protection factor (SPF) they typically use and how often they reapply sunscreen.

Frequency of Using Sun Protection Measures

Figure 3.7 shows that the most frequently used sun protection measures by parents at home in Ireland are wearing sunglasses (73% always or often), applying sunscreen (62%), and using t-shirts or long sleeves (62%).

Sunscreen and sunglasses are also the most commonly used sun protection measures abroad, with 82% of those who have spent time abroad reporting they use them always or most often. Shade or a sun umbrella is next at 64%. Wearing a t-shirt or long sleeves is the least common, with 56% using this measure always or often while abroad or on holiday in sunny countries.

Overall, the results indicate that the use of sun protection measures such as sunglasses, sunscreen, shade or a sun umbrella and clothing, are more common when individuals are in a sunny environment abroad.

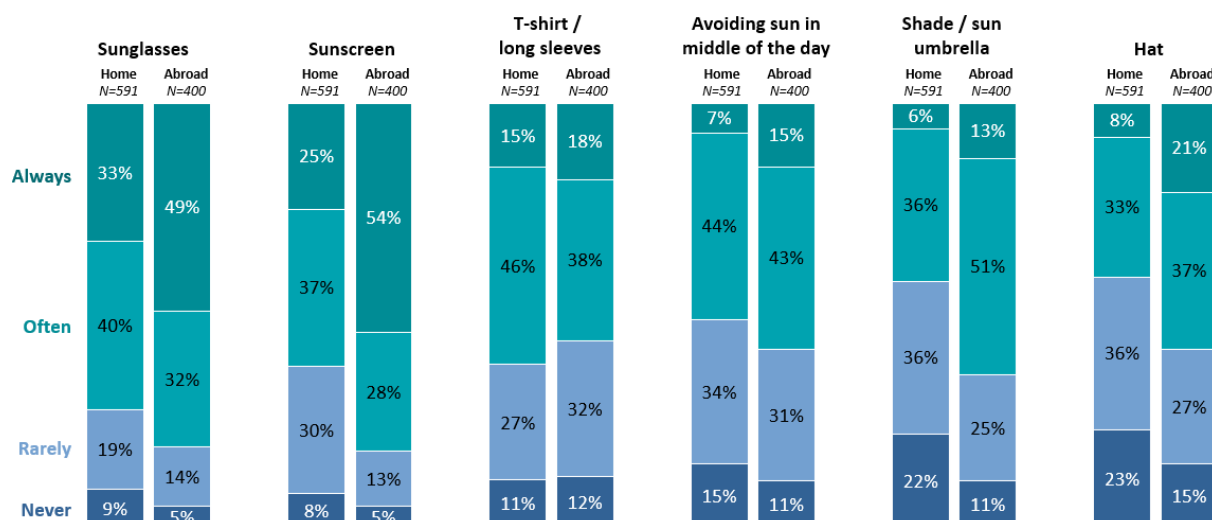


Figure 3-7 Frequency of using sun protection measures

The research shows notable differences in the use of sun protection measures at home and abroad when broken down by gender, age, and social class (see Figure 3.8).

At home in Ireland, males are more likely than females to always or most often wear a hat outdoors (53% vs 29%), while females are more likely than males to wear sunglasses (78% vs 68%).

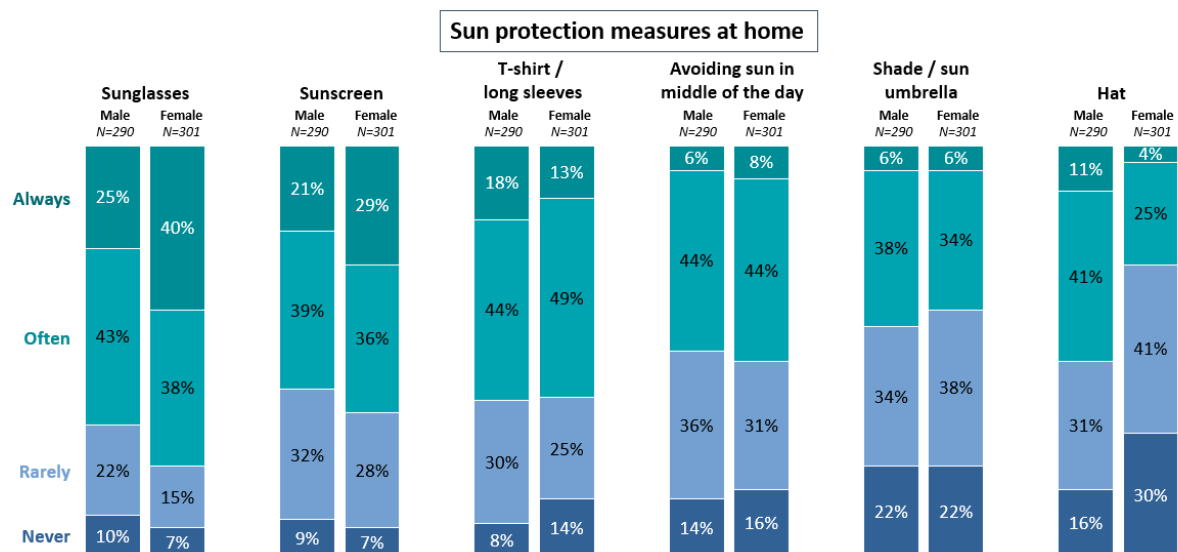


Figure 3-8 Frequency of using sun protection measures at home by gender (n=591)

As shown in Figure 3.9, the youngest cohort of parents (18–34) uses sunglasses and sunscreen less frequently than older age groups when spending time outdoors in Ireland. Half (50%) of respondents aged 18–34 rarely or never use sunscreen at home, compared to 38% of 35–44-year-olds and 27% of those aged 45 or older.

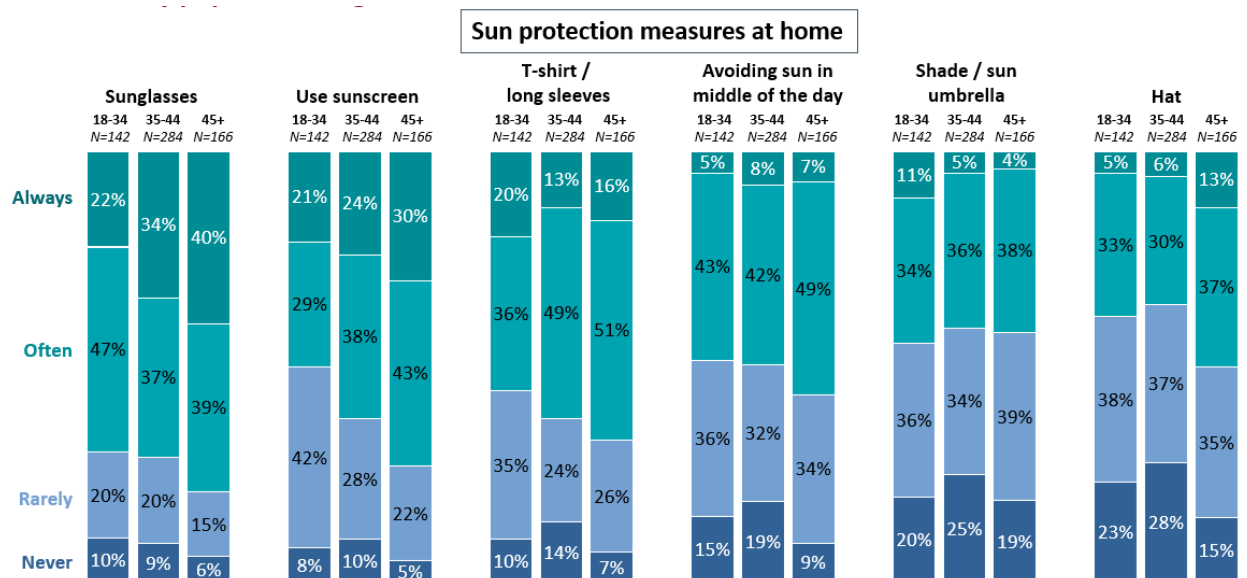


Figure 3-9 Frequency of using sun protection measures at home by age (n=591)

The results also indicate that sunscreen use at home in Ireland is more frequent among socio-demographic group ABC1 compared to C2DE, with 67% of ABC1s using sunscreen always or most often, compared to 57% of C2DEs. Similarly, a higher proportion of ABC1s use shade or a sun umbrella (50% vs 35%).

While abroad or on holidays in a sunny country, males are more likely than females to always or most often wear a t-shirt or long sleeves (67% vs 42%), a hat (62% vs 53%), and

avoid the sun during the middle of the day (62% vs 53%). Females, however, are more likely than males to wear sunglasses (89% vs 76%) and use sunscreen (89% vs 77%).

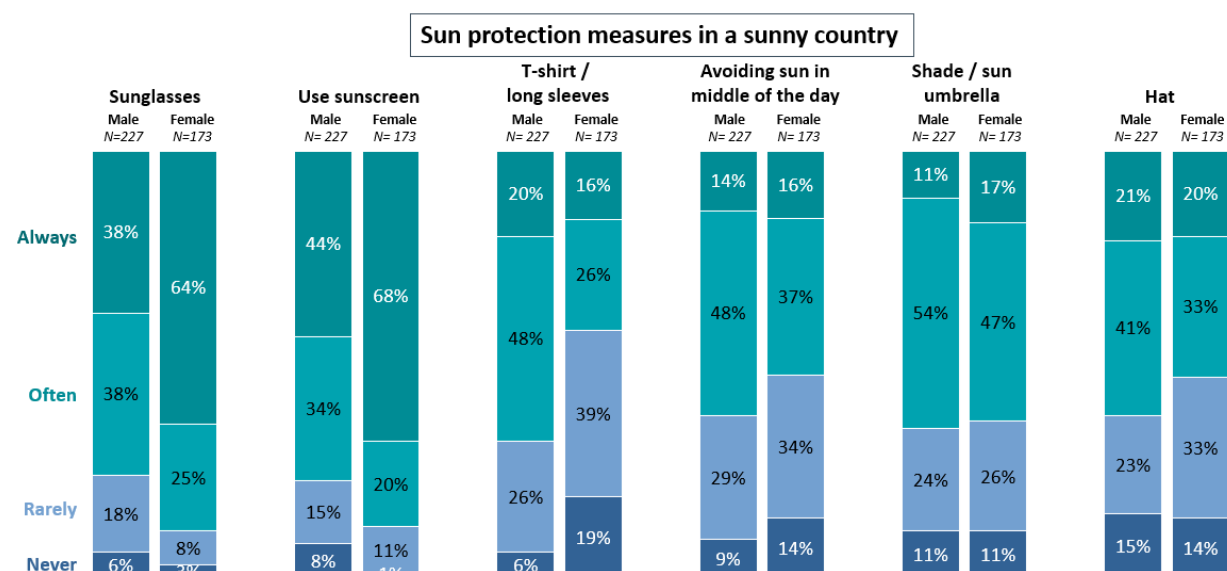


Figure 3-10 Frequency of using sun protection measures abroad by gender (n=400)

As shown in Figure 3.11, the youngest cohort of parents (18–34) uses sun protection measures the least frequently, while those aged 45+ use them the most. Over 3 in 10 (31%) of respondents aged 18–34 rarely or never use sunscreen while abroad, compared to 16% of 35–44-year-olds and 9% of those aged 45 or older.

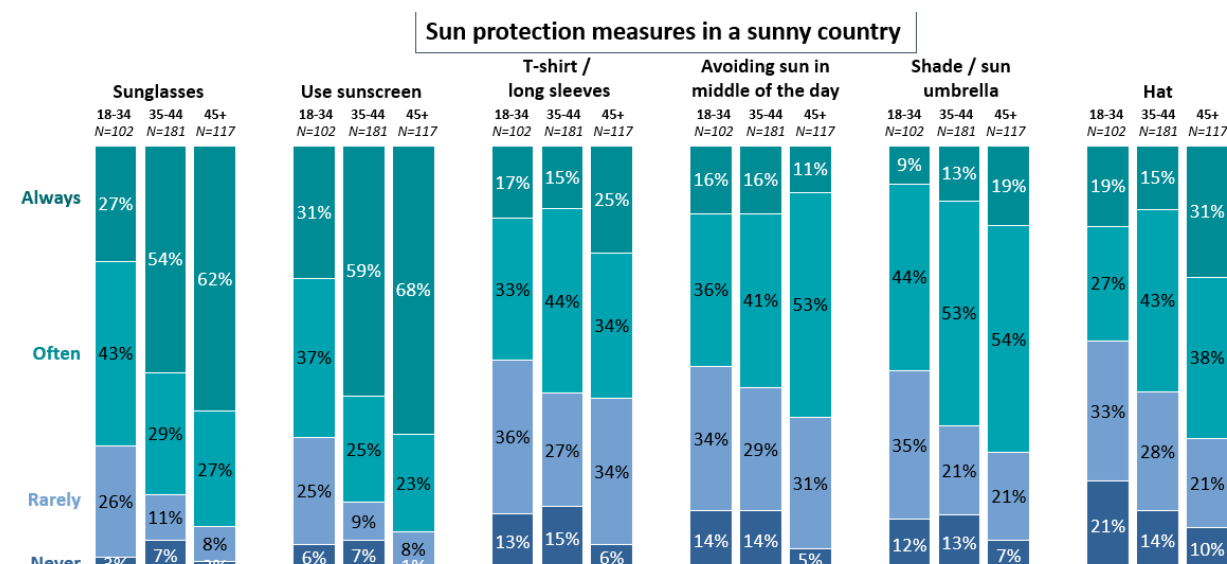


Figure 3-11 Frequency of using sun protection measures abroad by age (n=400)

The results suggest that sunscreen use while abroad does not vary as much by social class as at home in Ireland – 83% of ABC1s use sunscreen always or often abroad compared to 81% of C2DEs.

Use of Sunscreen

More detailed questions were then asked about sunscreen use. Respondents were first asked about the sun protection factor (SPF) they typically use when applying sunscreen, both at home in Ireland and while abroad or on holiday in a sunny country. The results are shown in Figure 3.12 below.

At home in Ireland, the majority of parents (73%) use sunscreen containing SPF 30 or higher, with 38% opting for SPF 50+. A small minority (18%) use SPF 15 or lower, and 7% reported that they never use sunscreen in Ireland, which is consistent with the proportion who said they never use it in the previous question (see Figure 3.7).

A similar proportion (35%) reported using sunscreen with SPF 30 while abroad or on holiday in a sunny country. However, the proportion using SPF 50+ increased to 49%. A smaller minority (12%) use SPF 15 or lower, and only 3% stated that they never use sunscreen while abroad.

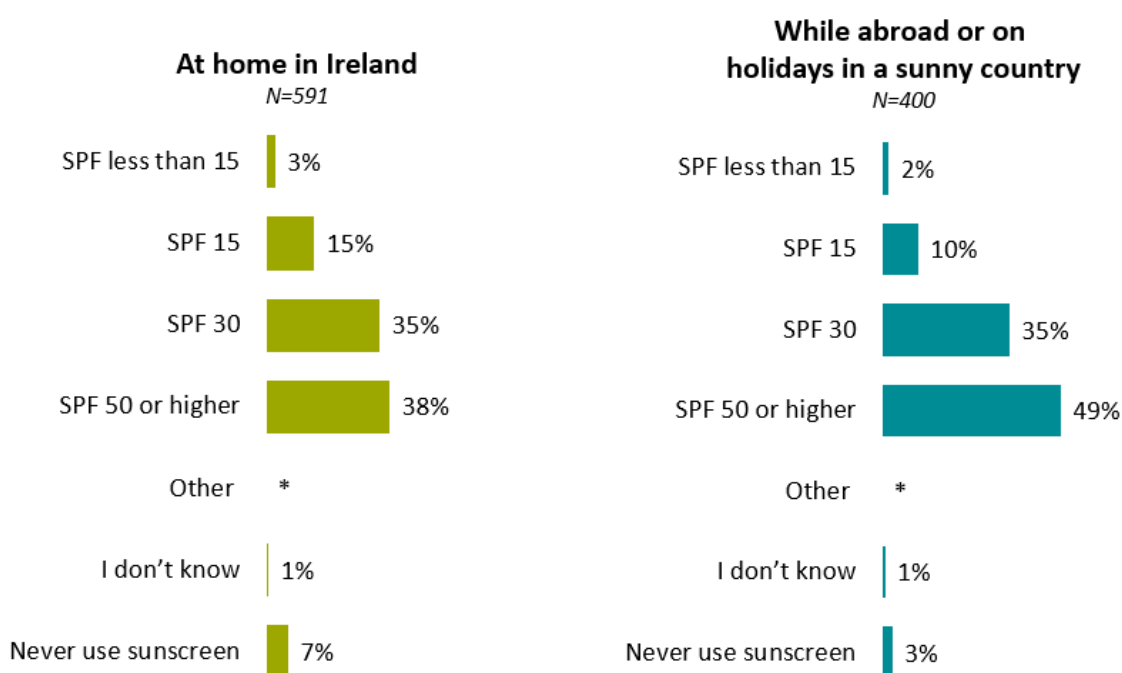


Figure 3-12 Sun protection factor (SPF) typically use

When broken down by gender, a higher proportion of females (44%) use SPF 50 or higher at home in Ireland compared to males (33%). The youngest cohort (18–34) is the most likely to use SPF 15 or lower, with 26% opting for this level of protection.

Similarly, a higher proportion of females (57%) use SPF 50 or higher while abroad, compared to males (43%). The majority (69%) of those aged 18–34 use SPF 30 or lower, whereas the majority of those aged 35–44 and 45+ use SPF 50 or higher (58% and 53%, respectively).

Users of sunscreen were then asked how often they typically reapply sunscreen, both at home in Ireland and while abroad or on holidays in a sunny country. The results are shown in Figure 3.13.

While at home in Ireland, 35% of respondents typically reapply sunscreen every 3–4 hours. A smaller proportion reapply every hour (6%) or every two hours (11%). Nearly a quarter (23%) apply only once, believing it lasts all day, while 25% reported having no set pattern for reapplication.

The data shows that respondents tend to reapply sunscreen more frequently when abroad, with 31% doing so every two hours and 39% every 3–4 hours. In contrast to their behaviour at home, fewer respondents apply only once, believing it lasts all day (11%), and even fewer reported having no set pattern (9%).

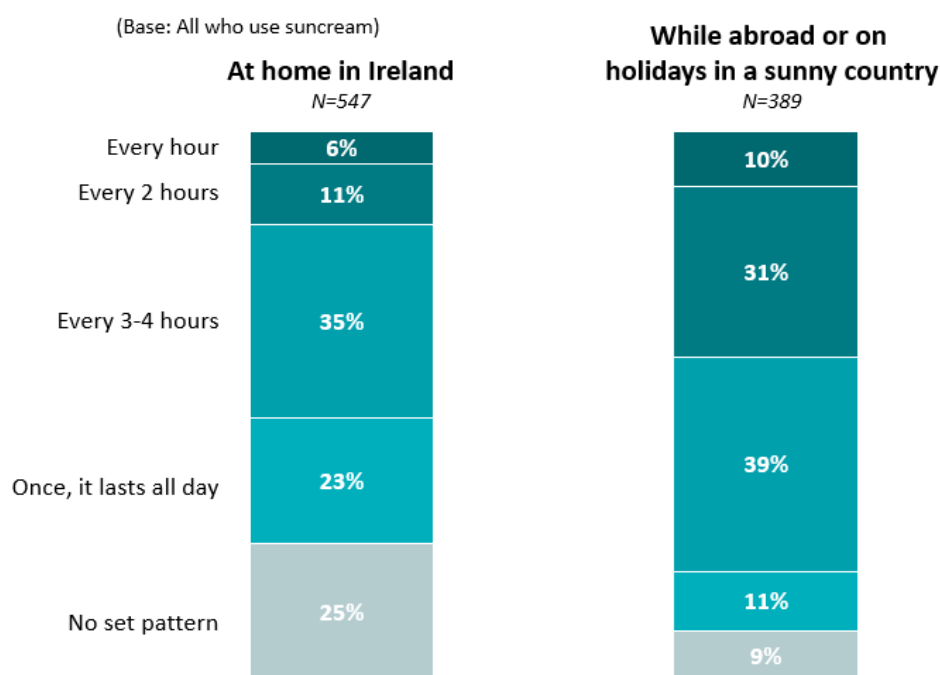


Figure 3-13 Frequency of reapplying sunscreen

Interestingly, the data shows that the youngest cohort tends to reapply sunscreen more frequently at home in Ireland. A higher proportion of 18–34-year-olds (34%) reapply sunscreen every hour or every two hours, compared to 12% of 35–44-year-olds and 10% of those aged 45 and older. Similarly, while abroad, the youngest cohort of parents reapply sunscreen most frequently, with 18% doing so every hour, compared to just 10% of the total sample.

3.2.5 Sunbed Usage

The survey explored respondents' experiences and behaviours related to sunbed usage through a series of questions. Initially, respondents were asked if they had ever used a

sunbed, providing insight into the prevalence of sunbed exposure among parents of primary school-aged children. For those who had used sunbeds, subsequent questions delved deeper into their current usage habits and the frequency of use. Additionally, respondents who reported using sunbeds currently were asked about the locations where they accessed the sunbed.

Overall, 40% of respondents reported having ever used a sunbed (tanning bed or solarium). As shown in Table 3.3, usage was highest among females (50%) and those aged 18-34 (56%). In contrast, the majority of males (70%) and individuals aged 35+ reported never having used a sunbed.

This result closely aligns with the findings from the 2019 Skin Cancer Prevention Survey¹⁰. Among a nationally representative sample of 1051 respondents aged 18 and over, 40% reported having ever used a sunbed.

(Base: All respondents – 591)

| | GENDER | | | AGE | | | SOCIAL CLASS | | REGION | | | |
|------------|--------|------|--------|-------|-------|-----|--------------|--------------|--------|-------------------------------|---------|-----------------|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ | ABC1 F50+ | C2DE F50- | Dublin | Leinster (excl. Dublin) | Munster | Conn/ Ulster |
| N= | 591 | 290 | 301 | 142 | 284 | 166 | 302 | 290 | 154 | 171 | 160 | 107 |
| Yes | 40% | 28% | 50% | 56% | 38% | 29% | 38% | 41% | 40% | 39% | 39% | 40% |
| No | 59% | 70% | 49% | 42% | 62% | 69% | 60% | 58% | 60% | 59% | 60% | 58% |
| Don't Know | 1% | 2% | 1% | 2% | * | 2% | 1% | 1% | 0 | 2% | 1% | 2% |

Table 3-3 Whether sunbed ever used (tanning bed or solarium)

In this study, of the 234 respondents who have ever used a sunbed, approximately 1 in 7 (15%) reported that they currently use one. This represents 6% of our nationally representative sample of parents with primary school-aged children who currently use a sunbed.

The survey identified 34 current sunbed users, who were asked additional questions about the frequency and location of their sunbed usage. However, due to the small sample size, these results should be interpreted with caution and are, therefore, not included in this report.

¹⁰ <https://www.hse.ie/eng/services/list/5/cancer/prevention/skin-cancer-prevention-survey-2019-national-cancer-control-programme.pdf>

3.3 Primary School Children

The next section of the survey asked parents to provide information about one of their primary school-aged children. If they had more than one child in this age group, they were asked to base their responses on the child whose birthday was closest to the survey date. Parents with only one primary school-aged child answered questions regarding that child.

3.3.1 Gender, Age and Primary School Class

More than half of all respondents (52%) provided answers regarding a female child in primary school, while 47% answered questions about a male child. The remaining 1% chose not to disclose the gender of their child.

The largest group of parents (37%) answered questions about a child aged 10-12 years, followed by 35% answering about a child aged 7-9 years, and 28% about a child aged 4-6 years. This means that each child age group was well-represented in this section of the survey.

Figure 3.14 below shows that responses were evenly distributed across primary school classes. Just over a quarter (27%) of parents answered questions about a child in Junior or Senior Infants, 21% about a child in 1st or 2nd class, 23% in 3rd or 4th class, and 29% in 5th or 6th class.

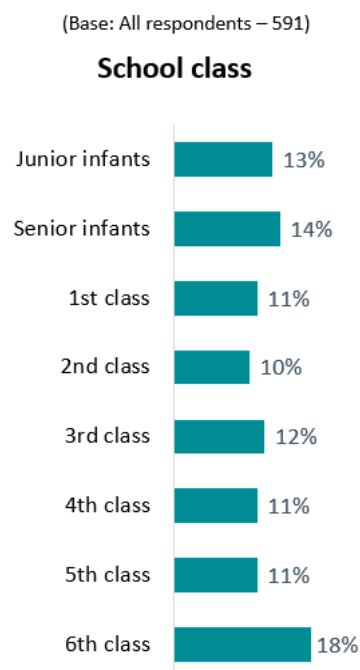


Figure 3-14 Primary school class of child

At the beginning of this section, parents were asked whether they are more concerned about protecting their child's skin from the sun compared to their own. The vast majority (82%) reported being more concerned about their child's protection, while 17% said they

were equally concerned about both. A small percentage of parents indicated they are more concerned about their own protection.

These findings suggest that parents prioritise their child's sun protection, which may reflect a greater awareness of the risks of sun exposure for children, including skin damage and the long-term risk of skin cancer.

3.3.2 Skin Type

Parents were re-shown the Fitzpatrick Skin Type Scale (Appendix B) and asked to select the image that best represented their child's natural (non-sun-exposed) skin colour.

The majority of parents (60%) identified their child's natural skin colour as 'white skin,' followed by 19% selecting 'pale white skin' and 16% choosing 'light brown skin.' As shown in Figure 3.15 below, darker skin tones were less common overall. Not surprisingly, these findings closely align with the skin profile of parents, as identified earlier in the survey.

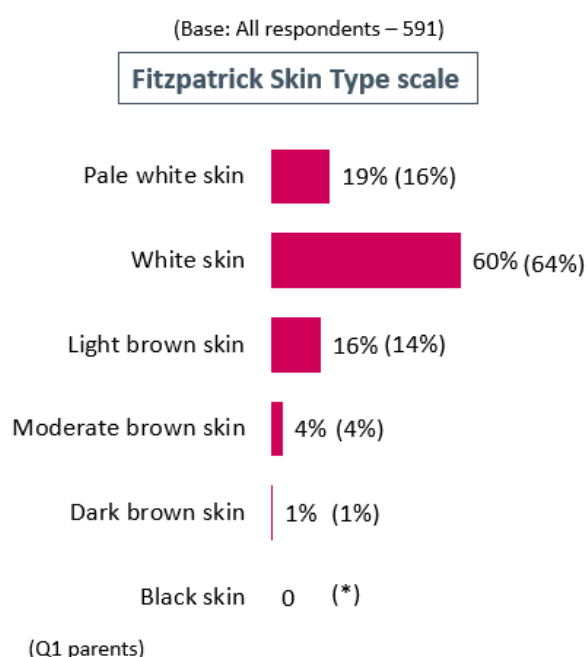


Figure 3-15 Self-reported natural (non-sun-exposed) skin colour of primary school child

Parents were then asked to describe how their child's skin reacts to sun exposure without protection. The results are shown in Figure 3.16. Once again, the majority reported strong or moderate sun sensitivity. The largest group (38%) indicated that their child's skin 'sometimes burns, gradually tans' (compared to 39% for parents). A combined 29% of parents reported that their child's skin either 'burns very easily, never tans' or 'burns easily, rarely tans' (vs 36% for parents). In contrast, a higher proportion (33%) reported that their child's skin 'rarely burns, tans easily,' 'rarely burns, tans darkly easily,' or 'never burns, always tans darkly' (vs 25% for parents).

Once again, it is notable that while only 5% of parents identified their child's skin type as IV or above, 33% reported sun sensitivity consistent with these darker skin types.

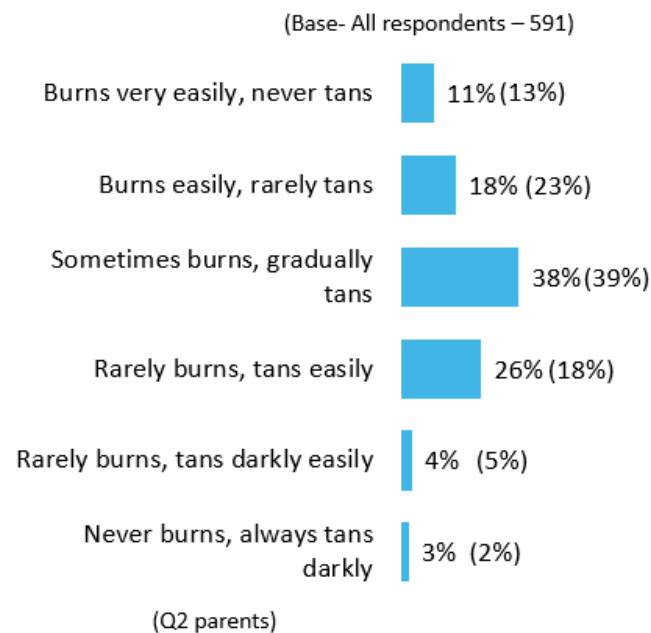


Figure 3-16 What happens to child's skin when exposed to sun as reported by parents

3.3.3 Time Spent Abroad or on Sunny Holidays

Approximately two-thirds (67%) of parents reported that their child spent time abroad or on holiday in typically sunny destinations this year (2024), while 33% indicated their child did not travel abroad (Figure 3.17). These findings are consistent with the travel patterns of parents noted earlier in the survey.

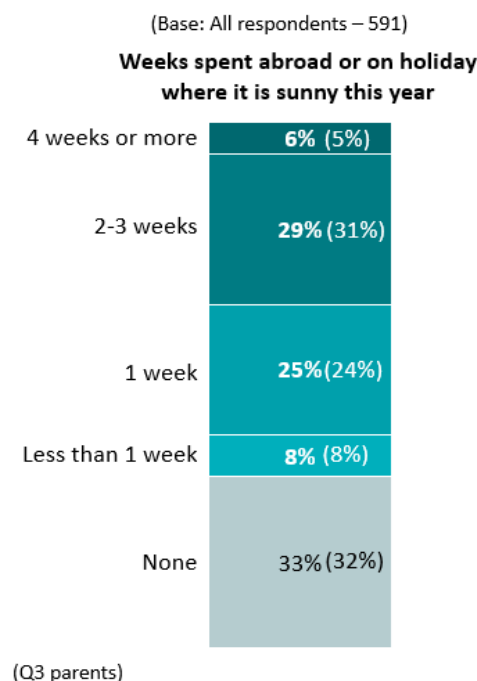


Figure 3-17 Number of weeks child spent abroad or on holidays in sunny places

3.3.4 Incidence of Sunburn: Frequency This Year (2024)

When asked about sunburn occurrences this year (either at home or abroad), the majority of parents (55%) reported that their child had not experienced sunburn (Figure 3.18). This contrasts with 37% of parents who stated that they personally avoided sunburn this year. Approximately one-quarter (26%) indicated that their child had experienced sunburn once, while 19% reported multiple instances of sunburn, which were more common among male children and those aged 4-6 (24% and 25% respectively).

Interestingly, more parents reported experiencing multiple sunburns themselves (31%) compared to their children (19%), further reinforcing the earlier finding that parents are generally more concerned about protecting their child's skin from the sun than their own.

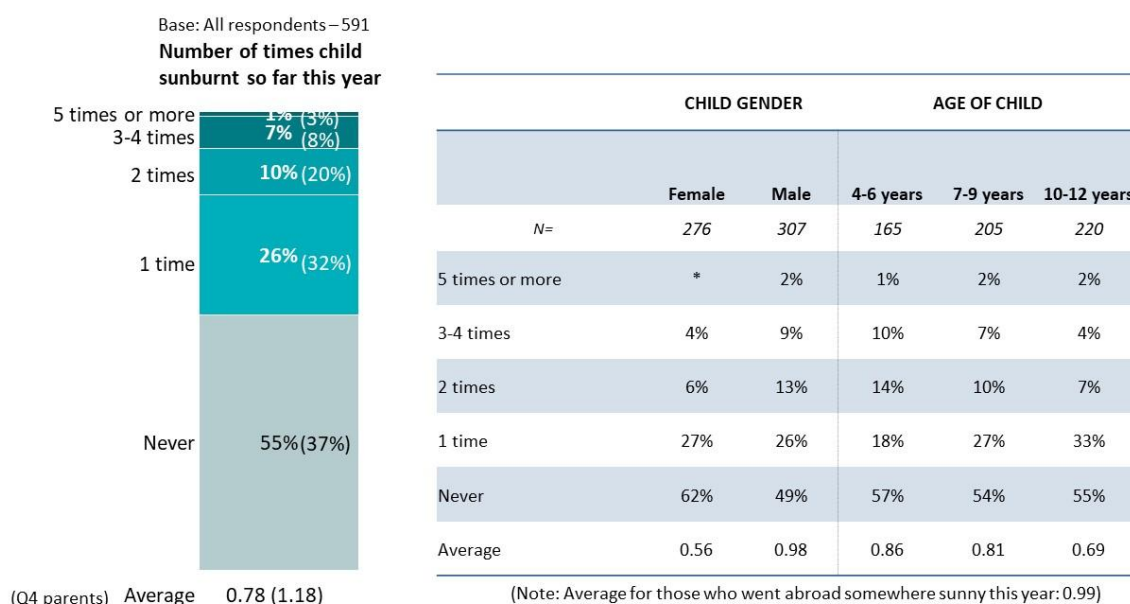


Figure 3-18 Frequency of sunburn this year (at home or abroad)

Parents were also asked how many times their child had experienced sunburn. Previous research has shown that severe burns during childhood (three or more instances before the age of 20) increase the risk of developing melanoma skin cancer, by two to four times¹¹. As shown in Figure 3.19, nearly 3 in 10 parents (29%) reported that their child had never experienced sunburn. Around one-quarter (24%) stated their child had been sunburned once, while nearly half (47%) reported multiple instances of sunburn, and 27% reported three or more sunburns.

Notably, multiple sunburns were reported more frequently among male children and those in older age groups.

¹¹ Markovic, S. N., Erickson, L. A., Rao, R. D., Weenig, R. H., et. al. (2007). Malignant melanoma in the 21st century, part 1: epidemiology, risk factors, screening, prevention, and diagnosis. Mayo Clinic proceedings, 82(3), 364–380. <https://doi.org/10.4065/82.3.364>

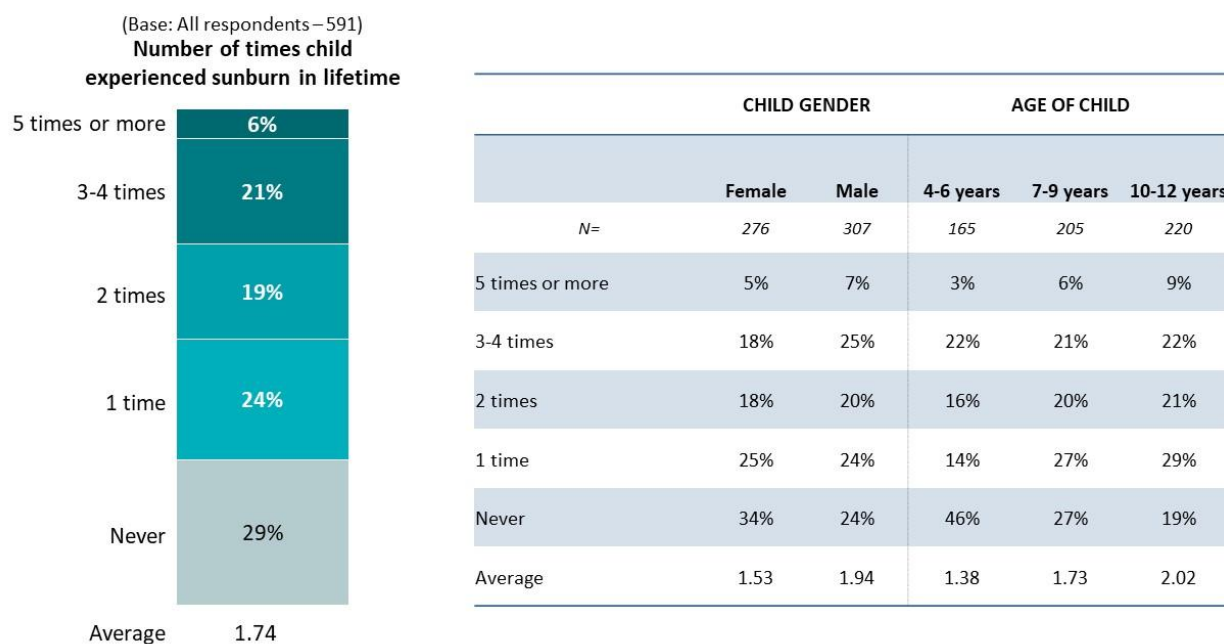


Figure 3-19 Lifetime frequency of sunburn (at home or abroad)

3.3.5 Sun Protection Behaviours

The next few questions focused on the sun protection measures parents take for their primary school-aged child. Earlier questions explored how often parents use various sun protection methods when outdoors at home in Ireland, as well as when abroad or on holiday in sunny destinations (where applicable). Parents were also asked about the sun protection factor (SPF) they typically use and how often they reapply sunscreen. In this section, the same questions were asked specifically about their primary school child.

Frequency of Using Sun Protection Measures

The most frequently used sun protection measures by parents for their child at home in Ireland are sunscreen (86% always or often), t-shirts or long sleeves (74%), and a hat (72%). Sunscreen and hats are also the most commonly used sun protection measures by parents for their child abroad (89% and 79% always or often). Sunglasses are the least frequently used sun protection measure, with 47% of parents using them always or often at home, and 62% using them abroad or on holiday in sunny countries (Figure 3.20).

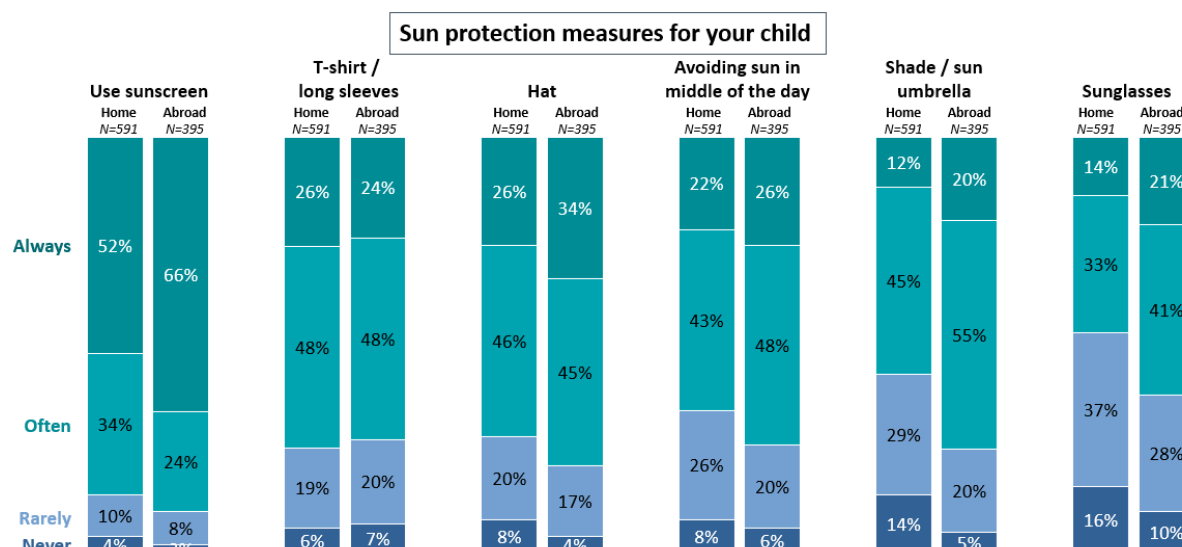


Figure 3-20 Frequency of using sun protection measures for child (n=591 at home, n=395 abroad)

The research reveals notable differences in the use of sun protection measures for children at home versus abroad, with variations observed by gender and age, but less so by social class.

In Ireland, parents of female children are more likely than parents of male children to use a hat (74% vs 69%), avoid sun exposure in the middle of the day (69% vs 62%), and seek shade or use a sun umbrella (64% vs 51%). Figure 3.21.

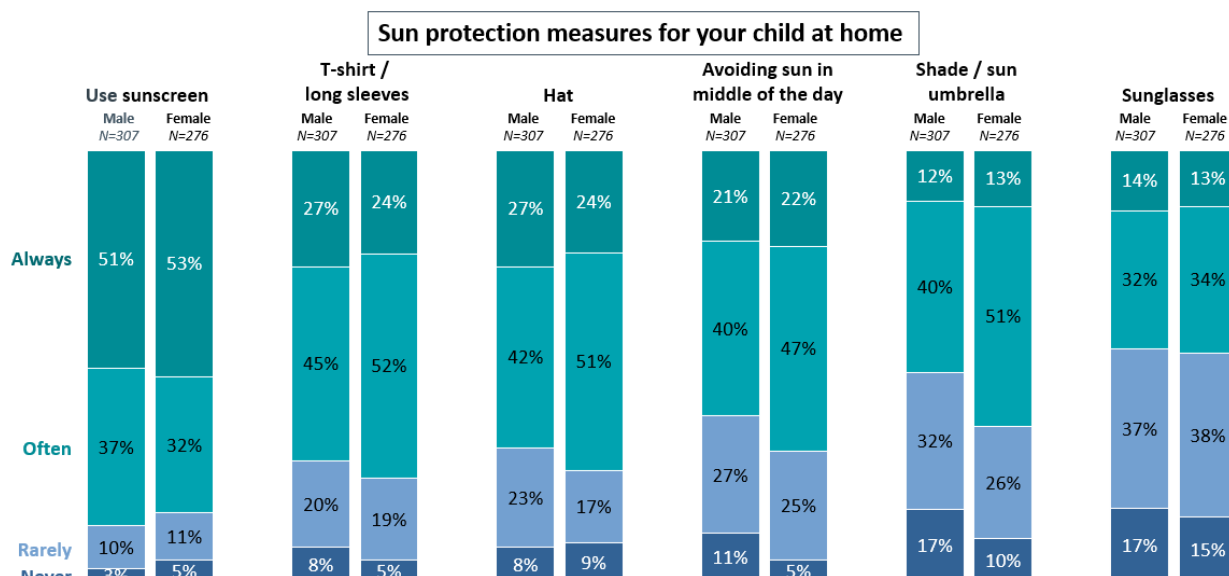


Figure 3-21 Frequency of using sun protection measures for child at home by gender (n=583)

As shown in Figure 3.22, parents are less likely to use a hat or sunglasses, or to avoid the sun during the middle of the day as their child gets older. However, the frequency of using sunscreen and t-shirts or long sleeves to protect children at home shows little variation by age.

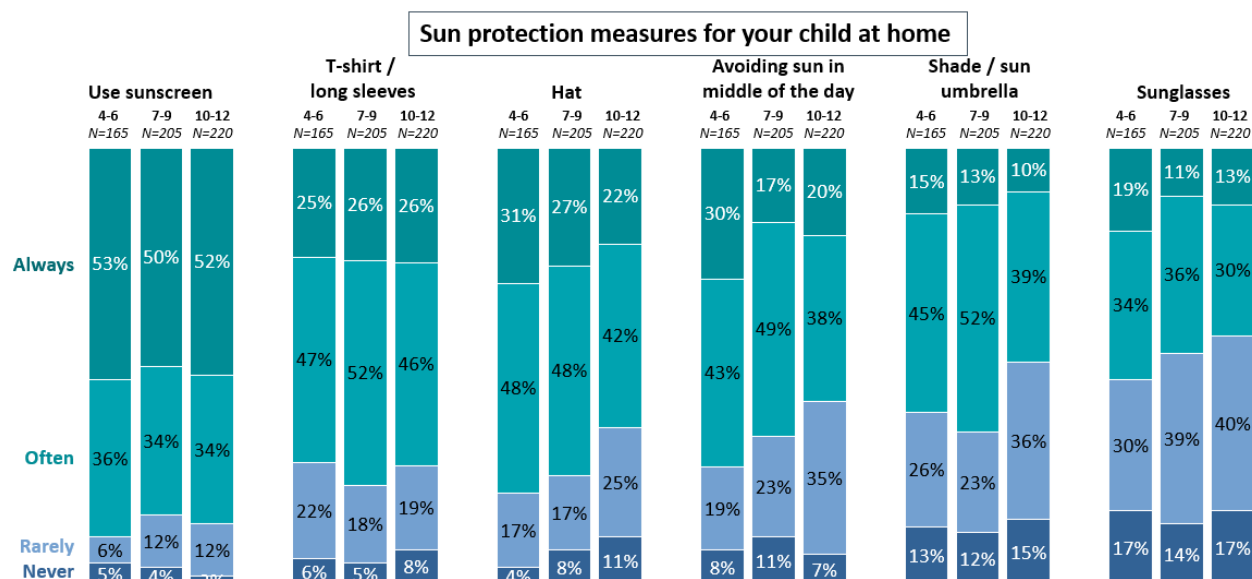


Figure 3-22 Frequency of using sun protection measures for child at home by age (n=590)

While abroad or on holiday in a sunny country, parents appear slightly more likely to use sun protection measures for their female children (Figure 3.23). For example, 78% of parents of female children always or often avoid the sun in the middle of the day (compared to 69% of parents of male children), and 82% use shade or a sun umbrella (compared to 70% for male children).

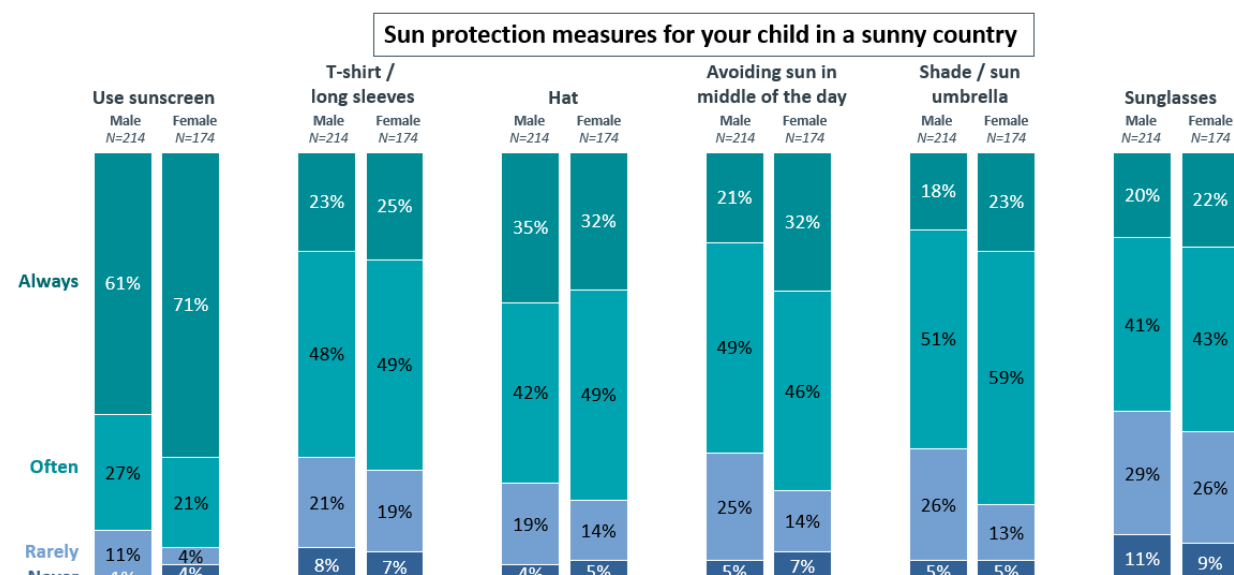


Figure 3-23 Frequency of using sun protection measures for child abroad by gender (n=388)

As shown in Figure 3.24 below, sunscreen is by far the most popular sun protection measure for children abroad. It is used more frequently on older children, with 74% of parents always applying it to 10-12-year-olds, compared to 56% for 4-6-year-olds. In contrast, hats are more commonly used for younger children, with 42% of parents always using them for 4-6-year-olds, compared to 26% for 10-12-year-olds. The frequency of use of other sun protection measures does not vary significantly by age group while abroad.

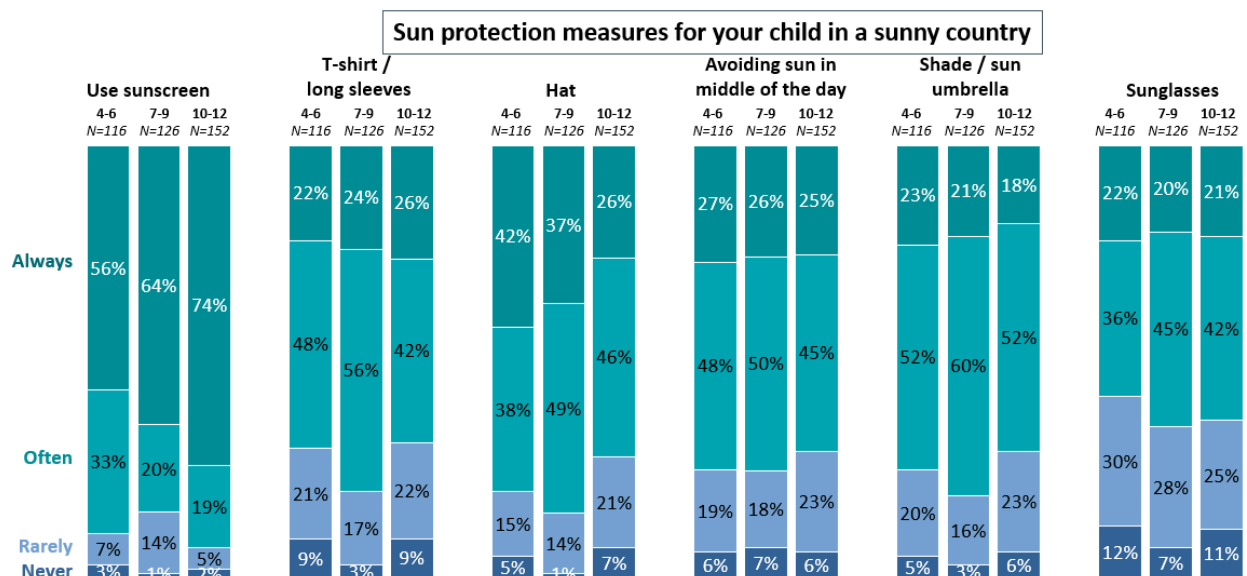


Figure 3-24 Frequency of using sun protection measures for child abroad by age (n=394)

Use of Sunscreen

Parents were also asked about the sun protection factor (SPF) they typically use when applying sunscreen to their child, both at home in Ireland and while abroad or on holiday in a sunny country. The results are set out in Figure 3.25 below, with the corresponding figures for parents included in brackets.

In Ireland, two-thirds (68%) of parents apply SPF 50 or higher to their child, 29% use SPF 30 or lower, and 2% never use sunscreen on their child. Interestingly, parents are more likely to use a lower SPF on themselves: 53% apply SPF 30 or less, while 38% use SPF 50 or higher and 7% never use sunscreen at home.

This aligns with earlier findings where 82% of parents expressed greater concern about protecting their child's skin from the sun than their own.

A larger proportion of parents reported applying sunscreen with SPF 50 or higher to their child while abroad (75%). The proportion using SPF 30 or lower was 24%, and 1% said they never use sunscreen on their child while abroad. Parents are also more likely to use a higher SPF on themselves when abroad: 47% use SPF 30 or less, while 49% apply SPF 50 or higher, and 3% never use sunscreen while abroad. Once again, parents are more likely to use a lower SPF on themselves compared to their children, even when abroad.

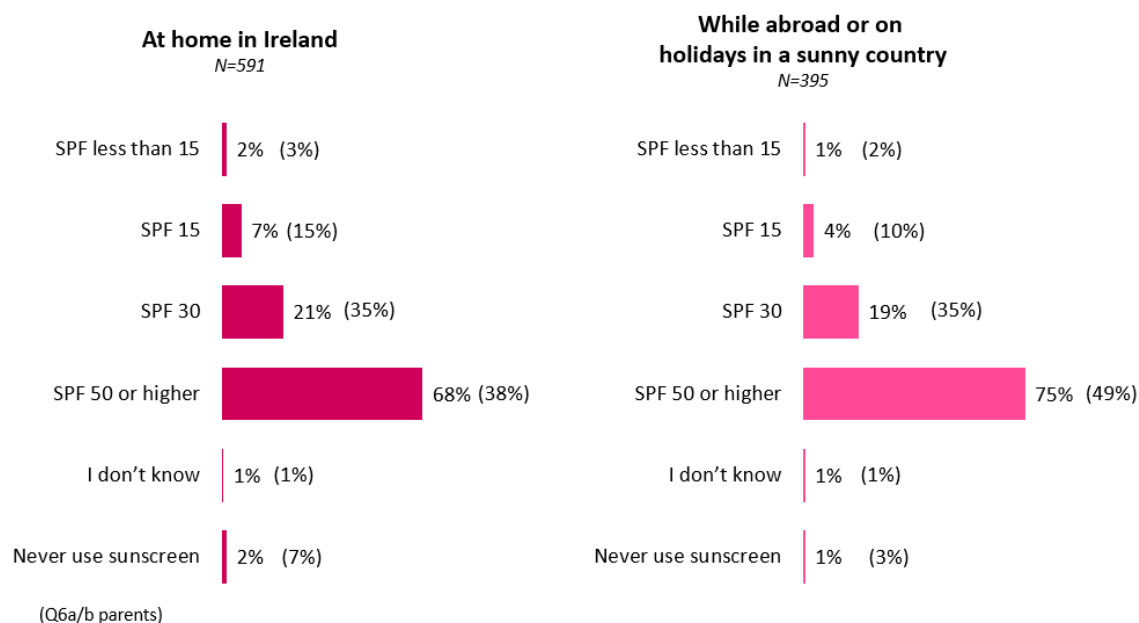


Figure 3-25 Sun protection factor (SPF) typically apply to child

Further evidence of this can be seen in Table 3.4 below, which presents a crosstab of the SPF that parents use in Ireland, compared to the SPF they typically apply to their child at home. The results show that most parents apply a higher SPF to their child than to themselves when at home in Ireland. For example, among those who typically use SPF 15 or less (n=104), 75% use SPF 30 or higher on their child. Among those who typically use SPF 30 (n=209), 61% use SPF 50 or higher on their child.

(Base: All respondents- 591)

| Sun Protection Factor At Home - Parent | | | | |
|----------------------------------------|-------|----------------|--------|------------------|
| Sun Protection Factor At Home - Child | TOTAL | SPF 15 or less | SPF 30 | SPF 50 or higher |
| N= | 591 | 104 | 209 | 227 |
| SPF less than 15 | 2% | 4% | 3% | 0 |
| SPF 15 | 7% | 21% | 6% | 1% |
| SPF 30 | 21% | 43% | 30% | 3% |
| SPF 50 or higher | 68% | 32% | 61% | 95% |
| I don't know | 1% | 0 | 1% | 0 |
| Never use sunscreen | 2% | 0 | 0 | 1% |

Table 3-4 Sun protection factor (SPF) typically apply to child at home

Similarly, most parents apply a higher SPF to their child than to themselves when abroad. Table 3.5 shows that among those who typically use SPF 30 (n=134), 59% use SPF 50 or higher on their child.

(Base: Child spent time abroad or on holidays in a place where it is usually sunny - 395)

| Sun Protection Factor Abroad - Parent | | | | |
|---------------------------------------|-------|----------------|--------|------------------|
| Sun Protection Factor Abroad - Child | TOTAL | SPF 15 or less | SPF 30 | SPF 50 or higher |
| N= | 395 | 47* | 134 | 183 |
| SPF less than 15 | 1% | 2% | 0 | 0 |
| SPF 15 | 4% | 6% | 6% | 1% |
| SPF 30 | 19% | 44% | 35% | 5% |
| SPF 50 or higher | 75% | 49% | 59% | 95% |
| I don't know | 1% | 0 | 0 | 0 |
| Never use sunscreen | 1% | 0 | 0 | 0 |

**Caution: low base*

Table 3-5 Sun protection factor (SPF) typically apply to child when abroad

When broken down by gender, a higher proportion of parents apply SPF 50 or higher to their female child (74%) compared to their male child (62%) at home in Ireland. Parents of older children also tend to use a higher SPF—71% apply SPF 50 or higher to their 10-12-year-old, compared to 63% for children aged 4-6. This may reflect the use of additional sun protection measures, such as hats, avoiding midday sun, seeking shade, and wearing sunglasses, which are more frequently applied to younger and female children.

Similarly, a higher proportion of parents apply SPF 50 or higher to their female child (82%) compared to their male child (68%) while abroad. Once again, parents of older children are more likely to use a higher SPF on them when abroad—77% apply SPF 50 or higher to their 10-12-year-olds, compared to 67% for children aged 4-6.

Users of sunscreen were asked how often they typically reapply it to their child, both at home in Ireland and while abroad or on holiday in a sunny country. The results are shown in Figure 3.26, with the corresponding figures for parents included in brackets.

Parents tend to reapply sunscreen to their child more frequently when abroad, with the majority (53%) reapplying every hour or two, compared to 34% at home. In Ireland, 39% reapply sunscreen every 3-4 hours, compared to 33% while abroad. A minority apply

sunscreen once per day (13% at home and 7% abroad), believing it lasts all day. A similar proportion report having no set pattern for applying sunscreen, either at home or abroad.

There is a notable difference in the proportion of those who follow no set pattern, with 13% at home versus only 7% abroad. A similar trend is observed among parents. This implies that parents may be more conscious of sun protection while abroad, leading to a more structured routine for themselves and their child.

These results also highlight that parents tend to reapply sunscreen more frequently to their child than to themselves, both at home and abroad. For example, at home in Ireland, 34% of parents reapply sunscreen to their child every hour or two, but only 17% do the same for themselves. Similarly, when abroad, 53% of parents reapply sunscreen to their child every hour or two, while only 41% follow this frequency for themselves.

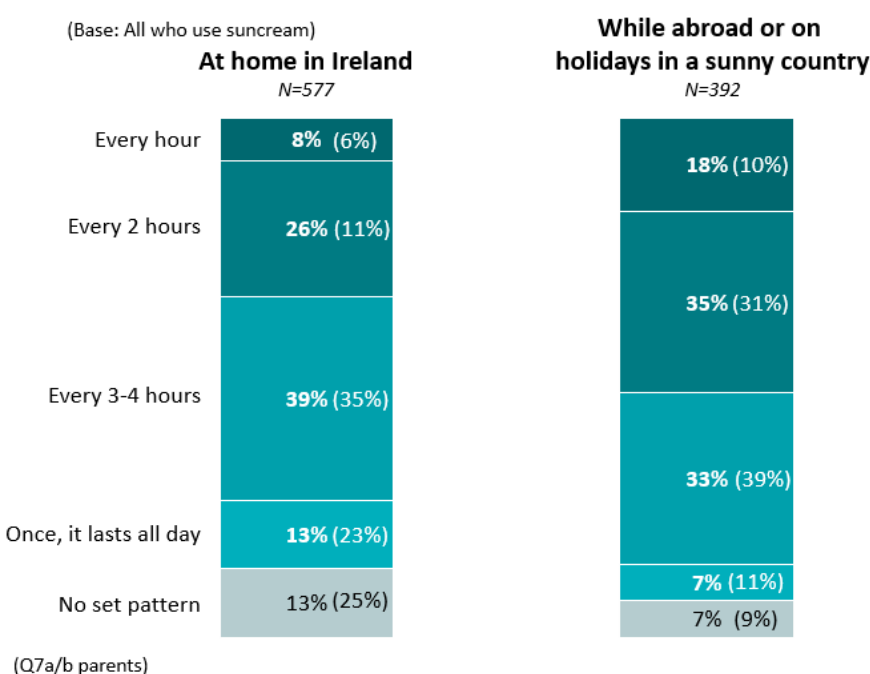


Figure 3-26 Frequency of reapplying sunscreen to child

3.4 Attitudes to Sun Exposure

The survey explored parents' perspectives on sun exposure and the protection of both their own and their children's skin from the sun. Respondents were first asked to share their opinions on sun protection for themselves, including their attitudes toward tanning, the perceived health benefits of sun exposure, and concerns about skin cancer. Following this, the survey shifted focus to parents' views on safeguarding their children's skin, with questions addressing their beliefs about the risks of sunburn, the importance of sun protection, and their willingness to allow their children to tan. These insights provide a comprehensive understanding of the factors influencing parents' sun protection practices for themselves and their children.

3.4.1 Parents' Opinions on Protecting Their Own Skin from the Sun

Firstly, parents were asked to indicate the extent to which they agree or disagree with a series of seven statements regarding their attitudes toward protecting their own skin from the sun. To minimize order bias, the statements were rotated, and a five-point agree/disagree scale was used: strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree.

Overall, the results in Figure 3.27 show that parents' attitudes towards sun exposure and protection are mixed. The majority of parents (70%) try to set a good example for their children when it comes to sun protection, with 68% expressing concern about skin cancer from sun exposure or tanning (32% 'strongly agree,' 36% 'somewhat agree').

Additionally, 77% of parents disagree that tanning through sun exposure involves no risks, with 61% 'strongly disagreeing' and 17% 'somewhat disagreeing'. A similar proportion (76%) disagree that getting sunburnt for a suntan is worth it (58% 'strongly disagree', 19% 'somewhat disagree').

However, while most parents are concerned about the risks of sun exposure and make efforts to protect their children, many still associate a suntan with feeling more attractive and healthier. Over half (53%) feel more attractive with a suntan, 46% feel healthier and 42% believe suntanning is necessary for Vitamin D production.

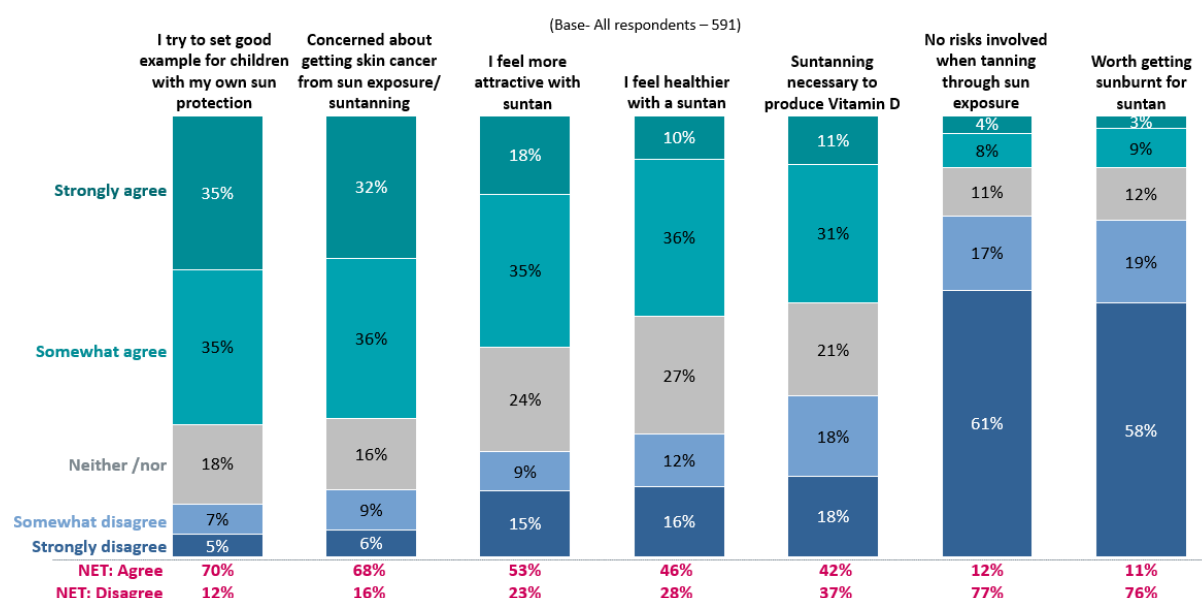


Figure 3-27 Attitudes toward protecting their own skin from the sun

The highest level of agreement was for the statement 'I try to set a good example for my child/children with my own sun protection' (Table 3.6). Overall, a clear majority of respondents (70%) expressed agreement with the statement. Female respondents were more likely to strongly agree (41%) compared to males (29%). Parents aged 45+ were the

most likely to strongly agree (42%), while those aged 18-34 showed a higher proportion of 'somewhat agree' (41%) and 'neither agree nor disagree' responses (27%).

**I try to set a good example for my
child/children with my own sun protection**

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | |
|----------------------------|-------|--------|--------|-------|-------|-----|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 35% | 29% | 41% | 23% | 37% | 42% |
| Somewhat agree | 35% | 37% | 33% | 41% | 33% | 33% |
| Neither agree nor disagree | 18% | 20% | 15% | 27% | 15% | 13% |
| Somewhat disagree | 7% | 9% | 6% | 7% | 8% | 5% |
| Strongly disagree | 5% | 5% | 5% | 2% | 6% | 6% |
| Summary | | | | | | |
| Agree | 70% | 66% | 74% | 65% | 71% | 75% |
| Disagree | 12% | 13% | 11% | 9% | 14% | 12% |

Table 3-6 To what extent do you agree or disagree with the statement: I try to set a good example for my child/children with my own sun protection

The next highest level of agreement was with the statement, 'I'm concerned about getting skin cancer from sun exposure/sunbathing' (Table 3.7). Overall, most respondents (68%) expressed concern about the risk of skin cancer from sun exposure, with women and older adults showing the strongest concern. Three-quarters of women (77%) agreed with the statement, and 45% strongly agreed. This is significantly higher than the 59% of men who agreed, with only 19% strongly agreeing. Among older adults, 79% of those aged 45+ agree, compared to 58% of 18-34 year olds, and 68% of 35-44 year olds. This suggests that concern about skin cancer from sun exposure increases with age.

**Concerned about getting skin cancer
from sun exposure/ suntanning**
(Base: All respondents – 591)

| | | GENDER | | AGE | | |
|----------------------------|-------|--------|--------|-------|-------|-----|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 32% | 19% | 45% | 28% | 32% | 38% |
| Somewhat agree | 36% | 40% | 32% | 30% | 36% | 41% |
| Neither agree nor disagree | 16% | 21% | 11% | 23% | 16% | 10% |
| Somewhat disagree | 9% | 13% | 7% | 13% | 10% | 5% |
| Strongly disagree | 6% | 7% | 5% | 6% | 6% | 6% |
| Summary | | | | | | |
| Agree | 68% | 59% | 77% | 58% | 68% | 79% |
| Disagree | 16% | 20% | 12% | 19% | 17% | 12% |

Table 3-7 To what extent do you agree or disagree with the statement: I'm concerned about getting skin cancer from sun exposure/suntanning

Despite their concern and desire to set a good example, approximately half of all parents (53%) agree that they feel more attractive with a suntan. This rises to 58% of females and 65% of those who have ever used a sunbed. However, one in four (23%) disagree, and a similar proportion (24%) are unsure. This suggests that there are mixed feelings and some uncertainty about the overall attractiveness of suntans.

A lower, but still significant proportion (46%) agree they feel healthier with a suntan. Once again, a notable minority (28%) disagree, and 27% are unsure. This indicates that there is less certainty about the perceived health benefits of a suntan compared to its attractiveness.

An interesting finding from the research is that more than four in ten adults (42%) believe that suntanning is necessary to produce Vitamin D, with this rising to 50% among parents aged 18-34. However, a similar proportion (37%) disagree, and 21% are unsure. This highlights the need for better communication to inform people that safer alternatives exist (through diet and supplements) to maintain healthy levels of this vital nutrient.

While a significant proportion perceive both health and attractiveness benefits from tanning, the vast majority recognize the risks associated with sun exposure and disagree that getting sunburnt is worth the pursuit of a suntan.

Three-quarters (77%) disagree that there are no risks involved with tanning through sun exposure, with the highest disagreement among females (85%) and older adults age 45+ (88%). However, nearly one in five (18%) in the youngest cohort believe there are no risks, which is somewhat concerning (Table 3.8).

**No risks involved when tanning
through sun exposure**

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | |
|----------------------------|-------|--------|--------|-------|-------|-----|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 4% | 5% | 2% | 4% | 3% | 4% |
| Somewhat agree | 8% | 9% | 8% | 14% | 9% | 3% |
| Neither agree nor disagree | 11% | 17% | 5% | 25% | 7% | 5% |
| Somewhat disagree | 17% | 18% | 16% | 20% | 16% | 16% |
| Strongly disagree | 61% | 52% | 69% | 38% | 66% | 71% |
| Summary | | | | | | |
| Agree | 12% | 14% | 10% | 18% | 11% | 7% |
| Disagree | 77% | 70% | 85% | 57% | 82% | 88% |

Table 3-8 To what extent do you agree or disagree with the statement: There are no risks involved when tanning through sun exposure

Similarly, three-quarters (76%) disagree that it is worth getting sunburnt for a suntan, with 68% of females strongly disagreeing. However, Table 3.9 shows that 22% of 18-34 year-olds believe it is worth getting sunburnt for a suntan, which aligns with the proportion who think there are no risks associated with sun tanning at Table 3.8 above.

Worth getting sunburnt for suntan

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | |
|----------------------------|-------|--------|--------|-------|-------|-----|
| | | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 3% | 4% | 2% | 4% | 3% | 2% |
| Somewhat agree | 9% | 11% | 6% | 18% | 5% | 6% |
| Neither agree nor disagree | 12% | 17% | 7% | 23% | 11% | 6% |
| Somewhat disagree | 19% | 21% | 16% | 20% | 17% | 20% |
| Strongly disagree | 58% | 47% | 68% | 35% | 64% | 66% |
| Summary | | | | | | |
| Agree | 11% | 15% | 8% | 22% | 8% | 8% |
| Disagree | 76% | 68% | 85% | 55% | 82% | 86% |

Table 3-9 To what extent do you agree or disagree with the statement: I feel it is worth getting sunburnt so that I can get suntanned

3.4.2 Parents' Opinions on Protecting Their Children's Skin from the Sun

Parents were then asked about their attitudes toward protecting their children's skin from the sun. They were asked to indicate the extent to which they agree or disagree with a series of five statements the results of which are set out in Figure 3.28 below.

Similar to their attitudes toward sun exposure and personal protection, parents' views on their children getting a suntan are also mixed.

The majority of parents (78%) agree that sunburn during childhood is dangerous and could lead to skin cancer later in life. However, a significant minority is comfortable with their child getting a suntan, with 29% agreeing, and 27% believing that their child looks healthier with a suntan. While the largest proportion disagreed with these two statements (39% and 44%, respectively), a notable minority were neutral (32% and 29%).

One-third (33%) of parents believe that suntanning is necessary for their child to produce Vitamin D—slightly lower than the 42% who believe that suntanning is necessary for their own body to produce Vitamin D.

The majority (58%) disagree that they find it difficult to protect their child from the sun, while one in four (25%) agree with this statement.

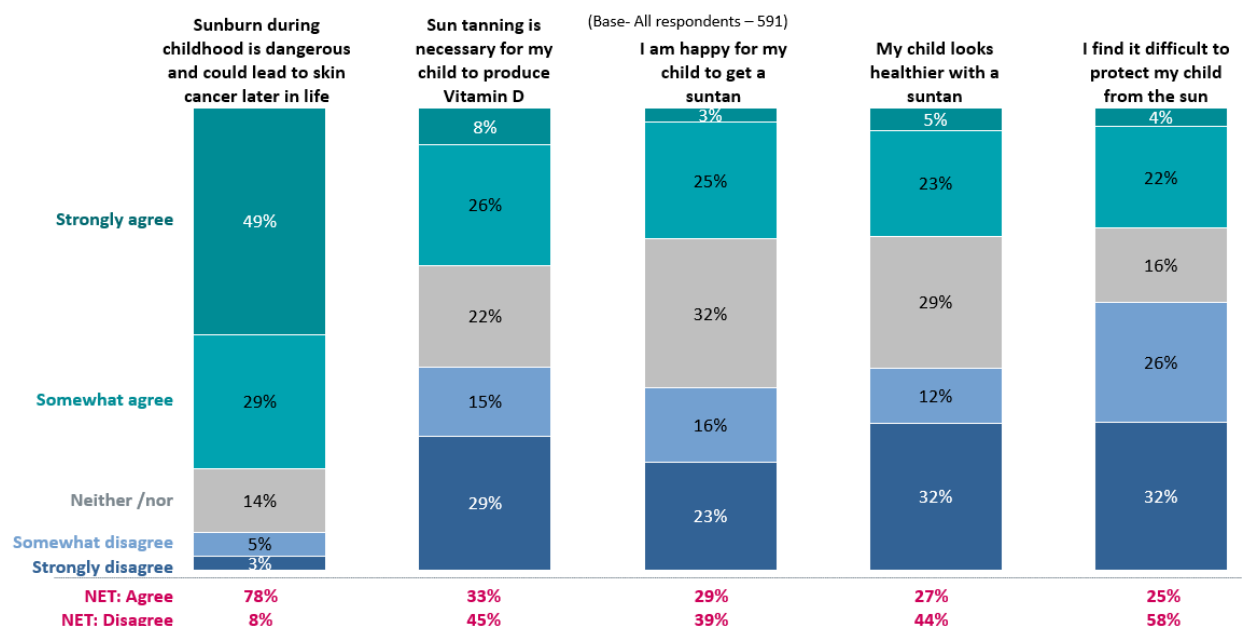


Figure 3-28 Attitudes toward protecting your children's skin from the sun

The highest level of agreement was for the statement 'Sunburn during childhood is dangerous and could lead to skin cancer later in life' (Table 3.10). Overall, the vast majority (78%) agreed, with females and older parents aged 45+ being even more likely to agree (86% and 83%, respectively).

Sunburn during childhood is dangerous and could lead to skin cancer later in life
(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | |
|----------------------------|-------|--------|--------|-------|-------|-----|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 48% | 39% | 59% | 32% | 51% | 60% |
| Somewhat agree | 29% | 30% | 27% | 32% | 30% | 23% |
| Neither agree nor disagree | 14% | 19% | 9% | 26% | 10% | 12% |
| Somewhat disagree | 5% | 7% | 4% | 8% | 5% | 3% |
| Strongly disagree | 3% | 4% | 1% | 2% | 4% | 2% |
| Summary | | | | | | |
| Agree | 78% | 70% | 86% | 64% | 81% | 83% |
| Disagree | 8% | 11% | 5% | 10% | 9% | 5% |

Table 3-10 To what extent do you agree or disagree with the statement: Sunburn during childhood is dangerous and could lead to skin cancer later in life

A higher proportion of males than females (34% vs 23%) were comfortable with their child getting a suntan. Similarly, more males agreed that their child looks healthier with a suntan

(35% vs 20% of females). In contrast, the majority of females (55%) and parents aged 35-44 (51%) disagreed with this statement (Table 3.11).

| My child looks healthier with a suntan (Base: All respondents – 591) | | | | | | |
|------------------------------------------------------------------------------------|-------|------|--------|-------|-------|-----|
| GENDER | | | AGE | | | |
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ |
| N= | 591 | 290 | 301 | 142 | 284 | 166 |
| Strongly agree | 5% | 8% | 2% | 10% | 3% | 2% |
| Somewhat agree | 23% | 28% | 18% | 18% | 20% | 31% |
| Neither agree nor disagree | 29% | 33% | 25% | 33% | 25% | 31% |
| Somewhat disagree | 12% | 13% | 11% | 13% | 15% | 8% |
| Strongly disagree | 32% | 19% | 44% | 26% | 37% | 28% |
| Summary | | | | | | |
| Agree | 27% | 35% | 20% | 28% | 23% | 33% |
| Disagree | 44% | 32% | 55% | 39% | 51% | 36% |

Table 3-11 To what extent do you agree or disagree with the statement: My child looks healthier with a suntan

When examined more closely (Table 3.12), the results indicate that younger parents aged 18-34 and those with children aged 4-6 years are more likely to find it difficult to protect their child from the sun, with 38% of younger parents and 31% of parents with children aged 4-6 agreeing.

Otherwise, parents' attitudes toward protecting their children's skin from the sun did not vary significantly based on the age of the child.

**I find it difficult to protect
my child from the sun**

(Base: All respondents – 591)

| | TOTAL | GENDER | | AGE | | | AGE OF CHILD | | |
|----------------------------|-------|--------|--------|-------|-------|-----|--------------|-----------|-------------|
| | TOTAL | Male | Female | 18-34 | 35-44 | 45+ | 4-6 years | 7-9 years | 10-12 years |
| N= | 591 | 290 | 301 | 142 | 284 | 166 | 242 | 304 | 308 |
| Strongly agree | 4% | 4% | 4% | 6% | 3% | 2% | 5% | 5% | 4% |
| Somewhat agree | 22% | 24% | 20% | 31% | 18% | 20% | 26% | 23% | 23% |
| Neither agree nor disagree | 16% | 23% | 11% | 21% | 16% | 14% | 17% | 19% | 18% |
| Somewhat disagree | 26% | 26% | 26% | 22% | 26% | 30% | 22% | 23% | 27% |
| Strongly disagree | 32% | 24% | 40% | 20% | 37% | 34% | 30% | 30% | 29% |
| Summary | | | | | | | | | |
| Agree | 25% | 27% | 23% | 38% | 21% | 22% | 31% | 27% | 26% |
| Disagree | 58% | 50% | 66% | 42% | 63% | 64% | 52% | 53% | 56% |

Table 3-12 To what extent do you agree or disagree with the statement: I find it difficult to protect my child from the sun

3.5 Sources of information on sun protection

In the final section of the survey, respondents were shown a list of different sources of health information and asked to select the most effective ways to receive information on sun protection for themselves and their children. Multiple responses were allowed at this question.

The results are displayed in Figure 3.29 below.

Overall, the results indicate that the most effective ways for respondents to receive information on sun protection for themselves and their children are through public health awareness campaigns (52%), national health websites such as the HSE (41%), and pharmacies (40%). Other popular sources include GPs (38%), schools or crèches (40%), and advertising (34%). Social media was also mentioned by 34%, while dermatologists and nurses were cited by 28% and 26%, respectively. Fewer respondents considered sources like radio (19%) and family or friends (17%) effective. These findings suggest that parents of primary school-aged children prefer institutional and trusted channels over personal or informal ones.

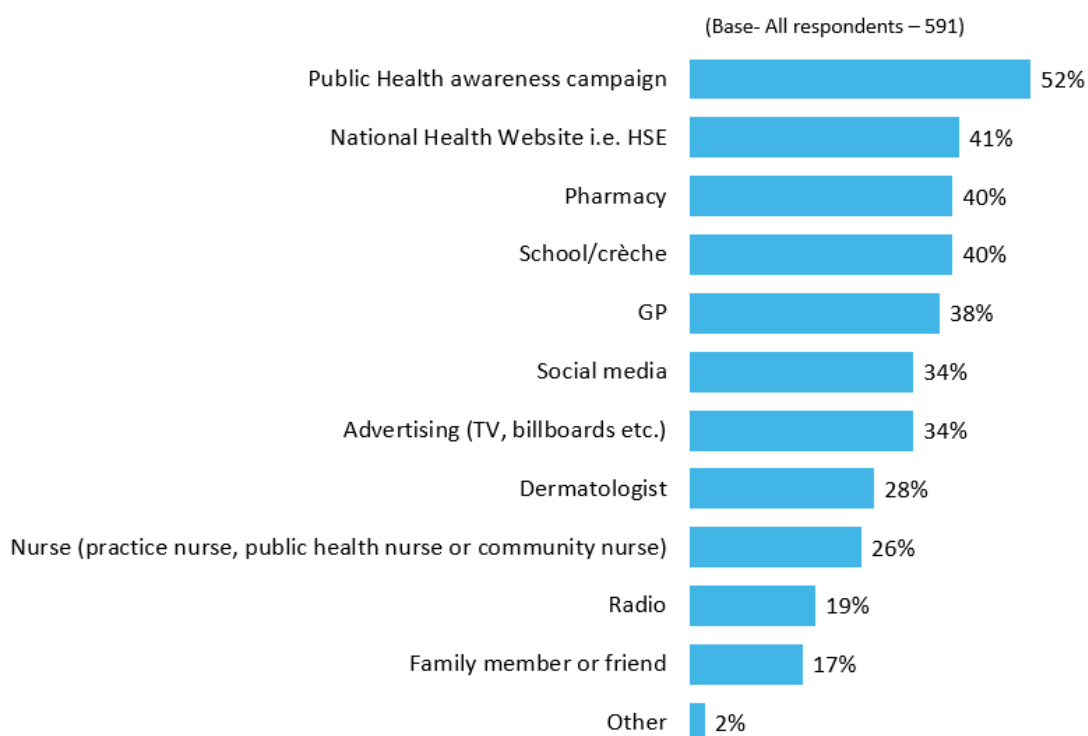


Figure 3-29 Most effective way(s) to receive information on sun protection for self and child/children

There are notable variations by gender, age, and region, as illustrated in Table 3.13 below. Females are more likely than males to choose pharmacies (47% vs 32%), social media (41% vs 28%), and nurses (31% vs 21%). Older adults aged 45+ are particularly inclined to select a public health campaign (62%), a national health website (46%), schools or crèches (45%), and advertising (41%). Regional preferences also differ, but the overall preferred source for sun protection information across all regions is a public health awareness campaign.

(Base- All respondents – 591)

| | TOTAL | GENDER | | AGE | | | REGION | | | |
|----------------------------------------------------------------|-------|--------|--------|-------|-------|-----|--------|-------------------------|---------|--------------|
| | | Male | Female | 18-34 | 35-44 | 45+ | Dublin | Leinster (excl. Dublin) | Munster | Conn/ Ulster |
| | N=591 | 290 | 301 | 142 | 284 | 166 | 154 | 171 | 160 | 107 |
| Public Health awareness campaign | 52% | 52% | 52% | 36% | 54% | 62% | 50% | 52% | 55% | 52% |
| National Health Website i.e. HSE | 41% | 39% | 42% | 29% | 44% | 46% | 33% | 37% | 46% | 49% |
| Pharmacy | 40% | 32% | 47% | 36% | 43% | 39% | 33% | 45% | 40% | 42% |
| School/crèche | 40% | 42% | 38% | 35% | 40% | 45% | 35% | 43% | 43% | 39% |
| GP | 38% | 37% | 39% | 34% | 38% | 39% | 40% | 31% | 43% | 36% |
| Social media | 34% | 28% | 41% | 31% | 36% | 34% | 30% | 33% | 39% | 37% |
| Advertising (TV, billboards etc.) | 34% | 30% | 37% | 29% | 32% | 41% | 32% | 33% | 35% | 36% |
| Dermatologist | 28% | 27% | 30% | 26% | 31% | 25% | 35% | 28% | 24% | 26% |
| Nurse (practice nurse, public health nurse or community nurse) | 26% | 21% | 31% | 24% | 28% | 23% | 25% | 25% | 22% | 32% |
| Radio | 19% | 21% | 18% | 22% | 16% | 23% | 18% | 21% | 19% | 19% |
| Family member or friend | 17% | 18% | 15% | 13% | 19% | 15% | 20% | 14% | 19% | 14% |
| Other | 2% | 1% | 2% | 2% | 2% | * | 1% | 3% | 1% | 1% |

Table 3-13 Most effective way(s) to receive information on sun protection for self and child/children by demographics

4 Conclusions and Recommendations

The findings of this survey provide valuable insight into parental attitudes and behaviours regarding sun protection for themselves and for their primary school-aged children.

The survey highlights important insights into parents' approaches to sun protection and sun exposure:

1. **Skin Type and Sensitivity:** The survey reveals that the majority of respondents (64%) identify as having white skin, with three quarters (75%) reporting strong or moderate sun sensitivity. The relatively low proportion of respondents who report low sun sensitivity (25%) suggests that sunburn remains a significant concern for many individuals.
2. **Sun Exposure Patterns:** More than two-thirds (68%) of respondents reported spending time abroad or in sunny locations in 2024, with a significant portion (60%) spending one week or more in such places. Furthermore, 63% of parents reported getting sunburned at least once in 2024, with nearly a third (31%) receiving multiple sunburns (at home or abroad). The difference in sun protection behaviours between respondents at home in Ireland versus abroad suggests that individuals are more likely to use sun protection measures, such as wearing sunglasses, applying sunscreen, using shade or a sun umbrella and wearing clothing such as a hat or long sleeves, when they are in sunny environments abroad.
3. **Gender and Age Differences in Sun Protection:** The data also highlight differences in sun protection behaviours based on gender and age. Males are more likely to wear hats and t-shirts for sun protection, especially when abroad, while females are more likely to use sunscreen and sunglasses. Additionally, younger parents (18-34 years) tend to exhibit less frequent usage of sun protection measures compared to older age groups.
4. **SPF Usage:** Most parents report using sunscreen with SPF 30 or higher - the recommended level for adults - both at home and abroad. SPF 50+ is especially favoured in sunny destinations. However, a significant portion of parents, particularly younger parents (18-34 years), still opt for a lower SPF, often choosing SPF 15 or lower both at home and abroad. There is also a gender difference, with females more likely to use higher SPF levels than males.
5. **Other Forms of Sun Protection:** In addition to sunscreen, commonly used sun protection methods at home in Ireland include wearing sunglasses and t-shirts or long sleeves. When abroad, sunglasses remain the most frequently used (after sunscreen), followed by seeking shade or using a sun umbrella, while wearing a t-shirt or long sleeves is the least common. Other measures - such as avoiding midday sun, or wearing a hat are also practiced, but tend to be used more consistently while abroad.
6. **Reapplication Habits:** At home in Ireland, 6% of parents report reapplying sunscreen every hour, 11% every two hours, and 35% every 3-4 hours. Nearly a quarter (23%) apply sunscreen only once, believing it provides all day protection, while 25% report

having no set pattern for reapplication. In contrast, sunscreen reapplication is more consistent abroad, with 10% reapplying every hour, 31% every two hours and 39% every 3-4 hours. Only 11% apply sunscreen just once, and 9% report no set pattern. These results suggest a more structured sun protection routine in sunnier environments. However, sunscreen should be reapplied every two hours - or more frequently after swimming, towel drying or sweating. A significant proportion of parents are reapplying less frequently than recommended, both at home and abroad.

7. **Sunbed Usage:** The survey indicates that 40% of respondents have ever used a sunbed, with usage highest among females (50%) and those aged 18-34 (56%). Currently, 6% of the nationally representative sample of parents with primary school-aged children report using sunbeds. While the small number of current users limits the generalisability of the findings, the issue warrants further attention given the increased risk of skin cancer associated with sunbed use, particularly among those aged under 35.

Recommendations for enhancing sun protection behaviours among parents:

- **Targeted Education on Sun Protection:** For example, the lower frequency of sunscreen use among younger parents (18-34 years) suggests a need for targeted educational campaigns aimed at this demographic.
- **Promote Consistent Sun Protection Habits at Home:** Given the differences in sun protection behaviours between at-home and abroad, communication should emphasise that sun protection is essential not just when traveling, but also at home in Ireland, particularly during hot or sunny weather.
- **Sustained Public Health Messaging on the Dangers of Sunbeds:** The high prevalence of sunbed use among younger respondents and the well-established risks of skin cancer highlight the importance of continued public health messaging discouraging their use. Although sunbed usage was examined in this study, the small number of current users limits deeper analysis. Further research is needed to better understand usage patterns and associated health risks.
- **Encourage Frequent Reapplication of Sunscreen:** The data suggests that sunscreen reapplication habits vary significantly, especially between younger and older parents. Public health initiatives should stress the importance of reapplying sunscreen every two hours, especially when outdoors for prolonged periods.
- **Emphasize that Sunscreen Alone is not Sufficient:** Campaigns can also emphasize that sunscreen alone is not enough to protect against the harmful effects of sun exposure—other measures, such as seeking shade or wearing protective clothing, should also be part of a comprehensive sun protection routine.

The survey also asked parents to provide information about one of their primary school-aged children. Below are some key findings:

1. **Parental Concern:** A significant finding is that parents express a higher level of concern for their child's sun protection than for their own, with 82% showing greater

concern for their child's skin safety. This reflects a broader awareness of the risks of sun exposure, including skin damage and long-term health concerns such as skin cancer.

2. **Prevalence of Fair Skin and Sun Sensitivity:** Parents commonly reported that their children, like themselves, have fair skin types (Type I or II), which are more prone to burning. Most parents described their children as having strong or moderate sun sensitivity, underscoring the importance of protective measures—particularly for children with lighter skin.
3. **Incidence of Sunburn Among Children:** While fewer parents reported multiple sunburns in their children in 2024 (19%) compared to themselves (31%), sunburn remains a concern. Nearly half (47%) of parents said their child has experienced multiple sunburns in their lifetime, raising concerns about the cumulative risk and potential for future skin cancer.
4. **Sun Protection Behaviours:** Parents generally demonstrate responsible sun protection practices when it comes to their children. Sunscreen, hats, and t-shirts/long sleeves are consistently used, particularly when children are abroad in sunnier destinations. A notable proportion of parents (68%) apply SPF 50 or higher to their child in Ireland, and even more (75%) when abroad. However, areas for improvement exist, particularly regarding sunglasses, which remain the least used form of sun protection for children, despite their importance in protecting the eyes from UV damage. Additionally, while sunscreen use is relatively frequent, reapplication practices at home show room for improvement. Only 8% of parents reapply sunscreen to their child every hour, 26% every two hours, and 39% every 3-4 hours. Notably, 13% apply it only once - believing it offers all-day protection – and another 13% have no consistent reapplication pattern. In total, just one-third (34%) of parents reapply sunscreen to their child every two hours or more frequently, as recommended. Practices improve while abroad or on holidays in a sunny country: 53% of parents report reapplying sunscreen to their child every two hours or more often. However, 33% still reapply only every 3-4 hours, while 7% apply sunscreen just once and another 7% follow no consistent reapplication routine.

Recommendations for reducing the risk of sunburn and long-term skin damage in children, fostering better habits and increasing awareness of sun safety are as follows:

- **Target Specific Demographics:** The findings suggest that parents of older children and those with male children are less likely to use certain sun protection measures like hats, sunglasses, or seeking shade. Targeted interventions, such as educational programmes or campaigns tailored for these groups, may help reinforce the importance of consistent sun protection for children of all ages and genders.
- **Increase Awareness of Eye Protection:** The relatively low usage of sunglasses highlights a gap in sun protection awareness. Campaigns could focus on the importance of protecting children's eyes from UV rays, and strategies could be implemented to make sunglasses more accessible and appealing to both parents and children.

- **Increase Awareness of Effective Sunscreen Application:** Although sunscreen use is widespread, the inconsistent application of sunscreen throughout the day, particularly at home in Ireland, suggests the need for further education on the importance of reapplication, especially when outdoors for prolonged periods. Information campaigns could encourage parents to adopt a more structured routine, both for themselves and their children.
- **Improve SPF Education:** Given the differences in SPF usage between parents and their children, it would be beneficial to educate parents on the importance of selecting higher SPF products for both themselves and their children. While SPF 30 or higher is generally sufficient for adults, SPF 50 or higher is recommended for children. Although most parents appear diligent about protecting their children from sun exposure, equal emphasis should be placed on encouraging better sun protection habits for adults.
- **Provide Clear Guidelines for Sun Protection in Different Environments:** The differences in sun protection behaviours at home versus abroad suggest that parents may adjust their practices depending on perceived risk levels. Providing clear and consistent sun protection guidelines for both home and abroad could help parents apply the same level of care regardless of their location.

Overall, the data reveals a mix of attitudes, with parents showing strong concern for safeguarding their children's skin from sun exposure, while their own sun safety behaviours are less consistent.

1. **Parents' Views on Protecting Their Children:** The majority of parents (78%) acknowledge the long-term risks of childhood sunburn, with many expressing concern that sun exposure may lead to skin cancer later in life. However, despite these concerns, a significant portion of parents still view suntanning as a desirable activity. Specifically, 29% are comfortable with their child getting a suntan, 27% believe their child looks healthier with a tan, and 33% think suntanning is necessary for Vitamin D production. These mixed attitudes suggest a gap in understanding the full implications of sun exposure, which may influence their approach to sun protection for their children.
2. **Parents' Own Sun Protection Behaviours:** Parents generally exhibit a high level of awareness about the risks of skin cancer, with 70% trying to set a good example for their children by using sun protection. However, a large proportion of parents still associate suntanning with feelings of attractiveness and health. Notably, 53% of parents feel more attractive with a suntan, and 46% believe it makes them healthier. These conflicting attitudes, particularly prevalent among younger parents (aged 18-34), underscore the need for a more in-depth conversation about the perceived aesthetic and health benefits of sun exposure. Additionally, there is a clear opportunity to improve education on safer ways to obtain Vitamin D without increasing the risk of sun damage.
3. **Information Sources:** Parents primarily rely on trusted institutional channels for sun protection information, with public health campaigns, national health websites, and pharmacies being identified as the most effective sources. This suggests that parents

prefer reliable, expert-backed resources when making decisions about sun protection, as opposed to informal or peer-based sources like social media or family and friends. Gender and age differences were also apparent, with females more likely to use pharmacies and social media for information, while older parents showed a preference for public health campaigns and national health websites.

Recommendations for improving sun protection behaviours and awareness based on attitudes include the following:

- **Strengthen Public Health Campaigns:** Since public health awareness campaigns are the most preferred source of information on sun protection, it is recommended to further enhance the SunSmart campaign. In particular, the campaign should emphasise the risks associated with tanning – for both adults and children - and promote safer alternatives for obtaining Vitamin D, such as through diet or supplements.
- **Target Younger Parents with Tailored Messaging:** Younger parents (18-34 years) showed higher levels of uncertainty about the risks of tanning, with a notable proportion agreeing that suntanning is necessary for Vitamin D and feeling healthier with a suntan. Tailored messaging for this demographic should focus on providing clear and accurate information about the risks of sun exposure, the importance of setting a good example for their children, and safer ways to maintain healthy Vitamin D levels.
- **Promote Sun Protection in Schools:** As schools and crèches are considered effective sources of information, it would be beneficial to integrate sun safety education into the school curriculum. Teaching children at a young age about the importance of sun protection can encourage lifelong habits. Parents should also be encouraged to actively participate in these educational efforts by reinforcing the importance of sun protection at home.
- **Provide Clear Guidelines on SPF Use:** Despite the high percentage of parents applying sunscreen to their children, there is still a need for greater clarity regarding SPF ratings and reapplication frequency. Public health campaigns and healthcare providers should offer clear guidelines on appropriate SPF levels as well as best practices for sunscreen reapplication.
- **Enhance Communication on the Role of Vitamin D:** A significant portion of parents incorrectly believe that suntanning is necessary for Vitamin D production. Health campaigns should clarify that while some sun exposure is beneficial for Vitamin D generation, excessive exposure increases the risk of skin cancer. Messaging should emphasise the importance of finding a safe balance, and promote alternative sources of Vitamin D, such as diet and supplements.
- **Leverage Trusted Health Professionals:** Given the importance of institutional sources, efforts should be made to ensure that healthcare professionals, such as GPs and dermatologists, are well-informed and proactive in advising parents on sun protection. Public health messages can be integrated into routine healthcare visits, especially for parents with young children.

In conclusion, the survey provides a comprehensive overview of sun protection behaviours and sun exposure among parents of primary school-aged children. It highlights areas where increased education, targeted interventions, and further research could improve public health outcomes related to skin safety. Findings from this research report will be used to inform the development of resources and programmes to engage parents of young children in skin cancer prevention behaviours. It will inform how best to reach this population to increase the awareness of sun protection, the messages and the medium of messages. This research will also serve as a useful baseline to which future research can be compared and inform the implementation of the National Skin Cancer Prevention Plan.

Appendices



5 Appendices

5.1 Appendix A – Questionnaire



Survey on parents/guardians' attitudes, behaviours, knowledge and awareness of sun protection in Ireland.

We are undertaking some research to explore knowledge, attitudes and behaviour related to sun protection among parents of primary school aged children in Ireland. The research is being carried out by the HSE's National Cancer Control Programme (NCCP).

Participation in this survey is voluntary and all responses are anonymous.
The survey will take up to 10 minutes to complete.

You will be asked a number of questions on sun protection measures, sunburn, and opinion on having a suntan.

Your anonymous feedback will help inform the HSE NCCP's work on skin cancer prevention.

I have read the information provided relating to this study. I have had enough time to consider the information. I understand that my participation is voluntary and that I am free to withdraw at any time.

Do you wish to proceed?

| | |
|-----|-----------------|
| Yes | CONTINUE |
| No | CLOSE |

Screener

S1. Are you a parent of at least one child who is in primary school education? Format: Single choice

| | |
|-----|----------|
| Yes | CONTINUE |
| No | CLOSE |

Message if no: Unfortunately, you are not eligible to take part if you are not a parent of a child in primary school education. Thank you for your time and interest in our research.

If yes ask:

S2. Which age band(s) do your primary school children fall into? Please select all that apply.

| | |
|-------------|---|
| 4-6 years | 1 |
| 7-9 years | 2 |
| 10-12 years | 3 |

About you

A. What is your gender? Format: Single choice

| | |
|-------------------|---|
| Male | 1 |
| Female | 2 |
| Other | 3 |
| Prefer not to say | 4 |

B. What is your age?

| | |
|-------|---|
| 18-24 | 1 |
| 25-34 | 2 |
| 35-44 | 3 |
| 45-54 | 4 |
| 55+ | 5 |

C. County of residence: Format: Single choice

| | |
|----------|----|
| Carlow | 1 |
| Cavan | 2 |
| Clare | 3 |
| Cork | 4 |
| Donegal | 5 |
| Dublin | 6 |
| Galway | 7 |
| Kerry | 8 |
| Kildare | 9 |
| Kilkenny | 10 |

| | |
|-----------|----|
| Laois | 11 |
| Leitrim | 12 |
| Limerick | 13 |
| Longford | 14 |
| Louth | 15 |
| Mayo | 16 |
| Meath | 17 |
| Monaghan | 18 |
| Offaly | 19 |
| Roscommon | 20 |
| Sligo | 21 |
| Tipperary | 22 |
| Waterford | 23 |
| Westmeath | 24 |
| Wexford | 25 |
| Wicklow | 26 |

Respondent is shown Fitzpatrick Skin Type scale.

Q1. Which of the following images best represents your natural (non-sun exposed) skin colour?

Please select the option that most closely matches your skin tone. Format: Single choice

| | |
|---------------------|---|
| Pale white skin | 1 |
| White skin | 2 |
| Light brown skin | 3 |
| Moderate brown skin | 4 |
| Dark brown skin | 5 |
| Black skin | 6 |

Q2. Which of these statements best describes what happens to your skin if you go out in the sun without protection? Format: Single choice

| | |
|----------------------------------|---|
| Burns very easily, never tans | 1 |
| Burns easily, rarely tans | 2 |
| Sometimes burns, gradually tans | 3 |
| Rarely burns, tans easily | 4 |
| Rarely burns, tans darkly easily | 5 |
| Never burns, always tans darkly | 6 |

Q3. Within this year so far, how many weeks have you spent abroad or on holidays in a place where it is usually sunny? Format: Single choice

| | |
|------------------|---|
| None | 1 |
| Less than 1 week | 2 |
| 1 week | 3 |
| 2-3 weeks | 4 |
| 4 weeks or more | 5 |

Q4. How many times did you get sunburnt (red skin lasting for hours after being in the sun) so far this year (either at home or abroad)? Format: Single choice

| | |
|-------|---|
| Never | 1 |
|-------|---|

| | |
|-----------------|---|
| 1 time | 2 |
| 2 times | 3 |
| 3-4 times | 4 |
| 5 times or more | 5 |

Sun protection behaviours

Q5a. How often do you use the following sun protection measures when spending time outdoors at home (in Ireland)? Please select one option for each.

| Rotate measures | Never | Rarely | Often | Always |
|-------------------------------------------|-------|--------|-------|--------|
| Shade / sun umbrella | 1 | 2 | 3 | 4 |
| Sunglasses | 1 | 2 | 3 | 4 |
| Hat | 1 | 2 | 3 | 4 |
| T-shirt / long sleeves | 1 | 2 | 3 | 4 |
| Avoiding the sun in the middle of the day | 1 | 2 | 3 | 4 |
| Use sunscreen | 1 | 2 | 3 | 4 |

If have spent time abroad this year at Q3 (codes 2-5) ask:

Q5b. How often do you use the following sun protection measures when spending time outdoors while abroad or on holidays in a sunny country? Please select one option for each.

| Rotate measures | Never | Rarely | Often | Always |
|-------------------------------------------|-------|--------|-------|--------|
| Shade / sun umbrella | 1 | 2 | 3 | 4 |
| Sunglasses | 1 | 2 | 3 | 4 |
| Hat | 1 | 2 | 3 | 4 |
| T-shirt / long sleeves | 1 | 2 | 3 | 4 |
| Avoiding the sun in the middle of the day | 1 | 2 | 3 | 4 |
| Use sunscreen | 1 | 2 | 3 | 4 |

Q6. When applying sunscreen, what sun protection factor (SPF) do you typically use? Format:

Single choice

a. At home (in Ireland)

| | |
|-------------------------------|---|
| SPF less than 15 | 1 |
| SPF 15 | 2 |
| SPF 30 | 3 |
| SPF 50 or higher | 4 |
| Other (Please specify: _____) | 5 |
| I don't know | 6 |
| Never use sunscreen | 7 |

If have spent time abroad this year at Q3 (codes 2-5) ask:

b. While abroad (or on holidays) in a sunny country

| | |
|-------------------------------|---|
| SPF less than 15 | 1 |
| SPF 15 | 2 |
| SPF 30 | 3 |
| SPF 50 or higher | 4 |
| Other (Please specify: _____) | 5 |
| I don't know | 6 |
| Never use sunscreen | 7 |

Ask all

Q7. How often do you typically reapply sunscreen when outside? Format: Single choice

a. At home (in Ireland)

| | |
|------------------------|---|
| Every hour | 1 |
| Every 2 hours | 2 |
| Every 3-4 hours | 3 |
| Once, it lasts all day | 4 |
| No set pattern | 5 |

If have spent time abroad this year at Q3 (codes 2-5) ask:

b. While abroad (or on holidays) in a sunny country

| | |
|------------------------|---|
| Every hour | 1 |
| Every 2 hours | 2 |
| Every 3-4 hours | 3 |
| Once, it lasts all day | 4 |
| No set pattern | 5 |

Sunbed Usage

Ask all

Q8. Have you ever used a sunbed (tanning bed or solarium)? Format: Single choice

| | |
|------------|---|
| Yes | 1 |
| No | 2 |
| Don't know | 3 |

If yes at Q8 ask:

Q9a. Do you currently use a sunbed (tanning bed or solarium)? Format: Single choice

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

If yes at Q9a ask:

Q9b. How often do you use a sunbed (tanning bed or solarium)? Format: Single choice

| | |
|------------------------|---|
| 2 or more times a week | 1 |
| Once a week | 2 |
| 1-2 times a month | 3 |
| Less than once a month | 4 |

If yes at Q9a ask:

Q.10 Thinking about the past 12 months, at which of the following locations did you use the sunbed or other tanning bed or solarium? Format: multiple choice

| | |
|-----------------------------------------------------------------------------|---|
| At your own home | 1 |
| At a friend's or family member's home | 2 |
| At a commercial sunbed salon, fitness centre, hairdresser or other business | 3 |
| Other location (please specify: _____) | 4 |

Ask all

Please answer the following questions for one of your primary school children. If you have more than one, answer based on the child whose birthday is closest to today. If you have only one primary school child, please answer in relation to them.

About your primary school child



What is your child's gender? Format: Single choice

| | |
|-------------------|---|
| Female | 1 |
| Male | 2 |
| Other | 3 |
| Prefer not to say | 4 |

Q12. How old is your child?

| | |
|-------------|---|
| 4-6 years | 1 |
| 7-9 years | 2 |
| 10-12 years | 3 |

Q.13 What class is your child in? Format: Single choice

| | |
|-----------------------|---|
| Junior infants | 1 |
| Senior infants | 2 |
| 1 st class | 3 |
| 2 nd class | 4 |
| 3 rd class | 5 |
| 4 th class | 6 |
| 5 th class | 7 |
| 6 th class | 8 |

Q14. Do you feel more concerned about protecting your child's skin from the sun compared to your own? Format: Single choice

| | |
|------------------------------------------------------|---|
| Yes, I am more concerned about my child's protection | 1 |
| No, I am equally concerned about both | 2 |
| No, I am more concerned about my own protection | 3 |

Respondent is re-shown Fitzpatrick Skin Type scale.

Q15. Which of the following images best represents your child's natural (non-sun exposed) skin colour? Please select the option that most closely matches their skin tone. Format: Single choice

| | |
|----------------------------|----------|
| <i>Pale white skin</i> | <i>1</i> |
| <i>White skin</i> | <i>2</i> |
| <i>Light brown skin</i> | <i>3</i> |
| <i>Moderate brown skin</i> | <i>4</i> |
| <i>Dark brown skin</i> | <i>5</i> |
| <i>Black skin</i> | <i>6</i> |

Q16. Which of these statements best describes what happens to their skin if they go out in the sun without protection? Format: Single choice

| | |
|-----------------------------------------|----------|
| <i>Burns very easily, never tans</i> | <i>1</i> |
| <i>Burns easily, rarely tans</i> | <i>2</i> |
| <i>Sometimes burns, gradually tans</i> | <i>3</i> |
| <i>Rarely burns, tans easily</i> | <i>4</i> |
| <i>Rarely burns, tans darkly easily</i> | <i>5</i> |
| <i>Never burns, always tans darkly</i> | <i>6</i> |

Q17. Within this year so far, how many weeks has your child spent abroad or on holidays in a place where it is usually sunny? Format: Single choice

| | |
|-------------------------|----------|
| <i>None</i> | <i>1</i> |
| <i>Less than 1 week</i> | <i>2</i> |
| <i>1 week</i> | <i>3</i> |
| <i>2-3 weeks</i> | <i>4</i> |
| <i>4 weeks or more</i> | <i>5</i> |

Q18. How many times did your child get sunburnt (red skin lasting for hours after being in the sun) so far this year (either at home or abroad)? Format: Single choice

| | |
|------------------------|----------|
| <i>Never</i> | <i>1</i> |
| <i>1 time</i> | <i>2</i> |
| <i>2 times</i> | <i>3</i> |
| <i>3-4 times</i> | <i>4</i> |
| <i>5 times or more</i> | <i>5</i> |

Q19. How many times in their lifetime has your child experienced sunburn (red skin lasting for hours after being in the sun)?

| | |
|------------------------|----------|
| <i>Never</i> | <i>1</i> |
| <i>1 time</i> | <i>2</i> |
| <i>2 times</i> | <i>3</i> |
| <i>3-4 times</i> | <i>4</i> |
| <i>5 times or more</i> | <i>5</i> |

Sun protection behaviours

Q20a. How often do you use the following sun protection measures for your child when spending time outdoors at home (in Ireland)? *Please select one option for each.*

| Rotate measures | Never | Rarely | Often | Always |
|-------------------------------------------|-------|--------|-------|--------|
| Shade / sun umbrella | 1 | 2 | 3 | 4 |
| Sunglasses | 1 | 2 | 3 | 4 |
| Hat | 1 | 2 | 3 | 4 |
| T-shirt / long sleeves | 1 | 2 | 3 | 4 |
| Avoiding the sun in the middle of the day | 1 | 2 | 3 | 4 |
| Use sunscreen | 1 | 2 | 3 | 4 |

If your child has spent time abroad this year at Q17 (codes 2-5), ask:

Q20b. How often do you use the following sun protection measures for your child when spending time outdoors while abroad or on holidays in a sunny country? *Please select one option for each.*

| Rotate measures | Never | Rarely | Often | Always |
|-------------------------------------------|-------|--------|-------|--------|
| Shade / sun umbrella | 1 | 2 | 3 | 4 |
| Sunglasses | 1 | 2 | 3 | 4 |
| Hat | 1 | 2 | 3 | 4 |
| T-shirt / long sleeves | 1 | 2 | 3 | 4 |
| Avoiding the sun in the middle of the day | 1 | 2 | 3 | 4 |
| Use sunscreen | 1 | 2 | 3 | 4 |

Ask all

Q21. When applying sunscreen to your child, what sun protection factor (SPF) do you typically use?

a. At home (in Ireland)

| | |
|-------------------------------|---|
| SPF less than 15 | 1 |
| SPF 15 | 2 |
| SPF 30 | 3 |
| SPF 50 or higher | 4 |
| Other (please specify: _____) | 5 |
| I don't know | 6 |
| Never use sunscreen | 7 |

If your child has spent time abroad this year at Q17 (codes 2-5), ask:

b. While abroad (or on holidays) in a warm country

| | |
|-------------------------------|---|
| SPF less than 15 | 1 |
| SPF 15 | 2 |
| SPF 30 | 3 |
| SPF 50 or higher | 4 |
| Other (please specify: _____) | 5 |
| I don't know | 6 |
| Never use sunscreen | 7 |

Ask all

Q22. How often do you typically reapply sunscreen to your child when outside?

a. At home (in Ireland)

| | |
|------------------------|---|
| Every hour | 1 |
| Every 2 hours | 2 |
| Every 3-4 hours | 3 |
| Once, it lasts all day | 4 |
| No set pattern | 5 |

If your child has spent time abroad this year at Q17 (codes 2-5) ask:

b. While abroad (or on holidays) in a warm country

| | |
|------------------------|---|
| Every hour | 1 |
| Every 2 hours | 2 |
| Every 3-4 hours | 3 |
| Once, it lasts all day | 4 |
| No set pattern | 5 |

Ask all

Next, I would like to ask you a few questions about your thoughts on sun exposure.

Q23. To what extent do you agree or disagree with the following statements regarding your opinions on protecting your own skin from the sun. Please select one option for each.



| <i>Rotate statements</i> | Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
|--------------------------------------------------------------------------------------|----------------|----------------|----------------------------|-------------------|-------------------|
| Statements directed at parents' opinion on protecting their own skin from sun | | | | | |
| <i>I feel more attractive with a suntan</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I feel healthier with a suntan</i> | 1 | 2 | 3 | 4 | 5 |
| <i>Sun tanning is necessary for my body to produce Vitamin D</i> | 1 | 2 | 3 | 4 | 5 |
| <i>There are no risks involved when tanning through sun exposure</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I feel it is worth getting sunburnt so that I can get suntanned</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I'm concerned about getting skin cancer from sun exposure/sunbathing</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I try to set a good example for my child/children with my own sun protection</i> | 1 | 2 | 3 | 4 | 5 |

Now we would like to ask about your attitudes toward protecting your children's skin from the sun.

Q24. To what extent do you agree or disagree with the following statements about protecting your children's skin from the sun. *Please select one option for each.*

| <i>Rotate statements</i> | Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
|---------------------------------------------------------------------------------------------|----------------|----------------|----------------------------|-------------------|-------------------|
| Statements directed at parents' opinion on protecting their children's skin from sun | | | | | |
| <i>My child looks healthier with a suntan</i> | 1 | 2 | 3 | 4 | 5 |
| <i>Sun tanning is necessary for my child to produce Vitamin D</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I am happy for my child to get a suntan.</i> | 1 | 2 | 3 | 4 | 5 |
| <i>I find it difficult to protect my child from the sun</i> | 1 | 2 | 3 | 4 | 5 |
| <i>Sunburn during childhood is dangerous and could lead to skin cancer later in life</i> | 1 | 2 | 3 | 4 | 5 |

Sources of health information

Q25. What do you think is the most effective way to receive information on sun protection for yourself and your child/children? *Please select all that apply.*

| | |
|-----------------------------------------------------------------------|----|
| <i>Social media</i> | 1 |
| <i>Public Health awareness campaign</i> | 2 |
| <i>Radio</i> | 3 |
| <i>Advertising (TV, billboards etc.)</i> | 4 |
| <i>GP</i> | 5 |
| <i>Nurse (practice nurse, public health nurse or community nurse)</i> | 6 |
| <i>Pharmacy</i> | 7 |
| <i>Dermatologist</i> | 8 |
| <i>Family member or friend</i> | 9 |
| <i>School/crèche</i> | 10 |
| <i>National Health Website i.e. HSE</i> | 11 |
| <i>Other (please specify: _____)</i> | 12 |

Finally, we have a few more questions about you for classification purposes only.

Q26. What is the highest level of education/training (full-time or part-time) which you have completed to date? Format: Single choice

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| No formal education or training | 1 |
| Primary education (FETAC Level 1 or 2 Cert. or equivalent). NFQ levels 1 or 2 | 2 |
| Lower secondary education (Junior/Inter/Group Cert, FETAC Level 3 Cert, FÁS Introductory Skills, NCVA Foundation Cert. or equivalent. NFQ level 3 | 3 |
| Upper secondary education (Leaving Cert. (including Applied and Vocational programmes) or equivalent. NFQ levels 4 or 5 | 4 |
| Technical or Vocational, FETAC Level 4/5 Cert., NCVA Level 1/2, FÁS National Craft Cert., Teagasc Farming Cert., CERT Professional Cookery Cert. or equivalent. NFQ levels 4 or 5 | 5 |
| Advanced Certificate / Completed Apprenticeship, FETAC Advance Cert., NCVA Level 3, FÁS National Craft Cert., Teagasc Farming Cert., CERT Professional Cookery Cert. or equivalent. NFQ level 5 | 6 |
| Higher Certificate, NCEA/HETAC National Cert. or equivalent. NFQ level 6 | 7 |
| Ordinary <u>Bachelors Degree</u> or Higher. NFQ Level 7 or Higher | 8 |
| Prefer not to say | 9 |

Q27. What is your employment status? Format: Single choice

| | |
|-------------------------------|---|
| Full-time employee | 1 |
| Part-time employee | 2 |
| Self employed | 3 |
| Student | 4 |
| Temporarily unemployed | 5 |
| Unemployed due to disability | 6 |
| Retired | 7 |
| Prefer not to say | 8 |
| Other (please specify: _____) | 9 |

Q28. Which one of the following best describes your household composition? Format: Single choice

| | |
|---------------------------------|---|
| Married couple with children | 1 |
| Cohabiting couple with children | 2 |
| One parent mother with children | 3 |
| One parent father with children | 4 |

Q29. Do your primary school children live at home with you?

| | |
|-----------------|---|
| Yes – full time | 1 |
| Yes – part time | 2 |
| No | 3 |

Q30. Which one of the following best describes your ethnic or cultural background?

White

| | |
|-----------------------------------|----------|
| <i>Irish</i> | <i>1</i> |
| <i>Irish traveller</i> | <i>2</i> |
| <i>Any other white background</i> | <i>3</i> |

Black or Black Irish

| | |
|-----------------------------------|----------|
| <i>African</i> | <i>4</i> |
| <i>Any other black background</i> | <i>5</i> |


Asian or Asian Irish

| | |
|-------------------------------------|----------|
| <i>Chinese</i> | <i>6</i> |
| <i>Indian/Pakistani/Bangladeshi</i> | <i>7</i> |
| <i>Any other Asian background</i> | <i>8</i> |













Other ethnic or cultural background

| | |
|----------------------------------------------------------|-----------|
| <i>Latino or Hispanic</i> | <i>9</i> |
| <i>Middle Eastern or North African</i> | <i>10</i> |
| <i>Mixed background or other (Please specify: _____)</i> | <i>11</i> |

Add occupation question for social class classification

Thank and close.

5.2 Appendix B – Fitzpatrick Skin Type Scale

| Score | Description | Female | Male |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 0–6 | Pale white skin Extremely sensitive skin, always burns, never tans <i>Example: red hair with freckles</i> |  |  |
| Type I | | | |
| 7–13 | White skin Very sensitive skin, burns easily, tans minimally <i>Example: fair skinned, fair haired Caucasians, northern Asians</i> |  |  |
| Type II | | | |
| 14–20 | Light brown skin Sensitive skin, sometimes burns, slowly tans to light brown <i>Example: darker Caucasians, some Asians</i> |  |  |
| Type III | | | |
| 21–27 | Moderate brown skin Mildly sensitive, burns minimally, always tans to moderate brown <i>Example: Mediterranean and Middle Eastern Caucasians, southern Asians</i> |  |  |
| Type IV | | | |
| 28–34 | Dark brown skin Resistant skin, rarely burns, tans well <i>Example: some Hispanics, some Africans</i> |  |  |
| Type V | | | |
| 35+ | Deeply pigmented dark brown to black skin Very resistant skin, never burns, deeply pigmented <i>Example: darker Africans, Indigenous Australians</i> |  |  |
| Type VI | | | |

* The information published here is not intended to take the place of medical advice. Please seek advice from a qualified health care professional.

Source: Commonwealth of Australia, Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)



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