

Cancer Research UK Study of sunbed use in 11 – 17 year olds in England

Part A: the National Prevalence Study:
July 2009 (amended March 2010)

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Cancer Research UK study of sunbed use in children – final quantitative report of national prevalence

Cancer Research UK (CR-UK) was commissioned by the Cancer Action Team (CAT) and the Department of Health (DH) to conduct a study to build on previous research exploring the extent and patterns of sunbed use among children. This report offers the final analysis of the quantitative study giving the national prevalence estimate.

CR-UK commissioned BMRB Omnibus to carry out the fieldwork across Great Britain during the periods from 21/02/2008-23/04/2008 and from 09/10/2008-21/04/2009. A total of 3,509 children aged 11-17 years were surveyed across Great Britain in face-to-face interviews in a nationally representative sample taken across the three countries (988 in pilot data and 2,521 in full study data). Further details are available in **Appendix 1**.

CR-UK analysed the fieldwork data and produced the final report.

The survey questions were developed following extensive consultation with a number of researchers, and specific questions were asked to try to explore the issue of sunbed supervision. All respondents who said they have used a sunbed in staffed premises were asked if they were a) provided with information about how to use the sunbed and/or b) provided with information about the health risks associated with using a sunbed (**Appendix 2**).

The analysis of the use of sunbeds in the constituent countries across Great Britain showed considerable variation, with England having lower use than Scotland and Wales (**table 1**).

Table 1: Use of sunbeds in Great Britain and the constituent countries

Region	%	95% CI	
Great Britain	6.8%	5.9%	7.6%
England	5.9%	5.0%	6.7%
Scotland	13.6%	9.7%	17.5%
Wales	10.6%	6.0%	15.2%

In the interests of answering the questions posed in the Cancer Reform Strategy, the remainder of this report focuses on analyses for England only.

CR-UK asked BMRB Omnibus to re-weight the survey responses to provide a nationally representative sample for England only, meaning that the percentages above are slightly different for the English data presented from here on in. In total, 3,101 children aged 11-17 years were surveyed in face-to-face interviews across England during the period (855 in pilot data and 2,246 in full study data). Further details are available in **Appendix 1**.

Key results from the England only analysis:

Sunbed use:

- Overall, 6.0% of children aged 11-17 years in England said that they had used a sunbed
- 14.9% said they had not yet used a sunbed, but may do in the future
- A significantly higher proportion of 15-17 year olds (11.2%) had used sunbeds compared with 1.8% of 11-14 year olds
- Girls were significantly more likely to have used a sunbed (8.6%) compared with 3.5% of boys
- Significantly more girls (17.5%) than boys (12.5%) said they had not yet used a sunbed, but may do in the future
- Sunbed use was higher in children from the lower social grades (D and E) at 7.6% compared with 5.4% for children in the higher social grades (AB, C1 and C2 combined)
- There was significant variation across the regions with 11.0% of children in the “North” having used a sunbed compared with 4.2% in both the “Midlands” and in the “South”
- Of those who had used a sunbed, 16.8% (95%CI: 11.4%, 22.1%) said they used a sunbed at least once a week
- And cumulatively, 26.5% (20.1%, 32.8%) children said they used a sunbed at least once a month
- Of those who had used a sunbed, the majority of children had used a tanning/beauty salon or gym/leisure centre at 76.8% (95%CI: 70.7%, 82.8%)
- Of those who had used a sunbed, 23.2% (17.2%, 29.3%) of children said that they had used a sunbed at home

Supervision of sunbed use:

- Of the children who had used a sunbed in a tanning/beauty salon or gym/leisure centre, 21.8% (15.0%, 28.6%) had said they had been unsupervised
- Of the children who were supervised, 60.8% (50.0%, 71.5%) were given information on how to use the sunbed
- Of the children who were supervised, only 25.3% (15.7%, 34.9%) were given information on the harm sunbeds can cause
- Of the children who were supervised, only 11.4% (4.4%, 18.4%) were shown how to use the sunbed and told about the harm sunbeds can cause
- Of the children who were supervised, 25.3% (15.7%, 34.9%) of those who said they had been supervised, said that they had received no information on how to use the sunbed, nor on the harm sunbeds can cause

Cancer Research UK study of sunbed use in children: final report

BMRB Omnibus survey of children – sample analysis – England only

- A total of 3,101 children aged 11-17 years were surveyed in face-to-face interviews across England during the period from 21/02/2008-23/04/2008 (855 in pilot data) and the period from 09/10/2008-21/04/2009 (2,246 in full study data).
- A nationally representative sample in England was recruited as part of the Youth Omnibus survey. This is undertaken as part of the adult BMRB Face-to-Face Omnibus which runs weekly and interviews a nationally representative sample of 2,000 adults aged 15 years or over across Great Britain. All interviews were conducted within the home. The CR-UK sunbed questionnaire was incorporated into the weekly Omnibus questionnaire until the required sample size had been generated. Further details are given in **Appendix 1**.
- The analyses are based on 1,589 (51.2%) boys and 1,512 girls (48.8%), once weighting had been applied to allow for the survey design within England (**tables 2 and 3**).
- The analyses are based on 1,725 (55.6%) aged 11-14 years and 1376 (44.4%) aged 15-17 years, once weighting had been applied to allow for the survey design within England (**tables 2 and 3**).
- All analyses are presented on the weighted samples, with a design effect taken to be 1.
- All confidence intervals are 95% confidence intervals, and are sometimes presented as (95%CI: x, y) and sometimes as (x, y).

Table 2: Weighted total sample numbers by sex, age-group, social grade and standard region in England.

	TOTAL	Male	Female	11-14	15-17	AB	C1	C2	D	E	London	South East	South West	East Anglia	East Mids	West Mids	Yorks/Humb	North West	North	
Total (wtd.)	3101	1589	1512	1725	1376	823	845	655	508	269	534	701	327	116	215	360	304	368	174	
Sex																				
Male	1589	1589	0	879	710	416	434	336	264	139	288	365	168	58	113	175	157	166	99	
Female	1512	0	1512	845	667	407	411	319	244	130	246	336	159	58	102	184	147	203	75	
Age																				
11-14	1725	879	845	1725	0	521	452	350	243	158	284	390	187	70	127	207	170	202	88	
15-17	1376	710	667	0	1376	302	393	304	265	112	250	312	140	47	88	153	134	165	86	
Social grade																				
AB	823	416	407	521	302	823	0	0	0	0	127	222	82	36	65	92	79	89	32	
C1	845	434	411	452	393	0	845	0	0	0	135	186	99	29	63	100	76	108	50	
C2	655	336	319	350	304	0	0	655	0	0	95	151	82	19	50	87	66	69	36	
D	508	264	244	243	265	0	0	0	508	0	112	98	50	24	24	56	51	60	35	
E	269	139	130	158	112	0	0	0	0	269	66	45	16	8	13	27	32	43	21	

Table 3: Weighted total sample percentages by sex, age-group, social grade and standard region in England.

	TOTAL	Male	Female	11-14	15-17	AB	C1	C2	D	E	London	South East	South West	East Anglia	East Mids	West Mids	Yorks/Humb	North West	North	
Sex																				
Male	51.2%	100.0%	0.0%	51.0%	51.6%	50.5%	51.4%	51.3%	52.0%	51.7%	53.9%	52.1%	51.4%	50.0%	52.6%	48.6%	51.6%	45.1%	56.9%	
Female	48.8%	0.0%	100.0%	49.0%	48.5%	49.5%	48.6%	48.7%	48.0%	48.3%	46.1%	47.9%	48.6%	50.0%	47.4%	51.1%	48.4%	55.2%	43.1%	
Age																				
11-14	55.6%	55.3%	55.9%	100.0%	0.0%	63.3%	53.5%	53.4%	47.8%	58.7%	53.2%	55.6%	57.2%	60.3%	59.1%	57.5%	55.9%	54.9%	50.6%	
15-17	44.4%	44.7%	44.1%	0.0%	100.0%	36.7%	46.5%	46.4%	52.2%	41.6%	46.8%	44.5%	42.8%	40.5%	40.9%	42.5%	44.1%	44.8%	49.4%	
Social grade																				
AB	26.5%	26.2%	26.9%	30.2%	21.9%	100.0%	0.0%	0.0%	0.0%	0.0%	23.8%	31.7%	25.1%	31.0%	30.2%	25.6%	26.0%	24.2%	18.4%	
C1	27.2%	27.3%	27.2%	26.2%	28.6%	0.0%	100.0%	0.0%	0.0%	0.0%	25.3%	26.5%	30.3%	25.0%	29.3%	27.8%	25.0%	29.3%	28.7%	
C2	21.1%	21.1%	21.1%	20.3%	22.1%	0.0%	0.0%	100.0%	0.0%	0.0%	17.8%	21.5%	25.1%	16.4%	23.3%	24.2%	21.7%	18.8%	20.7%	
D	16.4%	16.6%	16.1%	14.1%	19.3%	0.0%	0.0%	0.0%	100.0%	0.0%	21.0%	14.0%	15.3%	20.7%	11.2%	15.6%	16.8%	16.3%	20.1%	
E	8.7%	8.7%	8.6%	9.2%	8.1%	0.0%	0.0%	0.0%	0.0%	100.0%	12.4%	6.4%	4.9%	6.9%	6.0%	7.5%	10.5%	11.7%	12.1%	

SECTION 1: OVERALL ANALYSIS

Q1: Have you ever or are you considering using a sunbed? (weighted baseline = 3,101)

Overall

- 6.0% (5.1%, 6.8%) of children aged 11-17 had used a sunbed at least once (**table 4**).
- A further 14.9% (13.7%, 16.2%) said they may use a sunbed in the future.

Table 4: Use of sunbeds

Answer	No.	%	95% CI	
I have used sunbeds	185	6.0%	5.1%	6.8%
I have never used a sunbed but may do in the future	463	14.9%	13.7%	16.2%
I have never used a sunbed and would never want to	2420	78.0%	76.6%	79.5%

* 33 respondents (after weighting) said they 'did not know'

Breakdown by age group

- A significantly higher proportion of 15-17 yr olds had used sunbeds, 11.2% (9.5%, 12.9%) compared with 1.8% (1.2%, 2.4%) of 11-14 yr olds (**table 5**).
- A significantly higher proportion of 11-14 year olds had never used a sunbed and would never want to, 81.6% (79.7%, 83.4%) compared with 73.5% (71.2%, 75.9%) of 15-17 year olds.

Table 5: Use of sunbeds by age

Answer	Aged 11-14 yrs			Aged 15-17 yrs		
	No.	%	95% CI	No.	%	95% CI
I have used sunbeds	31	1.8%	1.2% 2.4%	154	11.2%	9.5% 12.9%
I have never used a sunbed but may do in the future	269	15.6%	13.9% 17.3%	194	14.1%	12.3% 15.9%
I have never used a sunbed and would never want to	1407	81.6%	79.7% 83.4%	1012	73.5%	71.2% 75.9%

* 33 respondents (after weighting) said they 'did not know'

Breakdown by sex

- Girls were significantly more likely to have used a sunbed (8.6%; CI: 7.2%, 10.0%) compared with 3.5% (2.6%, 4.4%) of boys (**table 6**).
- Significantly more girls also said they had not yet used a sunbed but may do in the future (17.5%; CI: 15.6%, 19.4%) compared with 12.5% (10.8%, 14.1%) of boys.

Table 6: Use of sunbeds by sex

Answer	Boys				Girls			
	No.	%	95% CI		No.	%	95% CI	
I have used sunbeds	55	3.5%	2.6%	4.4%	130	8.6%	7.2%	10.0%
I have never used a sunbed but may do in the future	198	12.5%	10.8%	14.1%	265	17.5%	15.6%	19.4%
I have never used a sunbed and would never want to	1315	82.8%	80.9%	84.6%	1105	73.1%	70.8%	75.3%

* 33 respondents (after weighting) said they 'did not know'

Breakdown by social grade

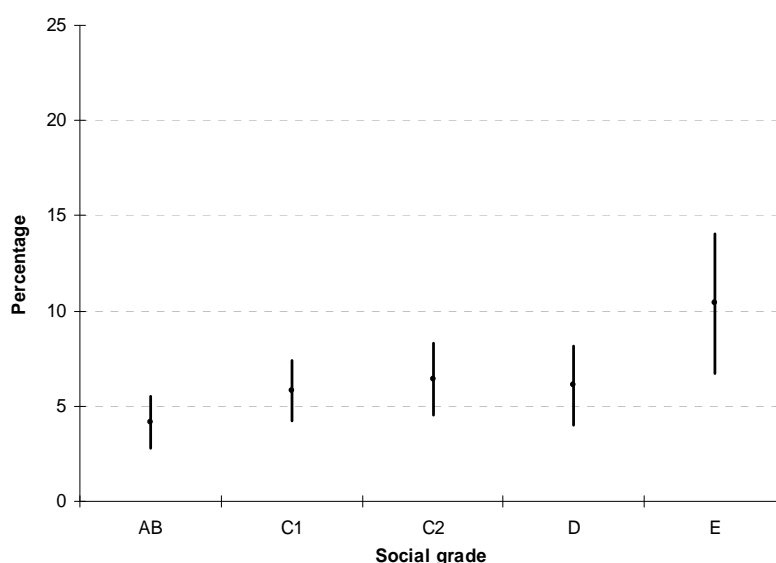
- Sunbed use varied across the social grades (table 7 & figure 1).
- There was a significantly higher use of sunbeds in children from the lower social grades (D and E combined) at 7.6% (5.7%, 9.5%) compared with 5.4% (4.5%, 6.3%) for children in the higher social grades (AB, C1 and C2 combined).
- The highest use was in the lowest social grade (E) at 10.4% (6.8%, 14.1%).

Table 7: Use (%) of sunbeds by social grade

Answer	AB			C1			C2			D			E		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Used sunbeds	4.1	2.8	5.5	5.8	4.2	7.4	6.4	4.5	8.3	6.1	4.0	8.2	10.4	6.8	14.1
Never used a sunbed but may do in future	14.7	12.3	17.1	14.2	11.8	16.6	15.6	12.8	18.3	16.7	13.5	20.0	13.0	9.0	17.0
Never used a sunbed and never wants to	80.6	77.9	83.3	78.5	75.7	81.2	77.6	74.4	80.8	75.0	71.2	78.8	76.6	71.5	81.6

* 33 respondents (after weighting) said they 'did not know'

Figure 1: Use of sunbeds by social grade



Breakdown by region

- There was significant variation in use of sunbeds across the regions, ranging from 14.1% (10.6%, 17.7%) in the North West to only 3.2% (1.7%, 4.7%) in London (**table 8**).

By grouping the regions into three areas, "South", "Midlands" and "North", regional differences are more obvious. The areas are:

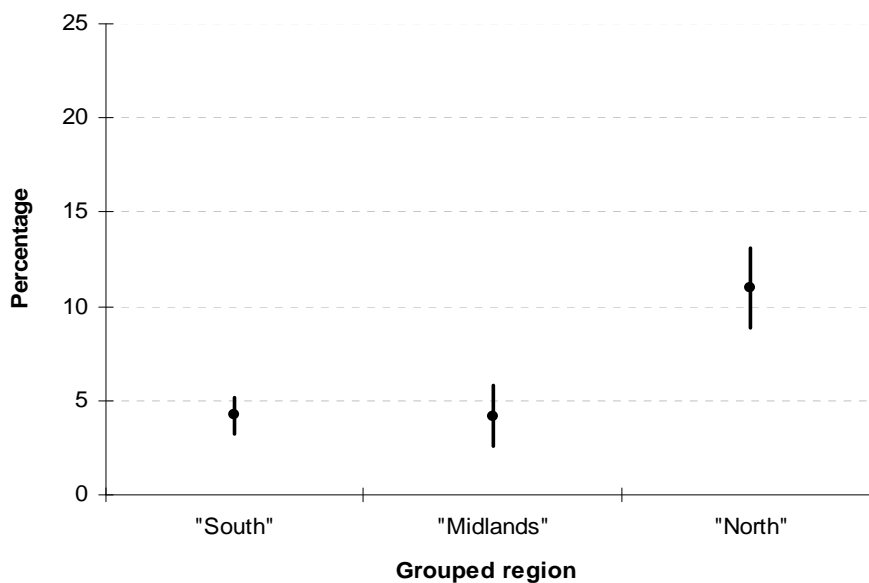
- "South": East Anglia, London, South East, South West
- "Midlands": East Midlands, West Midlands
- "North": North, North West, Yorkshire and Humber

Table 8: Use of sunbeds by Area and region of England

Area / Region	%	95% CI	
"South"			
East Anglia	7.8%	2.9%	12.6%
London	3.2%	1.7%	4.7%
South East	4.6%	3.0%	6.1%
South West	4.0%	1.9%	6.1%
"Midlands"			
East Midlands	3.7%	1.2%	6.3%
West Midlands	4.4%	2.3%	6.6%
"North"			
North	10.9%	6.3%	15.6%
North West	14.1%	10.6%	17.7%
Yorkshire & Humberside	7.2%	4.3%	10.1%

- There was significantly higher use of sunbeds in the "North" at 11.0% (95%CI: 8.9%, 13.1%) than in the other two grouped regions ("Midlands" at 4.2% (2.5%, 5.8%) and "South" at 4.2% (3.3%, 5.2%) (**figure 2**).

Figure 2: Use of sunbeds by Region of England



SECTION 2: SUNBED NON-USERS ONLY:

Q2 For what reason have you not used a sunbed? (weighted baseline = 2,882)

Please note: This question was asked only of those who said they had not used a sunbed in Q1.

Please note: Respondents could select multiple options.

Overall

- Half of sunbed non-users (51.4%; 95% CI: 49.6%, 53.2%) said they were not interested in getting a suntan.
- Two out of five sunbed non-users (41.7%; 95% CI: 39.9%, 43.5%) believed that sunbeds were a risk to their health.

Table 7: Reasons children had not used sunbeds

Answer	%	95% CI	
I'm not interested in getting a tan	51.4%	49.6%	53.2%
Health Risk	41.7%	39.9%	43.5%
Expense	7.5%	6.5%	8.4%
No access to a sunbed/ no salons near by	5.8%	5.0%	6.7%
Too young/not old enough	2.2%	1.6%	2.7%
I'm not allowed	1.3%	0.9%	1.7%
Salon staff advised against using the sunbed	0.8%	0.5%	1.1%
No need (no detail)	0.7%	0.4%	1.0%
No reason/never thought about it	0.6%	0.3%	0.8%
No need because I am already dark-skinned/already have a tan	0.5%	0.2%	0.7%
Not interested	0.5%	0.3%	0.8%
Other answers*:			
I don't know (anything/enough) about them	0.4%		
Scary/frightened of/by them	0.3%		
I get a tan from the sun/being outside/in the garden/on holiday	0.3%		
It's artificial/unnatural/prefer the natural (sun)	0.3%		
Don't want to/not bothered	0.3%		
It's a girl thing/it's not masculine	0.3%		
No time/too busy	0.2%		
Stupid/I think they're stupid	0.1%		
Dislike them	0.1%		
Claustrophobic/would panic	0.1%		
I tan easily	0.1%		
I burn (too easily)/I don't tan	0.1%		
I'm not interested in getting a tan that way/through a sun bed	0.0%		
Not a sun lover	0.0%		
Dislike the colour of the tan from a sunbed	0.0%		
Other answers	2.5%		
Don't know	1.8%		

* Confidence intervals were not calculated for percentages lower than 0.5%

To examine whether there were any differences across the sexes, age groups, regions and social grades, the options were grouped into five categories:

- **Health risk:**
Health risk
- **Not interested/use other tan option:**
I'm not interested in getting a tan,
no need (no detail),
no need because I am already dark skinned/already have a tan,
not interested,
I get a tan from the sun/being outside/in the garden/on holiday,
it's artificial/unnatural/prefer the natural (sun),
don't want to/not bothered,
I tan easily,
I'm not interested in getting a tan that way/through a sun bed,
not a sun lover,
dislike the colour of the tan from a sunbed
- **Practical reason:**
Expense,
no access to a sunbed/ no salons near by,
not time/too busy
- **Not allowed/advised not to:**
Too young /not old enough,
I'm not allowed,
Salon staff advised against using the sunbed
- **Other:**
No reason/never thought about it,
I don't know (anything/enough) about them,
Scary/frightened of/by them,
It's a girl thing/it's not masculine,
Stupid/I think they're stupid,
Dislike them,
Claustrophobic/would panic,
I burn (too easily)/I don't tan,
Other answers,
Don't know

Overall

Table 8: Reasons children had not used sunbeds

Answer	%	95% CI	
Health risk	41.7%	39.9%	43.5%
Not interested/use other tan option	54.3%	52.5%	56.1%
Practical reason	13.5%	12.3%	14.8%
Not allowed/advised not to	4.3%	3.5%	5.0%
Other	6.2%	5.3%	7.1%

Breakdown by sex

- The main reason for not using sunbeds differed between the sexes (**table 9**).
- The most common reason given by girls was “health risk” at 51.3% (95%CI: 48.7%, 54.0%) compared with 33.0% (30.6%, 35.4%) of boys.
- The most common reason given by boys was that they were “not interested/use other tan option” at 63.9% (61.5%, 66.3%) compared with 43.6% (41.0%, 46.2%) of girls.

Table 9: Reasons children had not used sunbeds by sex

Answers	Boys			Girls		
	%	95% CI		%	95% CI	
Health risk	33.0%	30.6%	35.4%	51.3%	48.7%	54.0%
Not interested/use other tan option	63.9%	61.5%	66.3%	43.6%	41.0%	46.2%
Practical reason	13.0%	11.3%	14.7%	14.0%	12.2%	15.9%
Not allowed/advised not to	2.9%	2.1%	3.8%	5.8%	4.5%	7.0%
Other	6.7%	5.5%	8.0%	5.7%	4.5%	6.9%

Breakdown by age

- Children aged 11-14 were significantly more likely to give “not being allowed/advised not to use” sunbeds as a reason at 6.3% (5.2%, 7.5%) than children aged 15-17 at 1.6% (0.9%, 2.3%) (**table 10**).
- Children aged 15-17 were significantly more likely give “health risk” as a reason at 46.0% (43.2%, 48.8%) than children aged 11-14 at 38.7% (36.3%, 41.0%).

Table 10: Reasons children had not used sunbeds by age

Answers	11-14			15-17		
	%	95% CI		%	95% CI	
Health risk	38.7%	36.3%	41.0%	46.0%	43.2%	48.8%
Not interested/use other tan option	53.4%	51.0%	55.8%	55.8%	53.0%	58.6%
Practical reason	13.4%	11.8%	15.1%	13.5%	11.6%	15.5%
Not allowed/advised not to	6.3%	5.2%	7.5%	1.6%	0.9%	2.3%
Other	7.6%	6.3%	8.8%	4.1%	3.0%	5.3%

Breakdown by social grade

- There were no significant differences in the reasons given for not using sunbeds by social grade.

Breakdown by region

- There were no significant differences in the reasons given for not using sunbeds by region.

SECTION 3: SUNBED USERS ONLY (weighted baseline = 185)

Please note: Questions in this section were asked only to those children who said they had used a sunbed in Q1. The breakdown of the 185 children included in this section is given in table 11.

Table 11: Weighted numbers of children who had used sunbeds

Category	Weighted numbers of users
Boys	55
Girls	130
11-14	31
15-17	154
AB,C1,C2	125
D,E	59
East Anglia	9
London	17
South East	32
South West	13
East Midlands	8
West Midlands	16
North	19
North West	52
Yorkshire/ Humberside	22
Total	185

Q3: When was the last time you used a sunbed? (weighted baseline = 185)

Please note: This question was asked only to those who said they had used a sunbed in Q1.

Overall

- 10.3% (95%CI: 5.9%, 14.6%) of children had used a sunbed in the past week (**table 12**).

Table 12: Last time used a sunbed

Answers	%	95% CI	
Within the past week	10.3%	5.9%	14.6%
More than a week ago but within the past month	11.9%	7.2%	16.6%
More than a month ago but within 6 months	33.5%	26.7%	40.3%
More than 6 months ago but with 12 months	30.3%	23.6%	36.9%
More than 1 year ago	3.2%	0.7%	5.8%

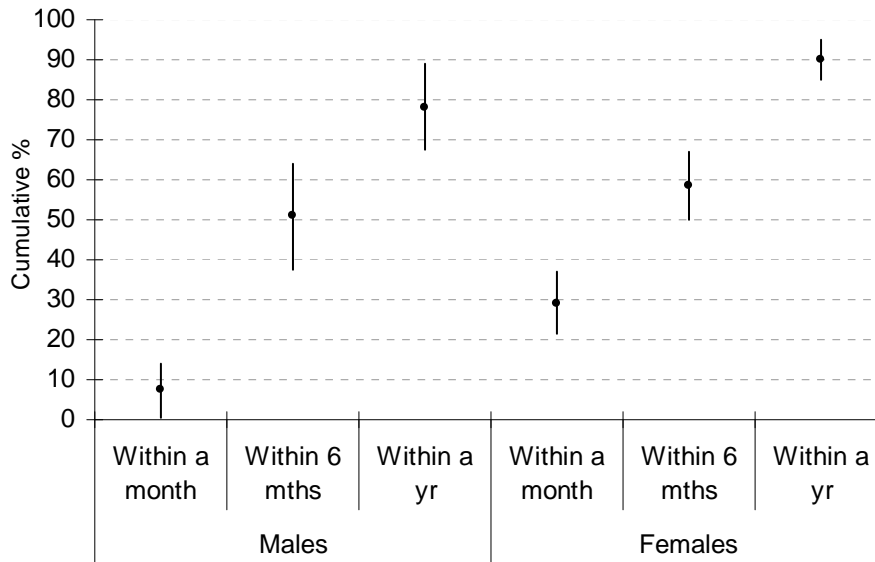
* 19 respondents (after weighting) said they 'did not know' and gave 'other answers'.

- Cumulatively, 22.2% (95%CI: 16.2%, 28.1%) of children had used a sunbed in the last month.
- Cumulatively, 85.9% (80.9%, 91.0%) of children had used a sunbed within the last year.

Breakdown by sex

- Girls were significantly more likely to have used a sunbed in the previous month at 29.2% (95%CI: 21.4%, 37.0%) compared with 7.3% (0.4%, 14.1%) of boys (**figure 3**).

Figure 3: Last time used a sunbed by sex, cumulatively



Breakdown by age group

- There were no significant differences in the time since last use between the two age groups (**table 13**).

Table 13: Cumulative last time used a sunbed by age group

	11-14			15-17		
	%	95% CI		%	95% CI	
< 1 month	12.9%	1.1%	24.7%	24.0%	17.3%	30.8%
< 6 months	48.4%	30.8%	66.0%	57.1%	49.3%	65.0%
< 1 yr	77.4%	62.7%	92.1%	88.3%	83.2%	93.4%
> 1yr	83.9%	70.9%	96.8%	90.3%	85.6%	94.9%

Breakdown by social grade

- There were no significant differences in the time since last use between the higher social grades (AB, C1, C2 combined) compared with the lower grades (D, E).

Breakdown by area

- Use of sunbeds in the last month was marginally significantly lower in the “South” at 14.1% (5.4%, 22.7%) than in the “North” at 26.9% (17.9%, 35.9%) (**table 14**).

Table 14: Cumulative last time used a sunbed by area

	North			Midlands			South		
	%	95% CI		%	95% CI		%	95% CI	
< 1 month	26.9%	17.9%	35.9%	25.0%	10.2%	39.8%	14.1%	5.4%	22.7%
< 6 months	59.1%	49.1%	69.1%	54.2%	37.2%	71.2%	49.3%	36.9%	61.7%
< 1 yr	90.3%	84.3%	96.3%	66.7%	50.6%	82.8%	81.7%	77.3%	91.3%
> 1 yr	92.5%	87.1%	97.8%	70.8%	55.3%	86.3%	85.9%	77.3%	94.6%

Q4 How often do you use a sunbed? (weighted baseline = 185)

Please note: This question was asked only to those who said they had used a sunbed in Q1.

Overall

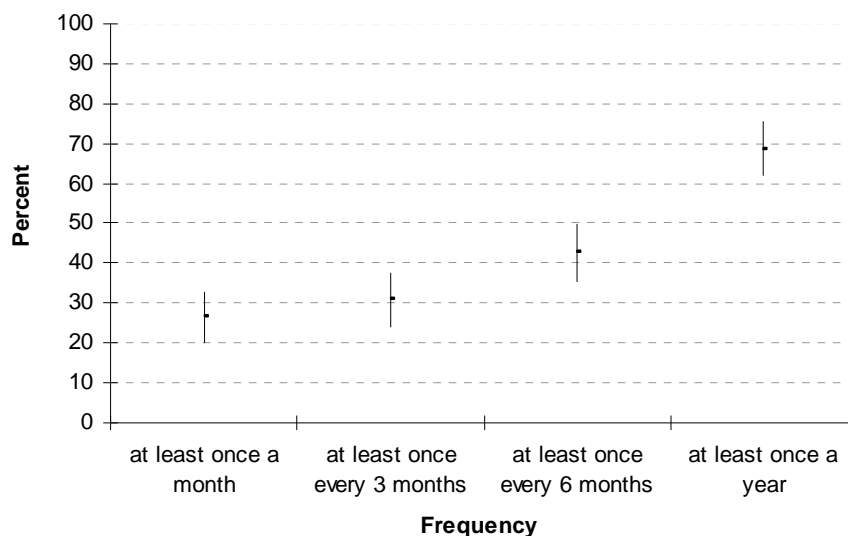
- 16.8% (95%CI: 11.4, 22.1%) of children reported that they used a sunbed at least once a week (**table 15**).

Table 15: frequency of sunbed use

	%	95% CI	
At least once a week	16.8%	11.4%	22.1%
Once a month	9.7%	5.5%	14.0%
Every 2 - 6 months	16.2%	10.9%	21.5%
Once a year	25.9%	19.6%	32.3%
Less than once a year	30.8%	24.2%	37.5%

- Cumulatively, 26.5% (20.1%, 32.8%) children said they used a sunbed at least once a month (**figure 4**).

Figure 4: Cumulative frequency of sunbed use



Breakdown by sex, age and social grade

- There were no significant differences in how often children use sunbeds across the age group, sexes or social grades.

Breakdown by region

- Children in the “North” and “Midlands” were significantly more likely to use sunbeds at least once a week at 24.7% (16.0%, 33.5%) and 20.8% (4.6%, 37.1%) respectively than children in the “South” at 5.6% (0.3%, 11.0%).

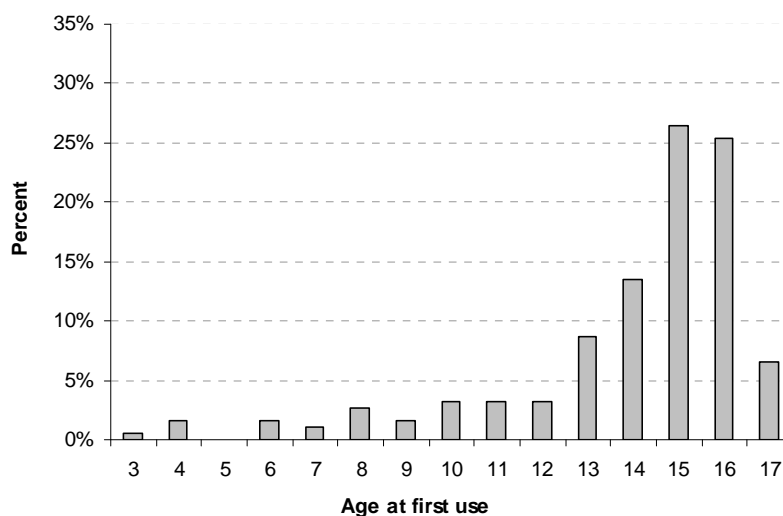
Q5 How old were you the first time you used a sunbed? (weighted baseline = 185)

Please note: This question was asked only to those who said they had used a sunbed in Q1.

Overall

- The mean age at which the children first used a sunbed was 14.
- 18.9% (95%CI: 13.3%, 24.6%) of children had used a sunbed before the age of 13 (figure 5).

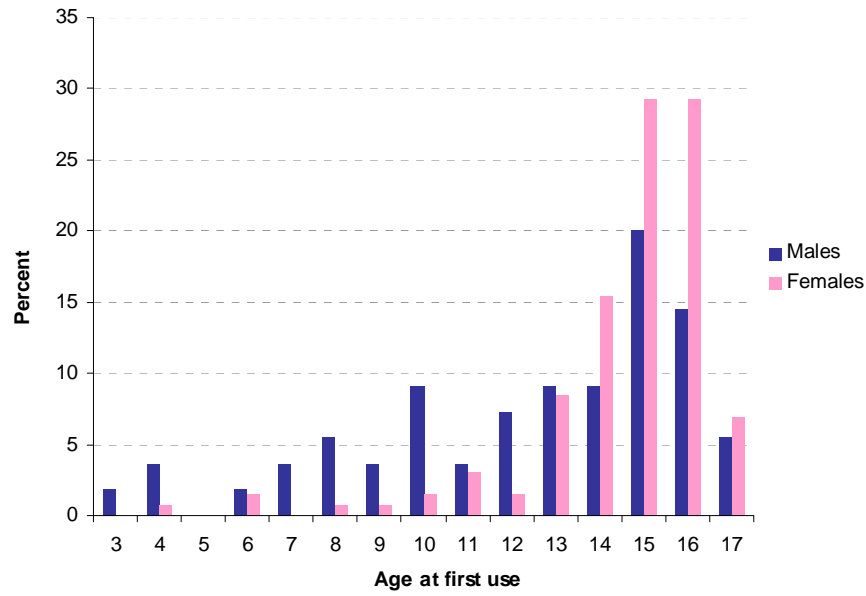
Figure 5: Age when first used a sunbed



Breakdown by sex

- The mean age of first use was lower in boys at age 12 compared with 15 years for girls.
- Boys were significantly more likely to have used a sunbed by the age of 13 at 40.0% (27.1%, 52.9%) compared with 10.0% (4.8%, 15.2%) of girls (figure 6).

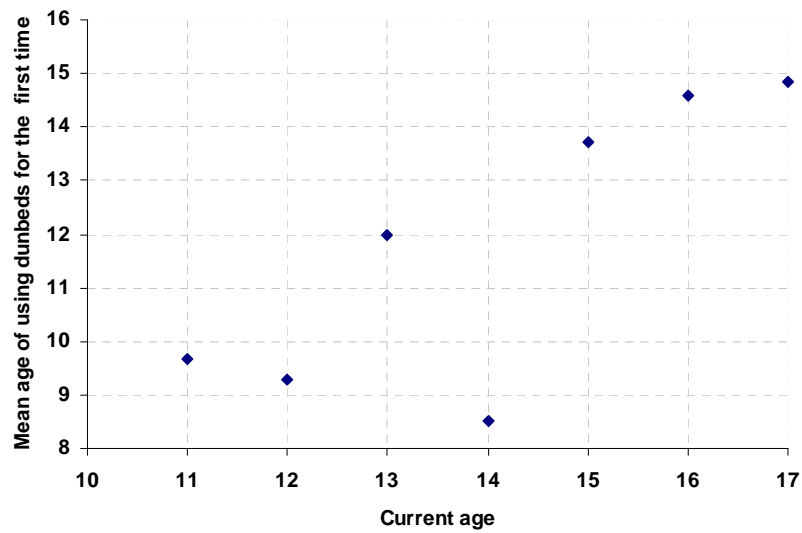
Figure 6: Age at first time of sunbed use by sex



Breakdown by age

- The age at which children used a sunbed for first time did not appear to be strongly associated with the current age of the child (figure 7).

Figure 7: First time of sunbed use by current age



Q6 Where have you used a sunbed? (weighted baseline = 185)

Please note: This question was asked only to those who said they had used a sunbed in Q1.

Please note: Respondents could select multiple options, as they may have used a sunbed in more than one setting.

Overall

- 23.2% (17.2%, 29.3%) of children said that they had used a sunbed at home (**table 16**).
- The majority of children had used a sunbed in a tanning/beauty salon or gym/leisure centre at 76.8% (95%CI: 70.7%, 82.8%).

Table 16: Place where children use sunbeds

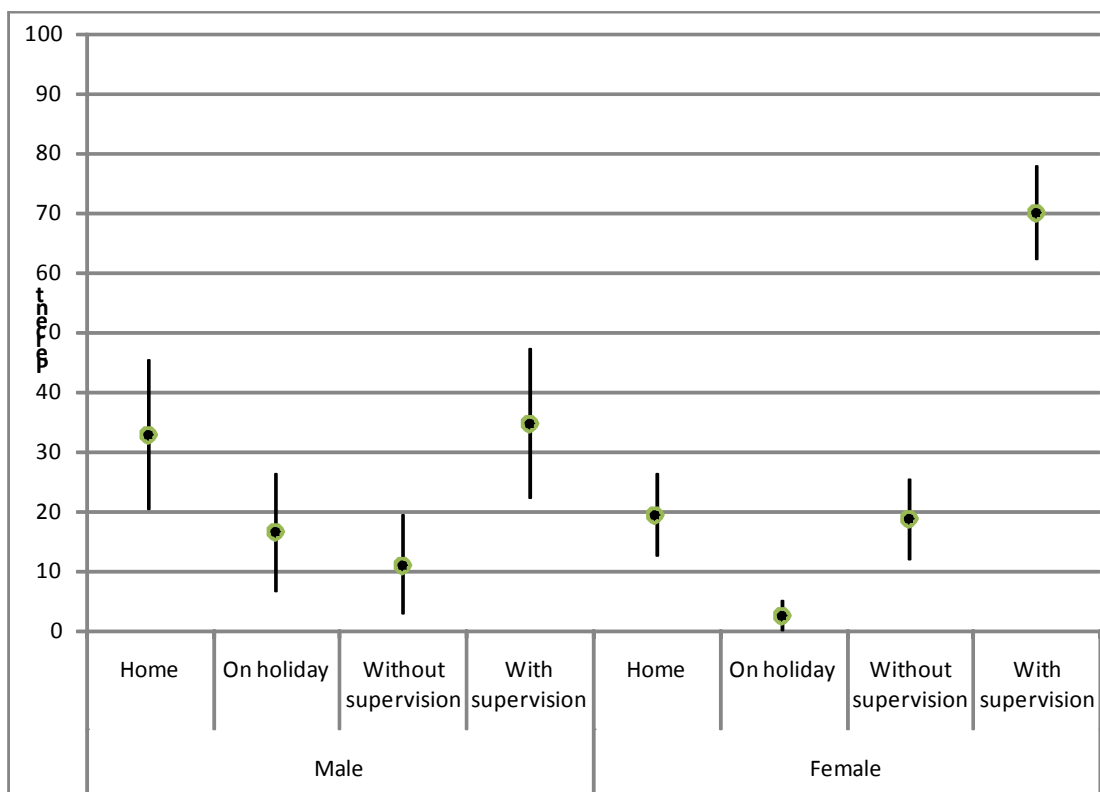
	%	95% CI	
Home - including friends/ relatives home	23.2%	17.2%	29.3%
with staff supervision			
Tanning/ beauty salon	49.7%	42.5%	56.9%
Gym/ leisure centre	10.3%	5.9%	14.6%
without staff supervision			
Tanning/ beauty salon	14.1%	9.0%	19.1%
Gym/ leisure centre	2.7%	0.4%	5.0%
On holiday/abroad	6.5%	2.9%	10.0%
Other answers and don't know	4.3%	1.4%	7.3%

- Of the children who had used a sunbed in a tanning/beauty salon or gym/leisure centre, 21.8% (15.0%, 28.6%) had said they had been unsupervised.
- There was no difference in the level of supervision between the tanning/beauty salons (22.0% unsupervised) and the gym/leisure centres (20.8% unsupervised).

Breakdown by sex

- Boys were more likely to have used a sunbed at home (32.7%; 20.3%, 45.1%) than girls (19.2%; 12.5%, 26.0%) (**figure 8**).
- Boys were also more likely to use a sunbed on holiday/abroad (16.4%; 6.6%, 26.1%) compared with 2.3% (0%, 4.9%) of girls.
- Girls were significantly more likely to have used a sunbed with in a tanning/beauty salon at 78.5% (71.4%, 85.5%) compared with 29.1% (17.1%, 41.1%) of boys.
- The higher levels of supervision seen for girls simply reflects the fact they were more likely to use tanning/beauty salons than boys (**figure 8**).

Figure 8: Where sunbeds been used by sex



Breakdown by age

- 15-17 year olds were significantly more likely to have used a sunbed with in a tanning/beauty salon at 74.0% (67.1%, 81.0%) compared with 12.9% (1.1%, 24.7%) of 11-14 year olds.
- 11-14 year olds were significantly more likely to have used a sunbed at home (41.9%; 24.6%, 59.3%) than 15-17 year olds (20.1%; 13.8%, 26.5%).
- 11-14 year olds were also more likely to use a sunbed on holiday/abroad (25.8%; 10.4%, 41.2%) compared with 3.2% (0.5%, 6.1%) of 15-17 year olds.

Q7 When your sunbed use was supervised, did a person show you how to use a sunbed, and did they give you information about the harm that sunbeds can cause? (weighted baseline = 79)

Please note: This question was asked only to those who said they had used a sunbed in Q1 and who said they had used one in a supervised setting in Q6, and who had taken part in the full study interviews. Additionally, respondents could make multiple selections.

Overall

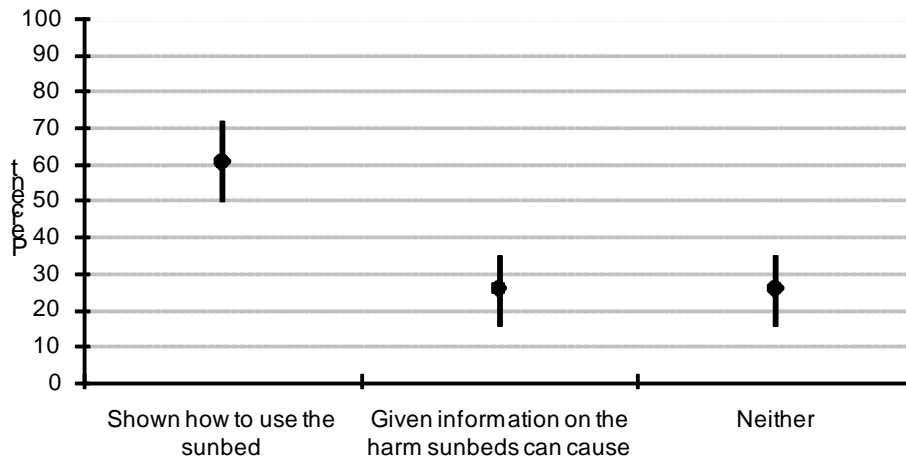
- Overall, 74.7% (95%CI: 65.1%, 84.3%) were given some form of information or advice (**table 17 and figure 9**).
- A total of 60.8% (50.0%, 71.5%) were shown how to use the sunbed.
- A total of 25.3% (15.7%, 34.9%) were given information on the harm sunbeds can cause.
- Only 11.4% (4.4%, 18.4%) were shown how to use a sunbed and given information about the harm sunbeds can cause.

- However, 25.3% (15.7%, 34.9%) of those who said they had been supervised, said that they had received no information on how to use the sunbed, nor on the harm sunbeds can cause.

Table 17: “Level” of supervision for those children using a sunbed when supervised

Answers	%	95% CI	
Shown how to use and given information	11.4%	4.4%	18.4%
Shown how to use but not given information	49.4%	38.3%	60.4%
Not shown how to use but given information	13.9%	6.3%	21.6%
Not shown nor given any information	25.3%	15.7%	34.9%

Figure 9: “Level” of supervision for those children using a sunbed when supervised



Q8 Which of the following best describes the hair on your skin and the colour of your eyes? (weighted baseline = 185)

Please note: This question was asked only to those who said they had used a sunbed in Q1.

Overall

- As this question was asked only of children who had used sunbeds, it is likely that the differences seen by skin type largely just represent the population breakdown of English children rather than differences in sunbed use by skin type.

Table 18: Sunbed Users by type of personal features

Answers	%	95% CI	
Light hair, blue/ brown eyes	40.5%	33.5%	47.6%
Red/ fair hair, blue/ green eyes, tend to have freckles	14.1%	9.0%	19.1%
Brown hair and eyes	21.6%	15.7%	27.6%
Dark brown hair and eyes	14.1%	9.0%	19.1%
Black-brown hair and eyes	5.9%	2.5%	9.4%

* 7 respondents (after weighting) said they were none of these

Appendix 1

Methodology: Sample Design and Fieldwork

CR-UK commissioned BMRB Omnibus to carry out the fieldwork to ensure that a total of more than 3,500 11-17 year olds across Great Britain were interviewed during the periods February-April 2008 (pilot) and October 2008-April 2009 (full study).

The Youth Omnibus survey was undertaken as part of the adult BMRB Face-to-Face Omnibus which runs weekly and interviews a nationally representative sample of 2,000 adults aged 15 years or over across Great Britain. All interviews were conducted within the home. The CR-UK sunbed questionnaire was incorporated into the weekly Omnibus questionnaire until the required sample size had been generated. The survey questions were developed following extensive consultation with a number of researchers (**Appendix 2**).

BMRB Face-to-Face Omnibus uses a Random location sampling technique. This is a single - stage sample design, taking as its universe Sample Units, a bespoke amalgamation of Output Areas (OAs – the basic building block used for output from the 2001 Census) in Great Britain. Sample Units have an average size of 300 households. In it, OAs are grouped into Sample Units by CACI (another marketing information company) within ward and taking account of their ACORN (tool for classifying people and areas into profiles based on both demographic and purchasing consumer details).

Within each sampling point, quota controls are set in terms of the following groups:

Men	- Working full time v not
Women	- Working full time or part time v not
Age	- 15-34
	- 35-54
	- 55+

Men and full-time workers are normally interviewed in the evenings, while nonworking women can be interviewed during the afternoons. After completing an interview, the interviewer leaves two houses before attempting the next interview.

This random location sampling method differs from conventional quota sampling in that the choice of location is taken from the hands of the interviewer. Instead of being given an area to work in, interviewers are provided with street lists with specific addresses. The use of ACORN strata ensures that all area types are correctly represented, making social class quotas unnecessary. The quota controls used are designed to correct for the variation in 'likelihood of being at home' between the different groups.

The Youth Omnibus is part of the adult survey so all the sampling information for the adult survey applies to the youth survey.

Methodology: Youth Omnibus

This is a specialist survey run by BMRB Omnibus comprising 1,000 interviews with 7–19 year olds each month. All the benefits of the Face-to-Face sampling design and CAPI technology (see below) apply to the Youth Omnibus. Each survey comprises:

c.250	7-10 yr olds
c.250	11-14 yr olds
c.500	15-19 yr olds

Children are recruited at the end of the main adult omnibus survey. The interviewer asks the adult respondent if there is a child in the house, within the required age range who is available

to answer some questions. In households with more than one child available, the child who has had their birthday most recently is selected. Permission is obtained from the parent and the child. The 11-17 year old sample used in the CR-UK sunbed analyses was then derived from this Youth Omnibus.

Methodology: Interviewer Validation

Interviews are carried out in-home, using a Computer Assisted Personal Interviewing (CAPI) system. Interviews are conducted by an average of 235 fully trained and briefed interviewers. A minimum of 10% of respondents are re-contacted by phone or letter on all surveys to check classification and key questions.

Appendix 2
Sunbed Usage - Youth - FINAL QUESTIONNAIRE

H837b - JN: 45107120 - 07 Oct 2008

Quanquest v2.1 - QAL v2.2bmr13 - CAPI

H837b

INTERVIEWER PLEASE SHOW SCREEN UNLESS INSTRUCTED OTHERWISE

1. Please tell me which of the following statements best describes you?

I have used sunbeds	1	(108)	
I have never used a sunbed but may do in the future			2
I have never used a sunbed and would never want to			3
Don't Know	Y		

IF 1 = I have never used a sunbed but may do in the future OR 1 = I have never used a sunbed and would never want to
THEN ASK: 2

2. For what reason have you not used a sunbed? Please choose all that apply

INTERVIEWER PLEASE PUT " _ " AROUND OTHER RESPONSES

Expense	1	(109)	
Health Risk	2		
Salon staff advised against using the sunbed			3
No access to a sunbed/ no salons near by			4
I'm not interested in getting a tan		5	
Don't Know	Y		
Other	0		

Other specify...	(110 - 113)
------------------	-------------

End of Filter I837A1

IF 1 = I have used sunbeds
THEN ASK: 3, 4, 5, 6

3. When was the last time you used a sunbed?

INTERVIEWER IF RESPONSE IS MORE THAN A YEAR AGO PLEASE PUT ANSWER IN OTHER SPECIFY

INTERVIEWER PLEASE PUT " _ " AROUND OTHER RESPONSES

Within the past 2 days	1	(114)
Within the past week	2	
Within the past month	3	
Within the past 6 months	4	
Within the last year	5	
Don't Know	Y	
Other	0	

Other specify...	(115 - 118)
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4. How often do you use a sunbed?

At least once a week	1	(119)
At least once a month	2	
Every 2 - 3 months	3	
Every 4 - 6 months	4	
Once a year	5	
Less than once a year	6	
Don't Know	Y	

5. How old were you when you first used a sunbed?

Numeric Range	_____	(120 - 121)
Don't Know	Y	(120)

Permitted Range
0 TO 17 (Numeric Range)

6. Where have you used a sunbed? Please choose all that apply

INTERVIEWER PLEASE SAY: By 'with staff supervision' we mean ' a staff member assisted you to use the sunbed'

INTERVIEWER PLEASE PUT " _ " AROUND OTHER RESPONSES

Home- including friends/ relatives home	1	(122)
Gym/ leisure centre with staff supervision (i.e. a staff member assisted you in using the sunbed)	2	
Gym/ leisure centre without staff supervision (i.e. a staff		

member did not assist you in using the sunbed) 3
Tanning/ beauty salon with staff supervision (i.e. a staff member assisted you in using the sunbed) 4
Tanning/ beauty salon without staff supervision (i.e. a staff member did not assist you in using the sunbed) 5
Don't Know Y
Other 0

Other specify...

(123 - 126)

**IF (6 = Gym/ leisure centre with staff supervision (i.e. a staff member assisted you in using the sunbed) OR 6 = Tanning/ beauty salon with staff supervision (i.e. a staff member assisted you in using the sunbed))
THEN ASK: 7**

7. When your sunbed use was supervised, did a person show you how to use a sunbed, and did they give you information about the harm that sunbeds can cause?

Yes - Showed me how to use the sunbed 1 (127)
Yes - Gave me information about the harm sunbeds can cause 2
No 3
Don't Know Y

End of Filter i837b1

8. Which of the following best describes the hair on your skin and the colour of your eyes?

Red or fair hair, blue or green eyes, tend to have freckles 1 (128)
Light hair, blue or brown eyes 2
Brown hair and eyes 3
Dark brown hair and eyes 4
Black-brown hair and eyes 5
Don't Know Y
None of these X

End of Filter I837A2