

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

Part B: the Six “Cities” Study:  
April 2009 (amended March 2010)

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## **Cancer Research UK study of sunbed use in children – variation across 6 “cities” in England**

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 an analysis of variation of use among children aged 11-17 years in the six selected “cities” in England. Further information about the background to this study can be found in Appendix 1. The methodology surrounding for all of the surveys are given in Appendix 2. Additional analyses are reported in Appendix 3. (note all appendices in this report relate solely to this report).

This report is based on a total of 6,209 children aged 11-17 years who were surveyed in face-to-face interviews across 6 “cities” in England over the 5-week period from 19/04/2008-12/05/2008 (2,506 in pilot data) and 5-week period from 17/10/2008-16/11/2008 (3,703 in full survey data).

The 6 “cities” were: (i) Liverpool; (ii) Stoke & Stafford combined; (iii) Sunderland; (iv) Bath & Gloucester combined; (v) Oxford & Cambridge combined; and (vi) Southampton. The first 3 “cities” were chosen as being areas with a relatively high number of sunbed salon outlets per population; the latter 3 “cities” were chosen as being areas with a relatively low number of sunbed salon outlets per size of the population. It was necessary to combine the data for Stoke & Stafford, Bath & Gloucester and Oxford & Cambridge together to obtain the numbers of necessary interviews (approx 1,000) in each area; these cities were selected to be combined as they had similar demographics to those of the original cities.

The average national prevalence estimate to be used should be derived from the analysis of the BMRB national survey to be reported in July 2009, and not taken from this report. This is because we have been targeting six specific “cities” and so would not necessarily be representative of behaviour over the country as a whole, which may vary between rural and urban areas as well as geographic location, socioeconomic deprivation, ethnic composition, age structure etc.

Key results from this analysis:

### **Sunbed use**

- Overall, 10.8% (95% CI: 10.1%, 11.6%) of all children said they had used a sunbed at least once. This should not be used as a national prevalence estimate
- Half of all 15-17 year old girls (49.7%; 95% CI: 45.0%, 54.4%) in Liverpool and Sunderland have used a sunbed
- More than one in five boys aged 15-17 (21.9%; 95% CI: 18.0%, 25.8%) in Liverpool and Sunderland have used a sunbed
- Overall, sunbed use was significantly higher in Liverpool 20.0% (CI: 17.5%, 22.4%) and Sunderland 18.0% (CI: 15.6%, 20.3%) than in the other four “cities”

- A significantly higher proportion of 15-17 yr olds across the six “cities” had used sunbeds, (19.6% 95% CI: 18.0%, 21.1%) compared with 4.3% (3.6%, 5.0%) of 11-14 yr olds
- Girls were significantly more likely to have used a sunbed, 14.4% (95% CI: 13.1%, 15.6%) compared with 7.3% (95% CI: 6.4%, 8.2%) of boys across the “cities”

#### **For sunbed users only**

- Three out of five children in Sunderland who use sunbeds use them at least one a week (61.6%; 95% CI: 54.6%, 68.6%)
- Two out of five sunbed-using children in Liverpool (42.6%; 95% CI: 35.8%, 49.3%) use a sunbed at least once a week
- Nearly half of all children (46.3%; CI: 42.6%, 50.1%) who said they’d used a sunbed, used one in the last month

#### **Supervision of sunbed use**

- A quarter of children (24.7%; CI: 21.0%, 28.4%) said they were unsupervised when they used tanning equipment in either a tanning/beauty salon or gym/leisure centre
- For those who were supervised, 75.9% (70.1%, 81.6%) were shown how to use the sunbed
- For those who were supervised, 40.8% (34.2%, 47.4%) were given information on the harm sunbeds can cause
- One in five children who said they were supervised, 19.9% (14.5%, 25.2%), said they were neither shown how to use the sunbed nor given any information about the harm sunbeds can cause

## Cancer Research UK study of sunbed use in children – variation across 6 “cities” in England

### LVQ Children’s Omnibus survey of children in six targeted “cities” in England

- A total of 6,209 children aged 11-17 years old were surveyed in face-to-face interviews across England over the 5-week period from 19/04/2008-12/05/2008 (2,506 in pilot data) and the 5-week period from 17/10/2008-16/11/2008 (3,703 in full survey) (**Table 1**).
- The 6 “cities” were: (i) Liverpool; (ii) Stoke & Stafford combined; (iii) Sunderland; (iv) Bath & Gloucester combined; (v) Oxford & Cambridge combined; and (vi) Southampton.
- “Cities” were classified according to the density of sunbeds they have. Liverpool, Stoke/Stafford and Sunderland are considered high density; Bath/Gloucester, Oxford/Cambridge and Southampton are low density.
- The “cities” have different distributions of deprivation measured by social grade (**Table 2**).
- It was necessary to combine the data for Stoke & Stafford, Bath & Gloucester and Oxford & Cambridge together to obtain the numbers of necessary interviews (approx 1,000) in each area; the additional cities (Stafford, Gloucester and Cambridge) were chosen as they had similar demographics and sunbed salon densities to those of the original cities.
- The analyses are based on 3,105 (50%) boys and 3,105 girls (50%) once weighting had been applied to allow for the survey design.
- The analyses are based on 3,549 (57.2%) children aged 11-14 years and 2,660 (42.8%) aged 15-17 years, once weighting had been applied to allow for the survey design.
- All analyses are presented on the weighted samples, with a design effect taken to be 1.
- All confidence intervals are at the 95% level and are presented as (CI: x, y) or (x, y).

**Table 1: Weighted total sample numbers by sex, age-group and social grade**

“city”	Total			Boys			Girls			Social grade				
	11-14	15-17	Total	11-14	15-17	Total	11-14	15-17	Total	AB	C1	C2	DE	Total
<b>Total</b>	<b>3,549</b>	<b>2,660</b>	<b>6,209</b>	<b>1,775</b>	<b>1,330</b>	<b>3,105</b>	<b>1,775</b>	<b>1,330</b>	<b>3,105</b>	<b>1,071</b>	<b>1,985</b>	<b>1,520</b>	<b>1,634</b>	<b>6,209</b>
Liverpool	573	462	1,034	280	225	505	292	237	529	106	324	260	344	1,034
Stoke /Staff	611	424	1,035	312	219	531	299	205	504	98	369	260	307	1,035
Sunderland	625	410	1,035	327	211	538	298	199	497	73	361	240	360	1,035
Bath/Glos	581	454	1,035	291	217	508	290	237	527	271	346	219	199	1,035
Oxford/Camb.	547	487	1,034	261	240	501	286	247	534	293	280	269	192	1,034
Southampton	612	423	1,035	303	219	522	309	204	513	229	304	271	231	1,035

Note: Numbers are rounded. High density ‘cities’: Liverpool, Stoke/Stafford, Sunderland. Low density ‘cities’: Bath/Gloucester, Oxford/Cambridge and Southampton.

**Table 2: Weighted total sample percentages by sex, age-group and social grade**

“city”	Total			Boys			Girls			Social grade				
	11-14	15-17	Total	11-14	15-17	Total	11-14	15-17	Total	AB	C1	C2	DE	Total
<b>Total</b>	<b>57.2</b>	<b>42.8</b>	<b>100.0</b>	<b>28.6</b>	<b>21.4</b>	<b>50.0</b>	<b>28.6</b>	<b>21.4</b>	<b>50.0</b>	<b>17.2</b>	<b>32.0</b>	<b>24.5</b>	<b>26.3</b>	<b>100.0</b>
Liverpool	55.4	44.6	100.0	27.1	21.7	48.8	28.3	22.9	51.2	10.3	31.3	25.2	33.3	100.0
Stoke /Staff	59.0	41.0	100.0	30.2	21.2	51.3	28.9	19.8	48.7	9.5	35.7	25.2	29.7	100.0
Sunderland	60.4	39.6	100.0	31.6	20.3	51.9	28.8	19.3	48.1	7.1	34.9	23.2	34.8	100.0
Bath/Glos	56.1	43.9	100.0	28.1	20.9	49.0	28.0	22.9	51.0	26.2	33.5	21.1	19.2	100.0
Oxford/Ca mbr.	52.9	47.1	100.0	25.2	23.2	48.4	27.7	23.9	51.6	28.3	27.1	26.0	18.6	100.0
Southampton	59.1	40.9	100.0	29.3	21.2	50.5	29.8	19.7	49.5	22.1	29.4	26.2	22.3	100.0

**SECTION 1: OVERALL ANALYSIS**

**Q1: Have you ever or are you considering using a sunbed? (weighted baseline = 6,209)**

*Overall*

- One out of ten children aged 11-17 (10.8%; CI: 10.1%, 11.6%) said they had used a sunbed at least once (**Table 3**).
- A further 17.0% (16.1%, 18.0%) said they may use a sunbed in the future.

**Table 3: Use of sunbeds**

Answer	%	95% CI	
I have used sunbeds	10.8	10.1	11.6
I have never used a sunbed but may do in the future	17.0	16.1	18.0
I have never used a sunbed and would never want to	69.3	68.1	70.4
Don't Know	2.9	2.5	3.3

- This was higher than the interim average national prevalence estimate of 7.4% (6.3%, 8.5%) obtained from the 2,217 children interviewed as part of the BMRB national survey interim analysis, reported in February 2009.
- This is as might have been expected as we were targeting six specific “cities” and so would not necessarily be representative of behaviour over the country as a whole, which may vary between rural and urban areas as well as geographic location, socioeconomic deprivation, ethnic composition, age structure etc.
- For this reason an average over all “cities” obtained here will not give an estimate for the country.

*Breakdown by “city”*

- Sunbed use was significantly higher in Liverpool at 20.0% (CI: 17.5%, 22.4%) and Sunderland at 18.0% (CI: 15.6%, 20.3%) than in the other four “cities” (**Table 4**).
- Despite of having a high density of sunbed salons, Stoke/Stafford showed a pattern similar to those “cities” where there are a low number of salons on offer (**Table 4**).
- Despite lower sunbed use in Oxford/Cambridge, Southampton and Stoke/Stafford, nearly one in five children in these “cities” said they may use a sunbed in the future (**Table 4**).

**Table 4: Use of sunbeds, by “city”**

Density	“City”	I have used sunbeds			I have never used a sunbed but may do in the future			I have never used a sunbed and would never want to		
		%	95% CI		%	95% CI		%	95% CI	
High	Liverpool	20.0	17.5	22.4	14.7	12.5	16.8	64.7	61.8	67.6
	Stoke /Stafford	6.8	5.2	8.3	19.1	16.7	21.5	72.3	69.6	75.0
	Sunderland	18.0	15.6	20.3	19.2	16.8	21.6	62.4	59.5	65.4
Low	Bath/Gloucester	6.6	5.1	8.1	13.2	11.1	15.2	74.3	71.6	77.0
	Oxford/Cambridge	7.5	5.9	9.1	18.3	15.9	20.6	71.2	68.4	74.0
	Southampton	6.2	4.7	7.7	17.7	15.4	20.0	70.7	67.9	73.5

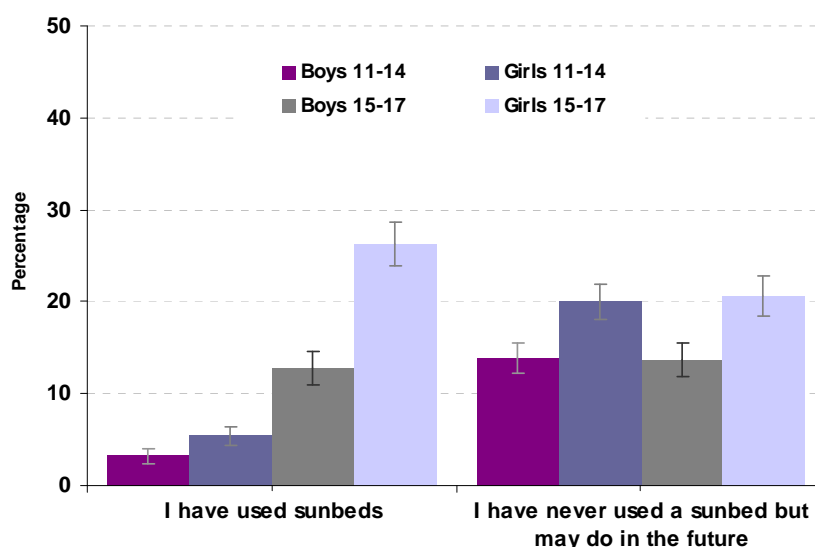
Breakdown by sex and age-group

- A quarter of all girls aged 15-17 have used a sunbed (26.3%; CI: 24.0%, 28.7%), and this was significantly higher than boys of all ages and younger girls (Table 5 & Figure 1).

Table 5: Use of sunbeds by sex and age-groups

Answer	Boys 11-14			Girls 11-14			Boys 15-17			Girls 15-17		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
I have used sunbeds	3.2	2.4	4.0	5.4	4.3	6.4	12.8	11.0	14.6	26.3	24.0	28.7
I have never used a sunbed but may do in the future	13.8	12.2	15.5	20.0	18.2	21.9	13.7	11.8	15.5	20.6	18.4	22.8
I have never used a sunbed and would never want to	77.4	75.4	79.3	70.9	68.7	73.0	72.9	70.5	75.3	52.7	50.1	55.4
Don't Know	5.6	4.5	6.6	3.7	2.9	4.6	0.7	0.2	1.1	0.4	0.0	0.7

Figure 1: Use of sunbeds by sex and age-group



Sunbed users broken down by "city", age and sex

- For all cities, significantly more girls aged 15-17 used sunbeds compared with boys of the same age (Table 6).
- There was, however, no significant difference between the sexes in sunbed use for those aged 11-14, for all "cities" (Table 6).
- For both age groups, use of sunbeds was significantly higher for both girls and boys living in Liverpool and Sunderland than in the other four "cities".
- In Liverpool and Sunderland, half of all 15-17 year old girls, and more than one out of five boys aged 15-17 have used sunbeds (Table 6).

Table 6: Children who had used sunbeds, by "city", age-group and sex

City	Boys 11-14			Girls 11-14			Boys 15-17			Girls 15-17		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Liverpool	4.8	2.3	7.3	9.2	5.9	12.5	20.3	15.0	25.5	51.0	44.6	57.4
Stoke /Stafford	2.6	0.9	4.4	3.2	1.2	5.2	7.6	4.1	11.1	17.3	12.1	22.5
Sunderland	4.3	2.1	6.5	8.8	5.6	12.0	23.6	17.9	29.4	48.2	41.3	55.1
Bath/Gloucester	2.3	0.6	4.0	1.4	0.1	2.8	11.3	7.0	15.5	14.1	9.7	18.6
Oxford/Cambridge	2.9	0.9	5.0	5.2	2.7	7.8	8.9	5.3	12.5	13.6	9.3	17.8
Southampton	2.3	0.6	4.0	4.6	2.2	6.9	5.7	2.6	8.8	15.0	10.1	19.9

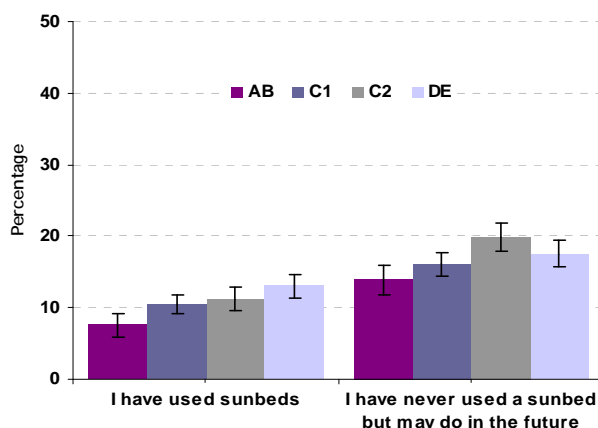
Breakdown by social grade

- Sunbed use was significantly higher in children from the lower social grades (D and E combined) at 13.0% (CI: 11.4%, 14.7%) compared with 10.1% (CI: 9.2%, 10.9%) for children in the higher social grades (AB, C1, C2 combined).
- The main difference was between children from social grade DE (the most deprived group) and children from social grade AB (the least deprived group) (Table 7 & Figure 2).

Table 7: Use of sunbeds by social grade

Answer	AB			C1			C2			DE		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
I have used sunbeds	7.6	6.0	9.2	10.5	9.1	11.8	11.2	9.6	12.8	13.0	11.4	14.7
I have never used a sunbed but may do in the future	13.9	11.9	16.0	16.1	14.5	17.7	19.9	17.9	21.9	17.5	15.7	19.4
I have never used a sunbed and would never want to	74.6	72.0	77.2	71.5	69.5	73.5	65.6	63.2	68.0	66.5	64.2	68.8
Don't Know	3.9	2.8	5.1	1.9	1.3	2.5	3.3	2.4	4.2	2.9	2.1	3.7

Figure 2: Use of sunbeds by social grade



Sunbed users broken down by “city” and social grade

- There were no significant differences across social grades in the proportion of sunbed users for any of the “cities”.

**Please note:** Additional analyses and tables showing breakdowns overall by age-group, sex, skin type and ethnicity are given in Appendix 3.

**SECTION 2: SUNBED NON-USERS ONLY**

**Q2 For what reason have you not used a sunbed? (weighted baseline = 5,536)**

**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 children who had not used sunbeds (50.8%; CI: 49.4%, 52.1%) believed that sunbeds were a risk to their health (**Table 8**).
- One in three children who had not used a sunbed (33.1%; CI: 31.9%, 34.4%) were not interested in getting a suntan (**Table 8**).

**Table 8: Reasons children had not used sunbeds**

Answer	%	95% CI	
It's a health risk /bad for you	50.8	49.4	52.1
I'm not interested in getting a tan	33.1	31.9	34.4
It's expensive	6.0	5.4	6.7
Prefer a natural tan	4.1	3.5	4.6
Cancer concerns	3.7	3.2	4.2
Waste of time /not interested	3.6	3.2	4.1
Too young /not old enough	3.1	2.6	3.5
Not allowed/ parents won't let me	2.3	1.9	2.7
Never thought about it	1.6	1.3	2.0
Skin/ hair type	1.5	1.1	1.8
Concern about tanning machines/might burn me	1.4	1.1	1.7
No salon /sunbed nearby	1.0	0.8	1.3
Bad for skin/ageing	0.9	0.6	1.1
Too girlie/only for girls	0.7	0.4	0.9
Salon staff advised against using sunbed	0.6	0.4	0.8
No time	0.5	0.3	0.7
Use fake tan /spray on tan	0.4	0.2	0.6
Never heard of sunbeds /don't know what they are	3.2	2.8	4
Other reason	1.4	1.1	1.8
Don't know	3.0	2.5	3.4

**Please note:** To simplify, options have been grouped in the following five categories:

- *Health risk:* It's a health risk /bad for you; cancer concerns; skin/ hair type; concern about tanning machines/might burn me; bad for skin/ageing.
- *Not interested/use other tan option:* I'm not interested in getting a tan; prefer a natural tan; waste of time /not interested; use fake tan /spray on tan
- *Practical reason:* It's expensive; no salon /sunbed nearby; no time
- *Not allowed:* Too young /not old enough; not allowed/ parents won't let me; salon staff advised against using sunbed
- *Other:* Never thought about it; too girlie/only for girls; other reason; don't know.

*Breakdown by "city"*

- There were significant differences in the reasons children did not use sunbeds across the "cities" (**Table 9**).
- Practical reasons deterred more children from using sunbeds in Bath/Gloucester and Southampton than in the other four "cities". The most common reason given was that it was expensive.
- Although not significant, there were slightly more restrictions for children in high sunbed density cities. Restrictions mainly came from their parents, or for being too young.

**Table 9: Reasons children had not used sunbeds by “city”**

“City”	Health risk			Not interested/use another option			Practical reason			Not allowed		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Liverpool	58.4	55.1	61.8	35.7	32.4	38.9	3.4	2.2	4.7	7.1	5.3	8.8
Stoke /Stafford	59.4	56.3	62.5	45.0	41.9	48.2	5.9	4.4	7.4	7.2	5.6	8.9
Sunderland	62.0	58.7	65.2	40.4	37.1	43.7	5.3	3.8	6.8	8.6	6.8	10.5
Bath/Gloucester	56.7	53.6	59.9	39.4	36.3	42.5	12.2	10.2	14.3	5.2	3.8	6.6
Oxford/Cambridge	55.1	51.9	58.2	48.3	45.2	51.5	6.6	5.0	8.1	3.0	2.0	4.1
Southampton	58.0	54.9	61.1	37.8	34.7	40.8	11.2	9.2	13.2	5.1	3.7	6.4

*Breakdown by sex*

- The reasons given for not using sunbeds differed between the sexes (**Table 10**).
- More girls did not use sunbeds because they are a health risk (66.4%; CI: 64.6%, 68.2%) than boys (50.6%; CI: 48.8%, 52.4%).
- More boys (50.5%; CI: 48.7%, 52.3%) did not use sunbeds because they were not interested in getting a tan or used another tanning option than girls (31.2%; 29.5%, 33.0%).
- Girls were more restricted than boys to use sunbeds, mainly by their parents or because of the age.

**Table 10: Reasons children had not used sunbeds by sex**

Answer	Boys			Girls		
	%	95% CI		%	95% CI	
Health risk	50.6	48.8	52.4	66.4	64.6	68.2
Not interested/use other tan option	50.5	48.7	52.3	31.2	29.5	33.0
Practical reason	7.0	6.0	7.9	8.3	7.2	9.3
Not allowed	3.6	2.9	4.3	8.5	7.4	9.6
Other	10.5	9.3	11.6	9.4	8.2	10.5

*Breakdown by age*

- The reasons given for not using sunbeds differed between children aged 11-14 and those aged 15-17 (**Table 11**).
- Children aged 11-14 were more concerned about health risk, were less interested in getting a tan and faced more restrictions than children aged 15-17.

**Table 11: Reasons children had not used sunbeds by age**

Answer	11-14			15-17		
	%	95% CI		%	95% CI	
Health risk	58.7	57.0	60.4	57.4	55.3	59.5
Not interested/use other tan option	38.7	37.1	40.4	45.2	43.1	47.3
Practical reason	5.7	4.9	6.5	10.6	9.3	11.9
Not allowed	7.7	6.8	8.6	3.2	2.4	3.9
Other	11.4	10.3	12.4	7.7	6.5	8.8

**SECTION 3: SUNBED USERS ONLY**

**Please note:** questions to follow were asked only to those who said they had used a sunbed in Q1 (Table 12)

**Table 12: Weighted numbers of children who had used sunbeds**

"City"	Total			Boys			Girls			Social grade				
	11-14	15-17	Total	11-14	15-17	Total	11-14	15-17	Total	AB	C1	C2	DE	Total
Total	153	520	673	57	170	227	96	350	446	81	208	171	213	673
Liverpool	40	166	207	13	46	59	27	121	148	17	60	53	78	207
Stoke /Staff	18	52	70	8	17	25	10	36	45	3	22	23	23	70
Sunderland	40	146	186	14	50	64	26	96	122	11	67	45	64	186
Bath/Glos	11	58	69	7	24	31	4	34	38	14	23	18	14	69
Oxford/Camb.	23	55	78	8	21	29	15	34	49	22	16	22	18	78
Southampton	21	43	64	7	13	20	14	31	45	16	21	11	17	64

**Q3: When was the last time you used a sunbed? (weighted baseline = 673)**

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

Overall

- Nearly half of all children (46.3%; CI: 42.6%, 50.1%) had used a sunbed in the last month (Table 13).
- Cumulatively, 86.2% (83.6%, 88.8%) of children had used a sunbed within the past year.
- Three children aged 11-14 said they had last used a sunbed more than five years ago, when they were aged between 6 and 9 years old.

**Table 13: Last time used a sunbed**

Answer	%	95% CI	
<=1 month	46.3	42.6	50.1
1-6 months	25.1	21.8	28.3
6-12 months	14.8	12.2	17.5
> 1 year	11.0	8.6	13.4
Don't know	2.8	1.5	4.0

Breakdown by "city"

- Significantly more children living in Liverpool and Sunderland had used sunbeds in the last month than children living in the other four "cities" (Table 14).
- In contrast, significantly more children living in Bath/Gloucester and Southampton had not used sunbeds in the last year in comparison to children in the other four "cities".

**Table 14: Last time used a sunbed, by "city"**

"City"	<=1 month			1-6 months			6-12 months			> 1 year		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Liverpool	62.6	56.0	69.2	20.3	14.8	25.7	7.2	3.7	10.7	7.3	3.8	10.9
Stoke /Stafford	36.5	25.2	47.7	28.7	18.1	39.3	17.1	8.2	25.9	16.0	7.4	24.6
Sunderland	55.0	47.8	62.1	27.0	20.7	33.4	10.9	6.4	15.3	4.9	1.8	8.0
Bath/Gloucester	30.5	19.6	41.4	22.6	12.7	32.5	19.6	10.2	29.0	23.9	13.8	34.0
Oxford/Cambridge	21.1	12.0	30.2	29.6	19.5	39.8	33.0	22.5	43.5	11.7	4.5	18.8
Southampton	26.9	16.0	37.7	27.8	16.9	38.8	21.4	11.4	31.5	20.5	10.6	30.3

*Breakdown by sex*

- Significantly more boys (16.5%; CI: 11.7%, 21.3%) than girls (8.2%; CI: 5.6%, 10.7%) last used a sunbed more than a year ago.

*Breakdown by age or social grade*

- There were no significant differences between the age groups or across the social grades.

**Q4 How often do you use a sunbed? (weighted baseline = 673)**

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

*Overall*

- Nearly two out of five sunbed users (38.4%; CI: 34.7%, 42.1%) said they used a sunbed at least once a week (**Table 15**).
- Cumulatively, 65.2% (CI: 61.6%, 68.8%) of children said they used a sunbed at least once a month.

**Table 15: Frequency of sunbed use**

Answer	%	95% CI	
At least once a week	38.4	34.7	42.1
At least once a month	18.2	15.3	21.2
Every 2-6 months	14.6	12.0	17.3
Once a year or less	25.2	21.9	28.5
Don't know	3.5	2.1	4.9

**Please note:** Additional analyses and tables showing breakdowns by age-group and sex are given in the Appendix 3.

*Breakdown by “city”*

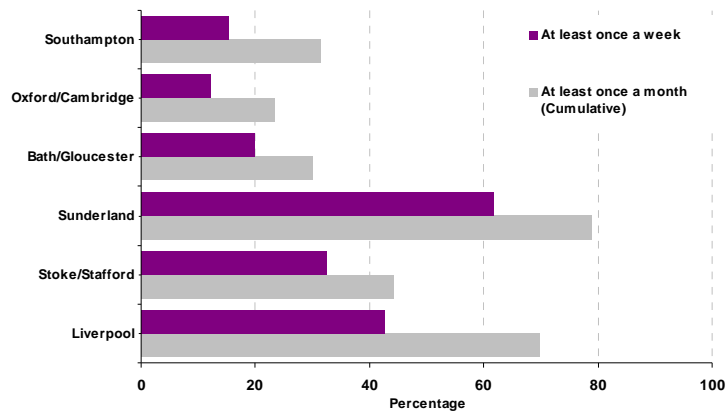
- Three out of five children in Sunderland (61.6%; CI: 54.6%, 68.6%), and two out of five children in Liverpool (42.6%; CI: 35.8%, 49.3%) said they used a sunbed at least once a week. (**Table 16 & Figure 3**).

**Table 16: Frequency of sunbed use, by “city”**

“City”	At least once a week			At least once a month			Every 2-6 months			Once a year or less		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Liverpool	42.6	35.8	49.3	27.2	21.1	33.3	11.3	6.9	15.6	16.0	11.0	21.0
Stoke /Stafford	32.4	21.5	43.4	11.8	4.3	19.4	13.9	5.8	22.0	39.0	27.5	50.4
Sunderland	61.6	54.6	68.6	17.5	12.0	22.9	8.4	4.4	12.4	9.4	5.2	13.6
Bath/Gloucester	19.9	10.4	29.3	10.2	3.0	17.3	16.8	7.9	25.6	49.8	38.0	61.6
Oxford/Cambridge	12.3	5.0	19.6	11.0	4.0	18.0	34.7	24.1	45.3	35.0	24.4	45.6
Southampton	15.4	6.6	24.3	15.9	7.0	24.9	17.8	8.5	27.2	47.4	35.2	59.6

\* Note 24 children (after weighting) said they did not know how often they used sunbeds.

Figure 3: Frequency of sunbed use, by “city”



**Q5 How long do you usually spend on a sunbed per session? (weighted baseline = 673)**

**Please note:** This question was asked only of those that said they had used a sunbed in Q1.

*Overall*

- The mean time spent per session was 10 minutes (median 9 minutes).
- Three out of ten children (31.2%; CI: 27.7%, 34.7%) spend 4-6 minutes in a sunbed per session (**Table 17**).
- Nearly a quarter of children spend 7-9 minutes on a sunbed per session (23.8%; CI: 20.6%, 27.0%) and one fifth (19.5%; CI: 16.5%, 22.5%) spend 10-12 minutes.

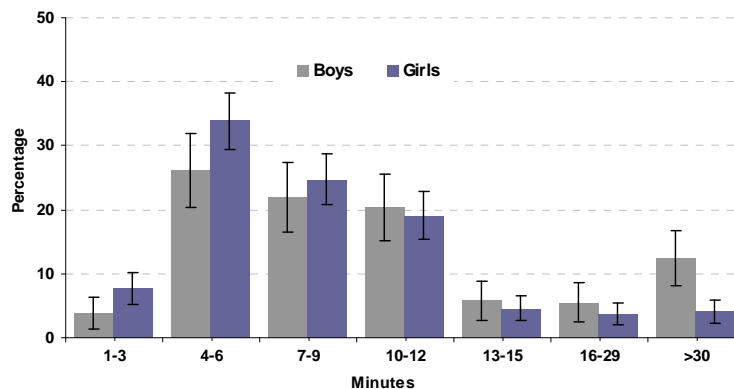
**Table 17: Time spent on a sunbed per session**

Time	%	95% CI	
1-3 minutes	6.4	4.6	8.3
4-6 minutes	31.2	27.7	34.7
7-9 minutes	23.8	20.6	27.0
10-12 minutes	19.5	16.5	22.5
13-15 minutes	5.0	3.4	6.7
16-29 minutes	4.3	2.8	5.8
> 30 minutes	6.9	5.0	8.8
Don't know	2.8	1.5	4.0

*Breakdown by sex*

- Girls spend an average of 9 minutes per session on a sunbed compared with an average of 12 minutes for boys. The difference, however, was not statistically significant (**Figure 4**).

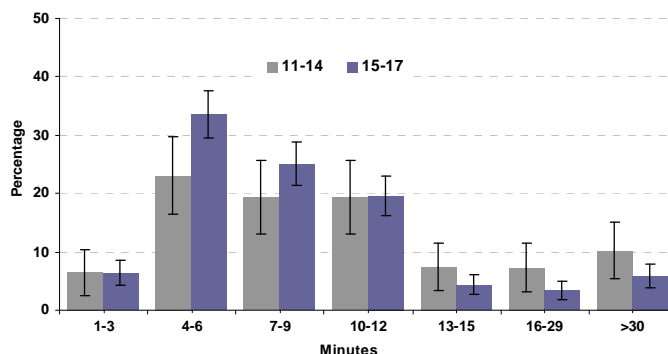
**Figure 4: Time spent on a sunbed per session by sex**



Breakdown by age

- Children aged 15-17 were more likely to have spent 4-9 minutes on a sunbed per session whereas younger children aged 11-14 were more likely to have spent more than 13 minutes. The differences, however, were not statistically significant (Figure 5).

Figure 5: Time spent on a sunbed per session by age

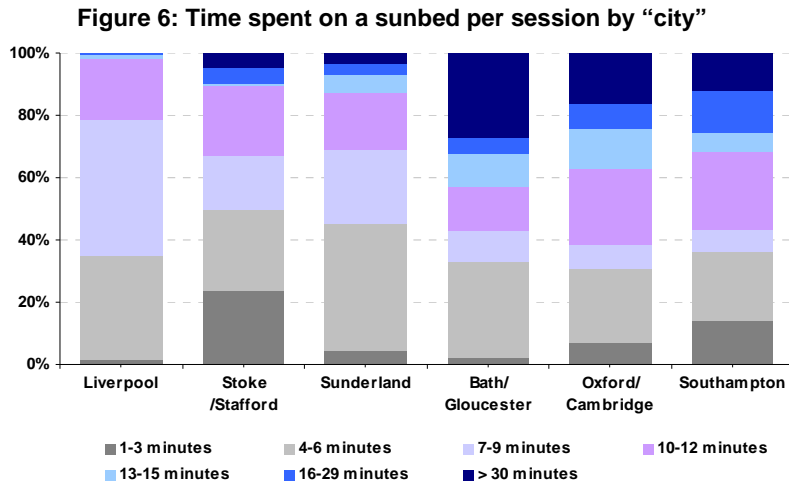


Breakdown by “city”

- There were significant differences between the “cities” (Table 18 & Figure 6).
- Overall, children in high sunbed density “cities” spent less time per session on a sunbed (mean 8-9) than children in low density “cities” (mean 13-15).
- No sunbed user in Liverpool spent more than 30 minutes on a sunbed in a session compared with 26.1% (15.75, 36.5%) of sunbed users in Bath/Gloucester, 15.2% (7.2%, 23.2%) in Oxford/Cambridge and 12.2% (4.2%, 20.2%) in Southampton, respectively.

Table 18: Time spent on a sunbed per session by “city”

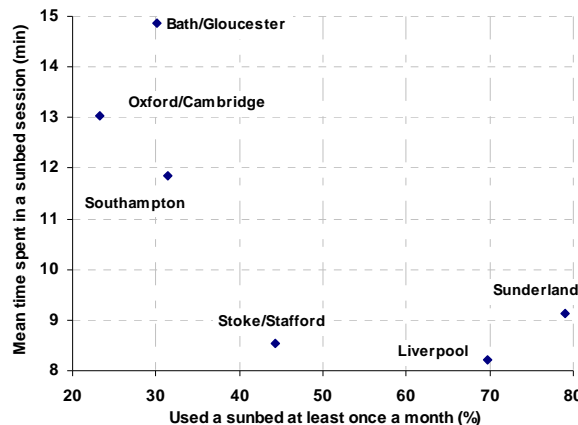
Answer	High density						Low density					
	Liverpool		Stoke /Stafford		Sunderland		Bath/Gloucester		Oxford/Cambridge		Southampton	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
1-3 minutes	1.6	0.0 3.3	22.8	12.9 32.6	4.6	1.6 7.6	2.2	0.0 5.6	6.4	0.9 11.8	14.0	5.5 22.5
4-6 minutes	32.5	26.1 38.9	25.5	15.3 35.7	39.7	32.7 46.7	29.7	18.9 40.6	21.9	12.7 31.1	21.8	11.7 31.8
7-9 minutes	42.7	35.9 49.4	16.8	8.0 25.5	23.2	17.1 29.3	9.4	2.5 16.3	7.7	1.8 13.6	7.1	0.8 13.4
10-12 minutes	19.4	14.0 24.8	21.4	11.8 31.0	18.2	12.7 23.8	13.9	5.7 22.1	22.3	13.1 31.6	24.6	14.0 35.1
13-15 minutes	1.3	0.0 2.8	1.1	0.0 3.6	5.5	2.2 8.8	10.4	3.2 17.6	11.9	4.7 19.2	6.1	0.2 11.9
16-29 minutes	0.5	0.0 1.4	4.9	0.0 9.9	3.9	1.1 6.7	4.9	0.0 10.0	7.3	1.5 13.0	13.1	4.9 21.4
> 30 minutes	0.0	0.0 0.0	4.4	0.0 9.2	3.0	0.6 5.5	26.1	15.7 36.5	15.2	7.2 23.2	12.2	4.2 20.2
Don't know	2.1	0.2 4.1	3.2	0.0 7.3	1.8	0.0 3.8	3.4	-0.9 7.7	7.2	1.5 13.0	1.2	0.0 3.9
Mean (minut.)	8		9		9		15		13		15	



Time spend per session Vs. frequency of sunbed use

- There is a negative correlation between the average time spent in a sunbed per session and the frequency of use of sunbeds across "cities" (**Figure 7**).
- In low density "cities", the frequency of use of sunbeds was low but the average time spent per session was high, around 12-15 minutes (Oxford/Cambridge, Southampton and Bath/Gloucester).
- In high density "cities" where children were more likely to use sunbeds at least once a month, the time spent per session was around 8-9 minutes (Liverpool, Sunderland).
- Please note:** It was not possible to assess whether the strength of the sunbeds is similar in low and high density "cities".

**Figure 7: Time spent on a sunbed session vs. frequency of use**



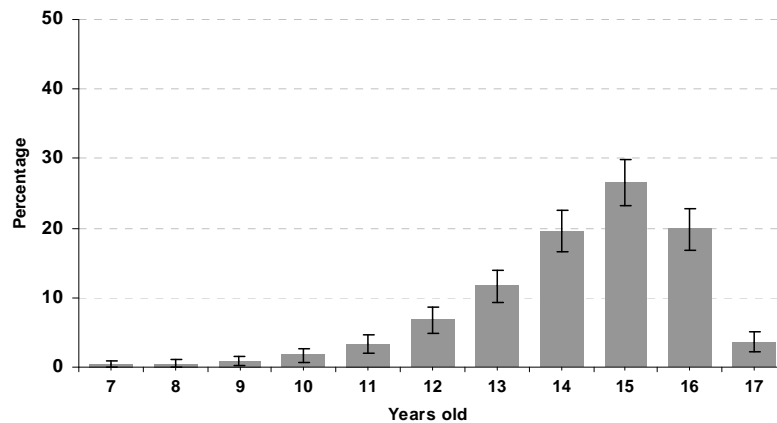
**Q6 How old were you the first time you used a sunbed? (weighted baseline = 673)**

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

*Overall*

- The mean age at which the children first used a sunbed was 14.
- 7.0% (5.0%, 8.9%) of children had first used a sunbed before they were aged 12.
- Cumulatively, a quarter of children (25.4%; CI: 22.1%, 28.7%) had used a sunbed before the age of 14 (**Figure 8**).

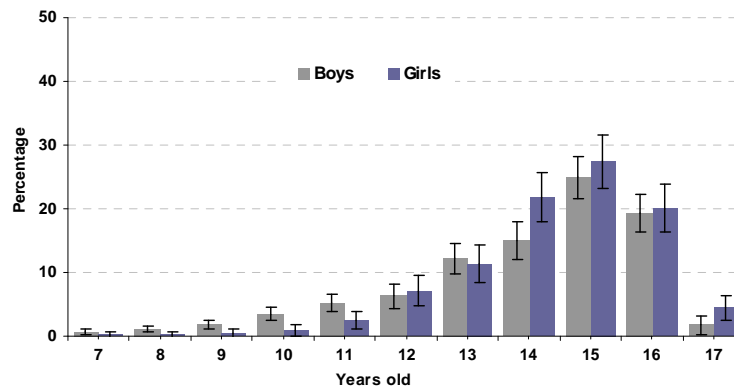
Figure 8: First time of sunbed use



Breakdown by sex

- There is a suggestion of a differing pattern between the sexes for the age of first use.
- Boys seemed to be more likely to have used sunbeds for the first time at younger age than girls (Figure 9). However, the mean for both sexes was 14.

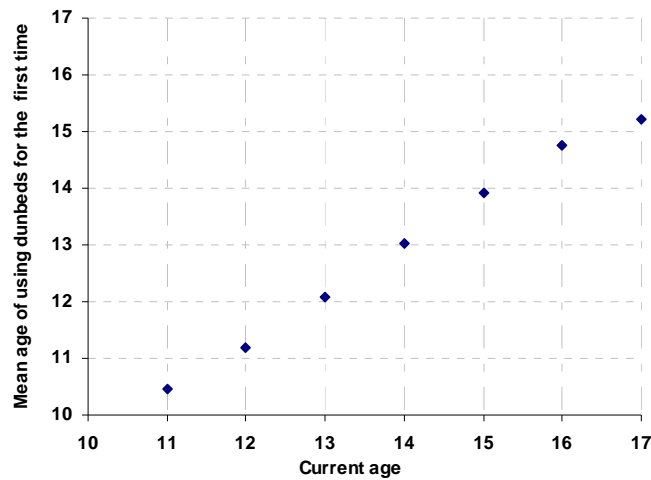
Figure 9: First time of sunbed use by sex



Breakdown by age

- The age at which children used a sunbed for first time was positively associated with the current age of the child. Overall, the mean age of the first time was when the child was one year younger than the current age (Figure 10).
- This perhaps suggests that the practice of using sunbeds is relatively new across all ages.

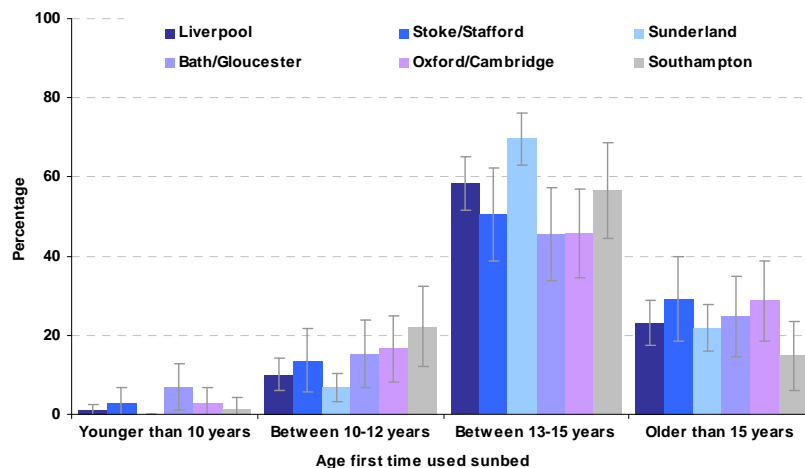
Figure 10: First time of sunbed use by age



Breakdown by “city”

- The mean at which the children first used a sunbed was 14 in all “cities” except Sunderland; in this city, the average age of first use was 15 years (Figure 11).

Figure 11: First time of sunbed use by “city”



**Q7 Where have you used a sunbed? (weighted baseline = 673)**

**Please note:** This question was asked only of 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

- Just over one in five children (23.0%; CI: 19.8%, 26.1%) had used a sunbed at home (including friends/relatives home) (Table 19).
- The majority of children had used a sunbed in a tanning/beauty salon or gym/leisure centre with staff supervision (57.9%; CI: 54.1%, 61.6%).
- Of only those children who used tanning equipment in either a tanning/beauty salon or gym/leisure centre (thus excluding the other options), a quarter (24.7%; CI: 21.0%, 28.4%) said they were unsupervised.

**Table 19: Places where children use sunbeds**

Answer	%	95% CI	
At home/ a friend's home	23.0	19.8	26.1
At tanning /beauty salon with staff to help you	52.1	48.4	55.9
At tanning /beauty salon without staff to help you	13.3	10.7	15.9
At gym /leisure centre with staff to help you	5.7	4.0	7.5
At gym /leisure centre without staff to help you	5.7	3.9	7.4
Other/Don't know	6.4	4.5	8.2

*Breakdown by "city"*

- In Liverpool, three out of four children used a sunbed in beauty salon or gym with staff to help (74.5%; CI: 68.5%, 80.4%). This was significantly higher than in any other "city" (**Table 20**).
- Also in Liverpool there was lower use of sunbeds at home/friend's home (10.0%; CI: 5.9%, 14.1%) than in any of the other five "cities".

**Table 20: Places where children use sunbeds, by "city"**

City	At home/ a friend's home			At tanning /beauty salon/Gym with staff to help you			At tanning /beauty salon/Gym without staff to help you		
	%	95% CI		%	95% CI		%	95% CI	
Liverpool	10.0	5.9	14.1	74.5	68.5	80.4	19.5	14.1	25.0
Stoke /Stafford	30.3	19.5	41.1	54.6	43.0	66.3	16.2	7.6	24.9
Sunderland	31.6	24.9	38.2	56.9	49.8	64.0	16.3	11.0	21.6
Bath/Gloucester	28.0	17.3	38.6	36.3	24.9	47.7	23.6	13.5	33.6
Oxford/Cambridge	23.2	13.8	32.6	49.9	38.8	61.1	16.4	8.1	24.6
Southampton	26.1	15.4	36.9	43.3	31.2	55.4	25.9	15.2	36.6

*Breakdown by sex*

- Girls were significantly more likely to have used a sunbed in a tanning and beauty salon either with help or without it (73.6%; CI: 69.5%, 77.6%) than boys (49.5%; CI: 43.0%, 56.0%) (**Table 21**).
- In contrast, boys were more likely to have used a sunbed at home or friend's home (31.2%), or at gym/leisure centre without help (9.1%), than girls (18.8% and 3.9% respectively) (**Table 21**).

**Table 21: Places where children use sunbeds, by sex**

Answer	Boys			Females		
	%	95% CI		%	95% CI	
At home/ a friend's home	31.2	25.2	37.3	18.8	15.1	22.4
At tanning /beauty salon with staff to help you	40.5	34.1	46.9	58.1	53.5	62.6
At tanning /beauty salon without staff to help you	9.0	5.3	12.7	15.5	12.1	18.9
At gym /leisure centre with staff to help you	7.0	3.7	10.3	5.1	3.1	7.1
At gym /leisure centre without staff to help you	9.1	5.4	12.8	3.9	2.1	5.7
Other/Don't know	10.9	6.9	15.0	4.1	2.2	5.9

Breakdown by age

- Young children were more likely to have used a sunbed at home/friends home (41.0%; CI: 33.2%, 48.8%) than children aged 15-17 (17.7%; CI: 14.4%, 20.9%) (**Table 26**).
- In contrast, older children (aged 15-17) were more likely to have used a sunbed at tanning beauty salon (71.7%; CI: 67.5%, 75.9%) than younger children (44.0%; CI: 37.6%, 75.9%).
- Older children, aged 15-17, were also more likely to have used a sunbed in a place without supervision (21.8%; CI: 17.9%, 25.6%) than younger children (9.4%; CI: 5.6%, 13.2%) (**Table 22**).

**Table 22: Places where children use sunbeds, by age**

Answer	11-14			15-17		
	%	95% CI		%	95% CI	
At home/ a friend's home	41.0	33.2	48.8	17.7	14.4	20.9
At tanning /beauty salon with staff to help you	38.3	30.6	46.0	56.2	51.9	60.5
At tanning /beauty salon without staff to help you	5.7	2.0	9.4	15.5	12.4	18.7
At gym /leisure centre with staff to help you	4.7	1.3	8.0	6.0	4.0	8.1
At gym /leisure centre without staff to help you	3.7	0.7	6.7	6.2	4.2	8.3
Other/Don't know	10.9	6.0	15.9	5.0	3.2	6.9

**Q8 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 = 213)**

**Please note:**

- This question was only asked in the survey carried out in October-November 2008 to those children who said they had used a sunbed in Q1 and who said they had used one in a supervised setting in Q7.
- However, the baseline for this question does not equal the number of respondents that said they were supervised in Q7 because respondents could make multiple selections in Q7.

*Overall*

- Overall, 75.9% (70.1%, 81.6%) were shown how to use the sunbed (**Table 23**).
- A total of 40.8% (34.2%, 47.4%) were given information on the harm sunbeds can cause (**Table 23**).

**Table 23: Children who received information when used a sunbed**

Answer	%	95% CI	
Yes - Showed me how to use the sunbed	75.9	70.1	81.6
Yes - Gave me information about the harm sunbeds can cause	40.8	34.2	47.4

Combined answers are given in **Table 24**.

**Table 24: Children who received information when used a sunbed**

Combined response	%	95% CI	
Shown how to use sunbed & given info	36.6%	30.1%	43.1%
Shown how to use sunbed but given no info	39.3%	32.7%	45.8%
Not shown how to use sunbed but given info	4.2%	1.5%	7.0%
Not shown how to use sunbed & given no info	19.9%	14.5%	25.2%

*Breakdown by age, sex, social grade and "city"*

- There were no significant differences across the sexes, the age-groups, the social grades or the cities.

## Appendix 1: Background

The Sunbed Association estimates that 7% of adults use sunbeds, whereas the estimates of use from the pilot study reported in August 2008 suggested the figure was around 24% [**see Appendix 1 of the main report: the pilot study**]. At the start of the project in early 2008, we did not currently have a national estimate of the proportion of young people that do. We had anecdotal evidence that young people are gaining access to, and using, commercial sunbeds in increasing numbers, but there was a need to establish the extent of sunbed use in minors as well as understanding the patterns of use and the experiences of using sunbeds.

To design a method of collecting this information effectively, it was important to have an indication of the prevalence of sunbed use. This project therefore included an initial 'scoping' exercise which surveyed a smaller number of children (under 18s) in order to obtain a picture of the level of commercial sunbed use.

In the 'scoping' exercise, 988 children were interviewed across Great Britain over an 11-week period from 21/02/2008-23/04/2008; 57 had used sunbeds. The analyses were based on 508 (51%) males, 488 (48%) females; and 558 (56%) aged 11-14 years, 430 (44%) aged 15-17 years, once weighting had been applied to allow for the survey design.

The top line results from the pilot study were as follows:

- **5.8%** (95% CI: 4.3%, 7.3%) of children aged 11-17 years had used a sunbed
  - **9.4%** (CI: 8.5%, 10.3%) of girls
  - **2.4%** (CI: 1.0%, 3.7%) of boys
- **18.1%** (CI: 15.7%, 20.5%) of respondents said they had not yet used a sunbed but may do so in the future
- **15.8%** (CI: 6.3%, 25.3%) of children reported using a sunbed in an unsupervised setting on at least one occasion

Additionally, 2,506 children were interviewed across six cities in England as part of the 'scoping' study to explore the idea that the variation in availability of sunbeds based on density of sunbed outlets per population in turn led to variations in the prevalence of sunbed use in children. The scoping study gave some evidence but was not large enough to be conclusive.

Full results of the 'scoping' study were presented to the Department of Health in August 2008.

Using the 'scoping' study findings, it was possible to decide how best to build the sample of sunbed users to solidify the prevalence estimate and obtain further information on behaviour and experience (see full methodology of the expanded study below for more detail).

An interim analysis of the national prevalence was presented in a report detailing the results of the 'scoping' study combined with an additional sample (1,229 children aged 11-17 were surveyed over a 10 week period from 09/10/2008-17/12/2008), reported to the CAT and DH in February 2009 [**see Appendix 2 of the main report: the interim analysis**]. This sample will be increased over the coming months to inform the final analysis, to be reported in July 2009.

By increasing the sample, we improved the accuracy and precision of the prevalence estimate. We were also been able to carry out some more specific analysis of sunbed use by subgroups e.g. age, sex, social grade and region.

We also added an extra question to the larger study to explore the issue of sunbed supervision in more detail. We asked all respondents who said they have used a sunbed in

staffed premises 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.

This current report presents the findings of the extended “city” analysis, combining data from the ‘scoping’ study with the new data collected towards the end of 2008, to allow better understanding of how having greater access to sunbed salons correlates with use of sunbeds.

As part of the project, we also commissioned 12 focus groups to explore patterns of sunbed use among young people and examine the ‘sunbed experience’ in more detail. The findings of this were reported in February 2009 [**see Part C of the main report: the qualitative study**].

The qualitative work complemented the quantitative research and offer insights into how and why young people are gaining access to sunbeds.

The full report to be completed by July 2009 will bring together the findings of all three separate strands [**see Part A of the main report: the national prevalence study**].



## Appendix 2: Full methodology for expanded study (developed in September 2008)

### Requirements for survey sample sizes for sunbed survey:

Data will be obtained from (i) BMRB for the overall use of sunbeds in children aged 11-17 yrs across the country; from (ii) BMRB regionally for the 9 GORs; (iii) LVQ to examine the use of sunbeds in urban areas where access to sunbed outlets is probably easier; and (iv) CM Insight to run focus groups to explore in more depth where children are using sunbeds and the level of supervision that is being experienced.

For the LVQ survey, data are being obtained from 9 cities (pooling data for 6 of them) such that sunbed use levels are obtained for 6 different cities (or pooled cities). These have been chosen on the basis of either high or low density of sunbed outlets, and according to ease of obtaining the sample.

We will use the data from the scoping exercise to combine with new survey data.

#### (i) BMRB Overall Survey

To get a much firmer estimate of the overall use of sunbeds in children aged 11-17 yrs across the country and to use this for policy development purposes, the BMRB survey will survey 2000 children to get estimates with 95% confidence intervals within +/- 1% (powered on the 5.8% use observed in the pilot study).

This will be reported as an interim measure of overall sunbed use after a further 1000 children have been interviewed (at the end of month 4 from start of data collection) as we are able to combine the data from the pilot surveys with this.

However, to obtain the final overall use of sunbeds in children, and to examine all of the other questions (same as those asked in the pilot), 3500 children will be surveyed (thus another 2500 needed). These will give the measures for all of the questions reported for age, sex and social grade. We will report this at the end of month 9 from the start of data collection (June 2009).

#### (ii) BMRB Regional Survey

To explore regional variation of sunbed use, we will run the BMRB survey such that 3500 children are interviewed. Even with this number, the estimated 95% confidence intervals for some of the GORs will still be relatively large for those with high use of sunbeds (though less than +/- 5%). However, the trade off between statistical certainty and the time needed to obtain the survey has been considered. The 3500 sample size is based on the assumption that the sunbed use rates seen for each of the GORs in the pilot remain in the extended study to 3500, with similar proportions of children interviewed in the GORs.

This will allow all of the questions to be reported by GOR, and will be able to give an indication of differences of use by age and sex within the GORs.

#### (iii) LVQ Cities Survey

To get a firmer estimate of sunbed use in 6 cities (or pooled cities) across the country, with smaller confidence intervals, we will increase the numbers interviewed to 1000 per "city". Following discussion with LVQ, we believe this strikes a good balance between providing robust estimates and achieving the required numbers of interviews in each "city". This will require a further approximately 600 interviews in each "city".

Of the 6 cities included in the scoping exercise, LVQ are confident of achieving a further 600 interviews in Liverpool, Sunderland and Southampton. For Oxford, an alternate "city" will need



to be included, either in terms of geography or similar incidence of sunbed population, to achieve the 1000 interviews. The data will then be pooled. LVQ are also less confident of achieving a further 600 interviews in Stoke and Bath. They will interview in Stafford if they fall short of the 600 target in Stoke and interview in Gloucester if they fall short of the 600 target in Bath. In total another 3,600 interviews will be carried out across the pooled cities.

#### **(iv) Qualitative research to explore where sunbeds are being used**

To gain an understanding of where under 18s are using sunbeds, and the level of supervision available in commercial premises, 12 focus groups of 4-6 15-17 year olds in 6 cities across the country are being undertaken (under 15s are being accepted if they are found and friendship pairs will be allowed). The participants will likely all be girls (as the scoping study showed that prevalence is much higher among girls). All participants will be 'ever used' sunbeds, and the researchers will aim for some regular users, with the majority having used a sunbed in the past 9 months.

The qualitative research will in part align with the quantitative work. Researchers will hold focus groups in two of Liverpool, Sunderland and Stoke, plus Brighton, a London suburb and two others. This will be particularly useful for exploring the high prevalence in some areas and examining why there appears to be a particular problem in specific cities. There will be two focus groups held in each city.

The focus groups will enable detailed discussion about where young people are using salons – for example, coin-operated beds in salons versus sunbeds in gyms – and what level and type of supervision they are receiving. We will also ask if ID was requested/ young people were challenged on grounds of age, skin type or asked about how frequently they use sunbeds.

#### **Timeframe**

**October 2008** – commence BMRB and LVQ quantitative research and CM Insight focus groups

**November 2008** – Continue with field research

**December 2008** – Continue with field research, begin analysis of LVQ data

**January 2009** – Continue with field research

**End of January 2009** – Deliver BMRB UK national prevalence figure

**End of March 2009** – Deliver expanded LVQ "city" prevalence figures and analysis of regional variation in use, plus the CM Insight qualitative research

**End of June 2009** – Deliver final BMRB results and prevalence figures by GOR

#### **Additional comments**

We discussed the combining of data with the research agencies and are confident that combining data is acceptable and the research agencies ensured that there was no double counting of interviewees. It may be beneficial to collect data at different points during the year to give a more balanced/ rounded picture of prevalence data.

The chosen sample sizes are appropriate and combine robustness with the ability to deliver results to a reasonable timescale.

The confidence limits for overall UK prevalence percentage will be within 1.0%; this will be a robust figure.

We will interview another 2,500 children to give the BMRB analysis. We will interview another circa 600 children per "city" to give a sample size of 1000 children per "city"/area for the LVQ analysis. We will hold 12 focus groups of 4-6 young sunbed users.

BMRB will interview approximately 90 children a week. We will interview another 1000 children to give an initial firm idea of the UK prevalence figure (& combine with the 1000 already interviewed to reach a sample size of 2000). We will then continue with the BMRB fieldwork so that, when combined, we will have interviewed a total of 3,500 children. This final analysis, which will provide a breakdown of use by children by GOR, will be delivered 9 months from the commencement of the study.

When we first scoped this project, we discussed the possibility of using school based studies to explore sunbed prevalence. For several reasons, we decided that this would not be the most appropriate method.

Dr Julia Verne and Professor Brian Diffey have commented on aspects of the (scoping study) proposal and their comments have been taken into account when developing the expanded study proposal.

In the quantitative research, it is not possible to go into the kind of depth we would like to explore what is meant by 'supervision' in sunbed salons. For this reason, we are making clear that these results should be used cautiously. It is also why we are conducting focus groups – so that we will have the time and appropriate mode of research to explore this key policy question in more detail.

### Appendix 3: Additional analyses

**Q1: Have you ever or are you considering using a sunbed? (weighted baseline = 6,209)**

*Breakdown by sex*

- Girls were significantly more likely to have used a sunbed at 14.4% (CI: 13.1%, 15.6%) compared with 7.3% (CI: 6.4%, 8.2%) of boys (**Table 1A**).
- There were also significantly more girls who responded that they had not yet used a sunbed but may do in the future (20.3%; CI: 18.8%, 21.7%) compared with 13.8% (CI: 12.6%, 15.0%) of boys (**Table 1A**).

**Table 1A: Use of sunbeds by sex**

Answer	Boys			Females		
	%	95% CI		%	95% CI	
I have used sunbeds	7.3	6.4	8.2	14.4	13.1	15.6
I have never used a sunbed but may do in the future	13.8	12.6	15.0	20.3	18.8	21.7
I have never used a sunbed and would never want to	75.4	73.9	77.0	63.1	61.4	64.8
Don't Know	3.5	2.8	4.1	2.3	1.8	2.8

*Breakdown by age group*

- Significantly more 15-17 yr olds had used sunbeds (19.6%; CI:18.0%, 21.1%) compared with 4.3% (3.6%, 5.0%) of 11-14 yr olds (**Table 2A**).

**Table 2A: Use of sunbeds by age-group**

Answer	11-14			15-17		
	%	95% CI		%	95% CI	
I have used sunbeds	4.3	3.6	5.0	19.6	18.0	21.1
I have never used a sunbed but may do in the future	16.9	15.7	18.2	17.1	15.7	18.6
I have never used a sunbed and would never want to	74.1	72.7	75.6	62.8	61.0	64.6
Don't Know	4.6	4.0	5.3	0.5	0.2	0.8

*Sunbed users broken down by “skin type”*

- There were no significant differences in sunbed use across the “skin types” (**Table 3A**)

**Table 3A: Users of sunbeds by “type of skin”**

“Type of skin”	% of users from the total sample in that “skin type”		
	%	95% CI	
Red or fair hair, blue or green eyes, tend to have freckles	10.1	8.2	11.9
Light hair, blue or brown eyes	10.3	9.1	11.5
Brown hair and eyes	11.4	9.8	12.9
Dark brown hair and eyes	12.8	10.5	15.0
Black-brown hair and eyes	11.4	7.3	15.5
Don't know	6.3	2.0	10.5

**Please Note:** Each child responded to the question Which of the following best describes the hair on your skin and the colour of your eyes? to be classified in any skin group.

Sunbed users broken down by ethnic group

**Table 4A: Users of sunbeds by Ethnic group**

Ethnic group	% of users from the total sample in that ethnic group		
	%	95% CI	
White	11.1	10.3	11.9
Mixed	5.9	0.6	11.2
Asian or Asian British	2.2	0.0	6.5
Black or black British	0.0	na	na
Other ethnic group	7.2	0.0	20.7
Not stated	7.6	2.4	12.9

**Please Note:** Each child responded to the question To which of the following ethnic groups do you belong? to be classified in any ethnic group

**Q4 How often do you use a sunbed? (weighted baseline = 673)**

*Breakdown by sex*

- Significantly more boys (32.7%; CI: 26.6%, 38.8%) than girls (21.4%; CI: 17.5%, 25.2%) said that they used a sunbed only once a year or less (**Table 5A**).
- There were no other significant differences between the sexes.

**Table 5A: Frequency of use of sunbed by sex**

Answer	Boys			Females		
	%	95% CI		%	95% CI	
At least once a week	35.6	29.3	41.8	39.8	35.3	44.4
At least once a month	17.2	12.3	22.1	18.8	15.1	22.4
Every 2-6 months	10.8	6.8	14.9	16.6	13.1	20.0
Once a year or less	32.7	26.6	38.8	21.4	17.5	25.2
Don't know	3.7	1.3	6.2	3.4	1.8	5.1

*Breakdown by age*

- Children aged 15-17 (43.2%; CI: 39.0%, 47.5%) were more likely to use sunbeds once a week than children aged 11-14 (21.9%; CI: 15.4, 28.5) (**Table 6A**).

**Table 6A: Frequency of sunbed use, by age**

Answer	11-14			15-17		
	%	95% CI		%	95% CI	
At least once a week	21.9	15.4	28.5	43.2	39.0	47.5
At least once a month	16.2	10.3	22.0	18.8	15.5	22.2
Every 2-6 months	24.1	17.3	30.9	11.9	9.1	14.6
Once a year or less	30.8	23.4	38.1	23.5	19.9	27.2
Don't know	7.1	3.0	11.2	2.5	1.2	3.8