

Global perceptions of lung cancer

An Ipsos MORI report for the **Global Lung Cancer Coalition**

16 June 2010



GLOBAL LUNG CANCER
COALITION

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Introduction

Introduction

Background and objectives

This report presents the findings from a multi-national study undertaken by Ipsos MORI on behalf of the Global Lung Cancer Coalition. A quantitative survey was conducted across sixteen different countries including: Argentina, Australia, Brazil, Bulgaria, Canada, Great Britain, Italy, Japan, Norway, Spain, Denmark, Switzerland, Slovenia, Sweden, the Netherlands, and the USA.

This project was commissioned to understand the following among adults:

- Perceptions of which cancers kill the greatest number of people in their country; and
- Attitudes towards lung cancer.

The purpose of this report is to summarise the key messages from each country and place this within the context of current data available.

Methodology

In every country, two questions were placed on the Ipsos Omnibus. A nationally representative quota sample for each country of c. 1,000 adults was interviewed between 25 January – 16 May 2010. Two different methodologies were used between the countries: face-to-face in-home interviewing and telephone interviewing using CATI (Computer Aided Telephone Interviewing.) The age of participants interviewed also varies slightly between countries. Details of the methodology used and the age range interviewed across the sixteen countries can be found overleaf.

The same questions were asked in each country to allow comparison between countries.

Data have been weighted to the known adult population profile of each country.

Country	Sample Size	Sample	Method of data collection	Fieldwork dates
Argentina	1,000	Adults aged 16-64	Telephone (CATI)	10 - 24 February 2010
Australia	1,200	Adults aged 18+	Telephone (CATI)	12 - 14 February 2010
Brazil	1,000	Adults aged 16+	Face-to-face (PAPI)	18 - 26 February 2010
Bulgaria	1,200	Adults aged 15+	Face-to-face (PAPI)	10 – 16 May 2010
Canada	1,000	Adults aged 18+	Telephone (CATI)	4 – 7 February 2010
Great Britain	1,000	Adults aged 15+	Face-to-face (CAPI)	29 Jan – 4 Feb 2010
Italy	1,026	Adults aged 15+	Face-to-face (CAPI)	10 – 16 February 2010
Japan	1,272	Adults aged 20+	Face-to-face (PAPI)	5 – 14 February 2010
Norway	1,000	Adults aged 15+	Telephone (CATI)	2 – 8 February 2010
Spain	1,005	Adults aged 15+	Face-to-face (CAPI)	25 Jan – 5 Feb 2010
Denmark	1,000	Adults aged 15+	Telephone (CATI)	2 – 8 February 2010
Switzerland	1,008	Adults aged 15+	Telephone (CATI)	15 – 20 February 2010
Slovenia	1,039	Adults aged 15+	Face-to-face (PAPI)	27 Jan – 10 Feb 2010
Sweden	1,000	Adults aged 15+	Telephone (CATI)	2 – 8 February 2010
The Netherlands	1,004	Adults aged 15+	Telephone (CATI)	2 Feb -1 March 2010
USA	1,000	Adults aged 18+	Telephone (CATI)	4 – 7 February 2010

Reporting

In the graphs and tables, the figures quoted are percentages. The size of the sample base from which the percentage is derived is indicated. Caution is advised when comparing responses between small sample sizes (i.e. fewer than 100).

Please note that percentage figures for the various sub-samples or groups will need to differ from each other by a certain number of percentage points for the difference to be statistically significant. This number will depend on the size of the samples being compared, and the percentage finding itself – as noted in the appendices to this report.

Where an asterisk (*) appears it indicates a percentage finding of less than half of one per cent, but greater than zero. Where percentages do not add up to 100% this can be due to a

number of reasons, such as the exclusion of 'Don't know' or 'Other' responses, multiple responses, or computer rounding.

Publication of Data

Our standard Terms & Conditions apply to this, as to all studies we carry out. Compliance with the MRS Code of Conduct and our advance clearance is necessary of any copy or data for publication, web-siting or press releases which contain any data derived from Ipsos MORI research. This is to protect our client's reputation and integrity as much as our own. We recognise that it is in no-one's best interests to have survey findings published which could be misinterpreted, or could appear to be inaccurately, or misleadingly, presented.

Research findings

Research findings

Background

According to the World Health Organisation (WHO), cancer is the leading cause of death worldwide, with lung, stomach, liver, colon and breast cancer causing the most cancer deaths each year. Lung cancer is responsible for the greatest number of deaths among men, while among women death due to breast cancer is more common, followed by lung cancer.¹

The *incidence* of lung cancer varies by country, as shown in the table below. In all the countries surveyed men are more likely to develop lung cancer than women. The USA has the highest rate for both men and women. These figures are taken from the GLOBOCAN 2002 database (which was built up using the data available in the Descriptive Epidemiology Group of IARC). The figures are based on *estimates* from the year 2002. However, although the populations of the different countries are those estimated for the middle of 2002 the disease rates are not those for the year 2002, but from the most recent data available, generally 2-5 years earlier. Further information can be found at <http://www-dep.iarc.fr/>.

Lung cancer incidence – age-standardised (World) rates, per 100,000

Country/Region	Males	Females
Argentina	43.3	8
Australia	39.5	16.8
Brazil	21.5	7.1
Bulgaria	45.6	6.7
Canada	55.8	31.6
Denmark	45.3	29.8
Italy	58	10.7
Japan	38.1	12.3
Norway	36.4	18.7
Slovenia	57.1	13.9
Spain	55.8	5.4
Sweden	21.1	14.4
Switzerland	44.6	13.8
The Netherlands	59.7	17.9
United Kingdom	48.1	24.9
United States of America	61.9	36.1

¹ <http://www.who.int/mediacentre/factsheets/fs297/en/index.html>

Which cancer is perceived to be responsible for the greatest number of deaths?

As shown in the table below, in 13 of the 16 countries surveyed, lung cancer is thought to be the cancer responsible for the greatest number of deaths in their country. The exceptions are: Japan, where a broadly equal proportion cite lung cancer and bowel cancer; Australia where a greater proportion cite breast and skin cancer; and Bulgaria where a greater proportion cite breast cancer.

In some of the countries (where lung cancer is seen as the most common killer), the difference between this and the next most commonly cited cancer is large, for example in Spain, Norway and Italy, while in others the difference is much less pronounced, for example in Canada and Brazil.

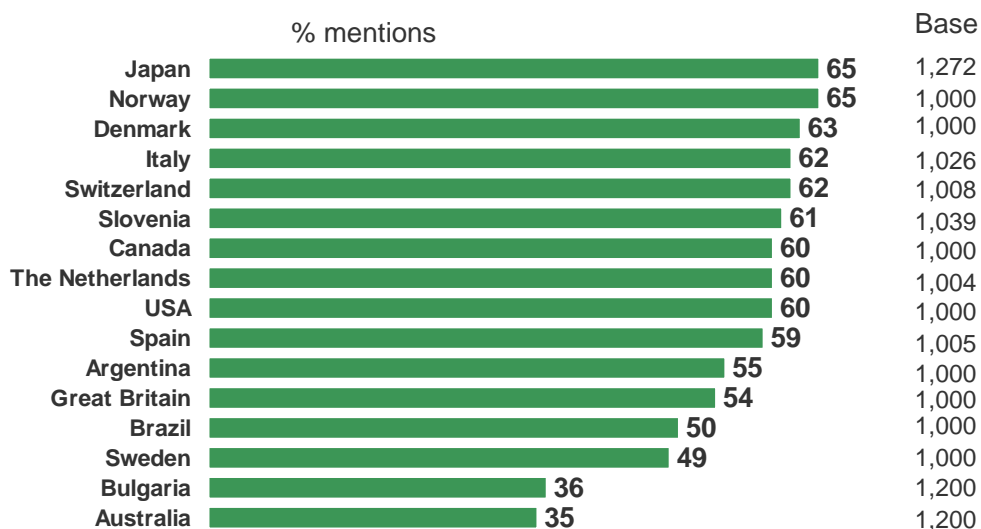
	Which cancer kills the greatest number? Top mentions	Percentage mention	Percentage point difference between lung cancer and next choice/top mention
Argentina	Lung cancer Breast cancer	55% 32%	+23
Australia	Breast cancer Skin cancer Lung cancer	44% 40% 35%	-9 ²
Brazil	Lung cancer Breast cancer	50% 47%	+3
Bulgaria	Breast cancer Lung cancer	45% 36%	-9
Canada	Lung cancer Breast cancer	60% 58%	+2
Denmark	Lung cancer Breast cancer	63% 54%	+9
GB	Lung cancer Breast cancer	54% 37%	+17
Italy	Lung cancer Bowel or colon cancer	62% 32%	+30
Japan	Bowel cancer Lung cancer	67% 65%	-2
The Netherlands	Lung cancer Breast cancer	60% 44%	+16
Norway	Lung cancer Bowel or colon cancer	65% 34%	+31
Slovenia	Lung cancer Breast cancer	61% 44%	+17
Spain	Lung cancer Breast cancer	59% 22%	+37
Sweden	Lung cancer Prostate cancer	49% 41%	+8
Switzerland	Lung cancer Breast cancer	62% 45%	+17
USA	Lung cancer Breast cancer	60% 52%	+8

² Difference in percentage mentions between breast cancer and lung cancer

Of all the countries surveyed, people in Japan and Norway are most likely to believe that lung cancer is the biggest killer in their country, although, as mentioned, in Japan there is also a perception that bowel/colon cancer is on a par with lung cancer (67% and 65% respectively).

Proportion who perceive lung cancer to be the biggest killer in their country

Which of the following cancers do you think kills the most people in your country? You may choose up to two.



Ipsos MORI

Source: Ipsos MORI



Australians are least likely to believe that lung cancer is the biggest killer in their country (as noted above Australians believe that both breast and skin cancer kill greater numbers of people than lung cancer). This may be related to the fact that, according to GLOBOCAN data (see incidence map available from the Cancer Research UK website³), colon, breast, prostate, and skin cancer all have a higher *incidence* level in Australia than lung cancer (it should of course be remembered that survival rates differ by cancer type so incidence does not necessarily equate to the number of people who die from a particular cancer type). Bulgarians are also relatively unlikely to believe that lung cancer kills the greatest number (in line with Australia). This may be due, in part, to the unusually high proportion responding that they *don't know* (25%) which cancer kills the most people. Even so, breast cancer is seen as a bigger killer among those able to express an opinion.

The proportion who believe lung cancer to be the biggest killer is also notably lower in Sweden, Brazil, Great Britain and Argentina in comparison with the other countries surveyed.

³http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK_PDFs/CSWORLDMAP.pdf

For Brazil and Argentina, this perception again may be partly due to a lower incidence of lung cancer in comparison with breast, prostate, stomach and cervical cancer.⁴

⁴ http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK_PDFs/CSWORLDMAP.pdf

Demographic differences in perceptions

Age

Age appears to be a significant factor in the belief that lung cancer kills more people than other types of cancer. In seven of the sixteen countries surveyed younger people (defined as those under 34 years old) are significantly more likely than older people (aged 55+) to perceive lung cancer as the cancer type responsible for the most deaths in their country. This is the case in: Australia (41% vs. 30%), Japan (71% vs. 60%), Norway (69% vs. 59%), Spain (63% vs. 52%), Sweden (55% vs. 43%) and the USA (66% vs. 56%), and this difference is particularly marked in Canada, (70% vs. 52%). Unusually, in Italy older people are more likely than younger people to believe lung cancer kills the greatest number of people in their country (65% of those aged 55+ and 64% of those aged 35-54 vs. 56% of those aged 15-34).

Gender

Reflecting the higher incidence rates of lung cancer among men than women, in a number of countries, men and women have different perceptions of whether lung cancer or other cancer types are the biggest killer, with men more likely to suggest lung cancer in Argentina (60% vs. 49%), Brazil (55% vs. 46%), Denmark (67% vs. 60%), Norway (69% vs. 62%), Slovenia (66% vs. 56%) and Switzerland (68% vs. 57%). This difference is particularly marked in Japan, where 71% of men think lung cancer is the biggest killer compared to 59% of women. It is worth noting that there is a much higher rate of smoking among Japanese men than Japanese women – they are three times more likely to smoke (see Appendix 1).

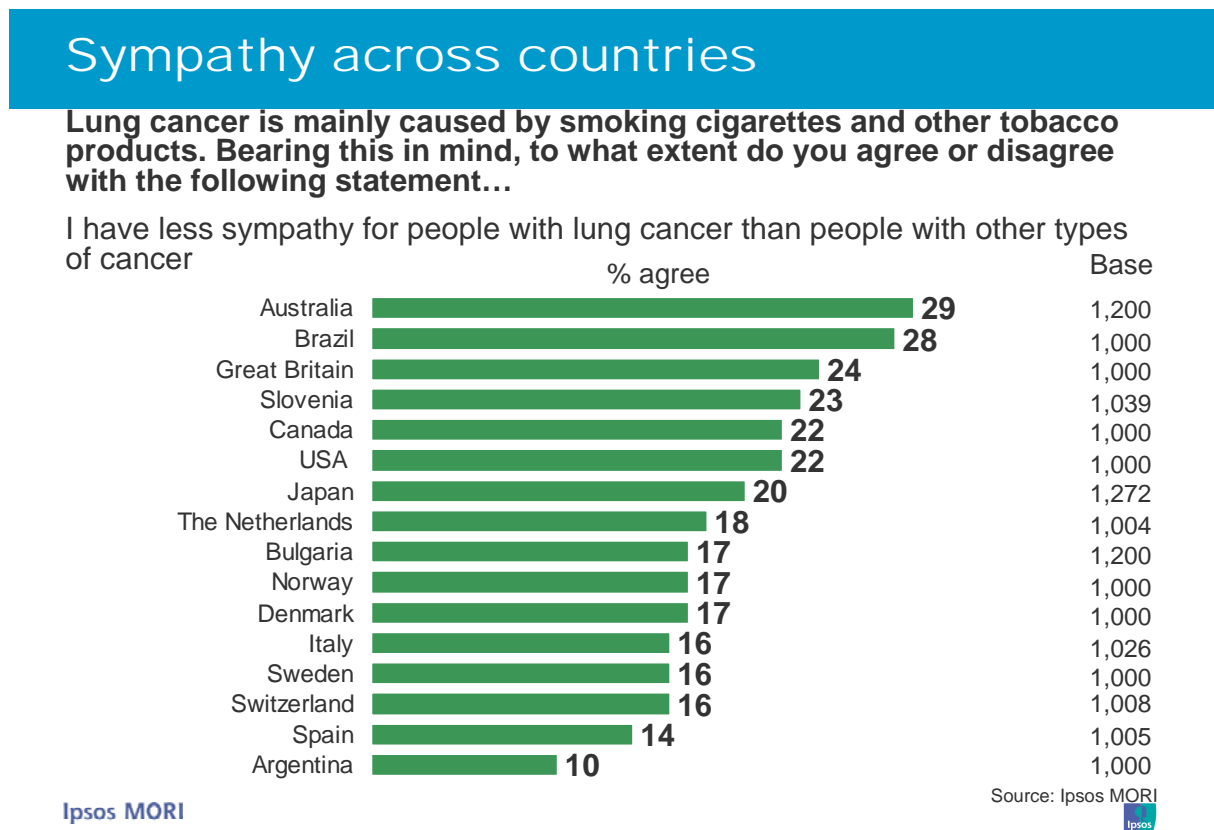
Attitudes towards lung cancer

In line with prevailing medical opinion⁵, people were told:

“Lung cancer is mainly caused by smoking cigarettes and other tobacco products.”

They were then asked whether or not, bearing this in mind, they have less sympathy for people with lung cancer than other types of cancer.

There is significant variation between countries in the proportion of adults who admit that they have less sympathy for people with lung cancer – from one in ten (10%) Argentinians to around three in ten Australians and Brazilians (29% and 28% respectively), as shown in the following chart.



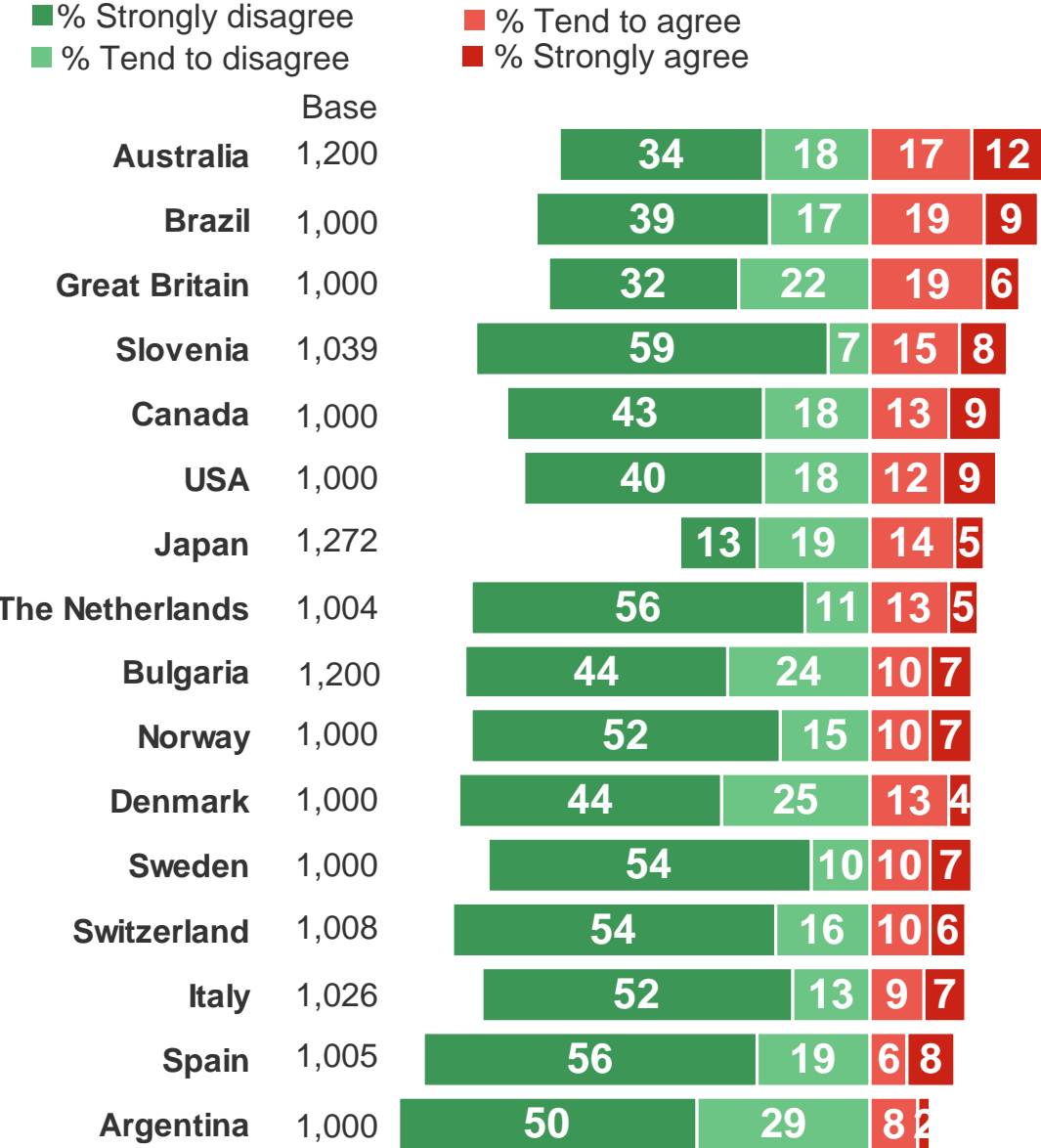
⁵ Smoking is responsible for 90% of all lung cancer according to the World Health Organisation. <http://www.who.int/tobacco/en/atlas9.pdf>

However, in all the countries surveyed, the majority reject the idea that they are less sympathetic for people with lung cancer, despite its link to smoking – for example, as shown in the following chart, even 52% of Australians *disagree* that they are less sympathetic.

Sympathy across countries – agree vs. disagree

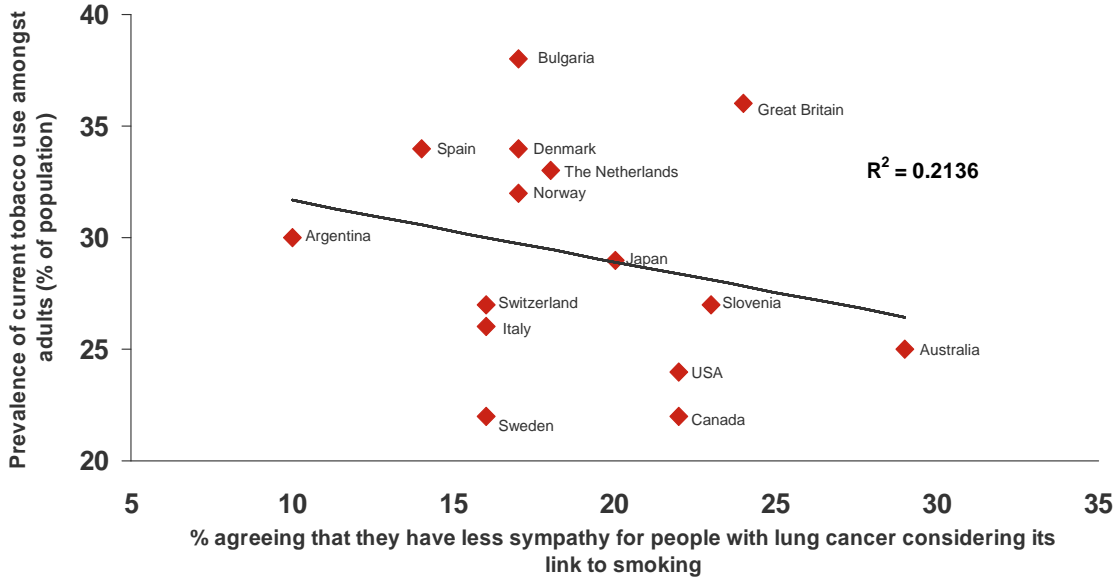
Lung cancer is mainly caused by smoking cigarettes and other tobacco products. Bearing this in mind, to what extent do you agree or disagree with the following statement...

I have less sympathy for people with lung cancer than people with other types of cancer



There is some correlation between sympathy levels and the proportion of people who smoke in each country⁶; generally people in countries with lower rates of smoking have a greater tendency to say they are less sympathetic to people with lung cancer than other types of cancer. However, the pattern is not perfect, which suggests that other factors also have an important role to play; for example, Great Britain has relatively less sympathy for people with lung cancer, despite also having relatively high smoking rates.

Correlating Sympathy levels with Smoking rates



Ipsos MORI and WHO
Ipsos MORI

Source: Ipsos MORI
Ipsos

⁶ Based on WHO data (2005) on prevalence of tobacco used by country (full data and further information can be found at <http://www.who.int/mediacentre/factsheets/fs297/en/index.html>)

Demographic differences in opinion

In a number of countries certain groups are more likely than others to feel less sympathy for people with lung cancer than people with other types of cancer – and the pattern varies noticeably between countries, for example:

Age

In many countries there is little significant difference in sympathy felt towards people with lung cancer by age, but in others there are some notable differences. In Argentina and Switzerland older people have less sympathy than younger people (Argentina - 15% of those aged 55-64 vs. 10% average; Switzerland – 25% of those aged 65+ vs. 16% average).

However, in the Netherlands and Norway the pattern is reversed, with younger people (aged 15-34) having less sympathy than average (24% vs. 18% and 25% vs. 17% respectively);

Gender

Sympathy levels are lower among men than women in six of the countries surveyed. The difference between the sympathy levels between men and women is most marked in Australia where 36% of men compared to 23% of women say they feel less sympathy towards those with lung cancer compared to other types of cancer. A similar pattern also occurs in Canada (27% vs. 19%), Denmark (20% vs. 14%), Great Britain (29% vs. 20%), Norway (21% vs. 13%) and Slovenia (28% vs. 19%).

Education

Some level of information on educational attainment was collected in all countries surveyed. Although the question asked and the type of qualifications obviously vary between countries, in Slovenia, Bulgaria, Switzerland and the USA there is a link between sympathy for people with lung cancer (given that it is mainly caused by smoking) and education level as follows; people educated to elementary/primary/high school levels are less likely to feel sympathy for people with lung cancer than those educated to university or college level:

- In Switzerland, those educated to primary or secondary school level only tend to feel less sympathy for people with lung cancer than those educated to university/college level (27% vs. 12% agree that they have less sympathy towards those with lung cancer).

- The same pattern applies in the USA – where adults who have completed grade school or high school only are less sympathetic to those with lung cancer than those who have completed a four year college degree (23% agree vs. 16%).
- In Bulgaria, those educated to secondary level only are less sympathetic towards people with lung cancer than those who have completed a university education (21% agree vs. 13%).
- Similarly, in Slovenia, those educated to university/college level or higher have a greater tendency to *disagree* that they have less sympathy for people with lung cancer than other types of cancer (74% disagree vs. 57% of those educated to elementary school level or lower only).

Headline findings by country

Some key findings that stand out for each country are summarised below:

Australia – In comparison to the other fifteen countries surveyed, people in Australia are least likely to name lung cancer as the cancer which kills the most people in their county (35%), particularly older people (30% aged 55+); although this does reflect the fact that the incidence of lung cancer is lower in Australia than many of the other countries surveyed*. Australians are also most likely to admit to feeling less sympathy for people with lung cancer than other types of cancer (when bearing in mind that lung cancer is mainly caused by smoking) at 29% – and this particularly applies to men (36% vs. 23% of women).

Argentina – Of all sixteen countries, Argentina has the smallest proportion of people who say they feel less sympathy for people with lung cancer than other types of cancer (10%), and has the lowest level of all among young people (only 8% of 16-24 year olds say they feel less sympathy).

Brazil – Brazilians are comparatively less likely than other nationalities to perceive lung cancer as the biggest killer in their country (50%); they also have a greater tendency than many other nations to feel less sympathy for people with lung cancer (28% admit to this).

Bulgaria – Compared to the other countries surveyed, Bulgarians are relatively unlikely to name lung cancer as the cancer that kills the greatest number (36%). A larger proportion believe breast cancer is the biggest killer (45%), and a significant minority *don't know* (25%). In comparison to the other countries, sympathy for people with lung cancer is around average in Bulgaria, although those educated to secondary school level only are less sympathetic than those who have completed a university education (21% agree they have less sympathy vs. 13%).

Canada – A particularly high proportion of young Canadians (18- 34 years old) think lung cancer is the biggest killer (70% of those aged 15-34). Canadians are broadly in-line with other countries in terms of their feelings towards people with cancer (22% agree they have less sympathy for people with cancer than other types of cancer). Men tend to be less sympathetic (27% agree vs. 19% of women).

Denmark – The belief that lung cancer is the biggest killer is particularly strong in Denmark at 63%, particularly among young people (70%). In comparison to the other countries, sympathy for people with lung cancer is around average in Denmark, although men tend to be less sympathetic than women (20% vs. 14% agree).

Great Britain – Just over half (54%) of adults in Great Britain think that lung cancer is the type of cancer which kills the greatest number of people in GB, and an above average 24% admit to feeling less sympathy for people with lung cancer than other types of cancer – and this increased to 29% of men (vs. 20% of women).

Italy – The majority (62%) of Italians believe that lung cancer kills the most people in their country, but they are among the least likely to say they feel less sympathy for those with lung cancer than other cancer types (16% have less sympathy). Unusually, older people are more likely than younger people to believe lung cancer kills the greatest number in Italy (65% aged 55+ vs. 56% aged 15-34).

Continues overleaf

*http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK_PDFs/CSWORLDMAP.pdf

Netherlands – People in the Netherlands occupy the middle ground in comparison to the other countries surveyed. Three in five (60%) believe lung cancer is the biggest killer in their country and 18% agree that they have less sympathy for people with lung cancer than other types of cancer. Young people (aged 15-34) in the Netherlands are the most likely to feel less sympathy (24%).

Norway – Norwegians are among the nations most likely to believe that, of all the types of cancer listed, lung cancer is responsible for the most deaths in Norway, while 17% agree they have lower levels of sympathy for people with lung cancer. In Norway, younger people (aged 15-34) have a greater tendency to admit feeling less sympathetic than those in the middle age groups (aged 35-54) or those aged 55+ (25% vs. 10% and 16% respectively).

Slovenia – Around three in five (61%) Slovenians believe lung cancer is the type of cancer responsible for the greatest number of deaths in Slovenia. A slightly above average minority (23%) say that they have lower levels of sympathy for those with lung cancer than other cancer types – and a greater proportion of men than women admit to this (28% vs. 19%).

Spain – Lung cancer is thought to be the cancer type which kills the most people in their country by three in five (59%) Spaniards. People in Spain are relatively unlikely to say they feel less sympathy for people with lung cancer (14%); Spain also has relatively high smoking rates (see Appendix 1).

Sweden – Only half (49%) of Swedish people think that lung cancer kills the most people in their country, which is the second lowest of all countries surveyed, and especially low among older people (43% aged 55+). Sympathy here, though, is relatively unlikely to be affected by the fact that someone has lung cancer as opposed to another type of cancer (16% agree they feel less sympathy).

Switzerland – A relatively large proportion (62%) of Swiss adults think that lung cancer is the type of cancer responsible for the greatest number of deaths in Switzerland. They also feel (relatively) just as sympathetic towards people with lung cancer – as only a small minority (16%) agree that they have less sympathy for people with this type of cancer.

USA – Broadly in-line with the average of other countries surveyed, around three in five (60%) Americans believe that lung cancer is the type of cancer to kill the most people in the USA. As in Canada, 22% admit that they feel less sympathy for those with lung cancer than other cancers. There is very little difference by age or gender in this respect.

Appendices

Appendices

Appendix 1 – tobacco use by gender

Prevalence of current tobacco use (%)⁷	Male	Female	Both sexes	Difference
Bulgaria	47.5	27.8	37.7	19.7
United Kingdom	36.7	34.7	35.7	2.0
Denmark	38.3	30.3	34.3	8.0
Spain	36.4	30.9	33.7	5.5
The Netherlands	36.1	30.6	33.4	4.8
Norway	33.6	30.4	32.0	3.2
Argentina	34.6	25.4	30.0	9.2
Japan	44.3	14.3	29.4	30
Slovenia	31.8	21.1	26.5	10.7
Switzerland	30.7	22.2	26.5	8.5
Italy	32.8	19.2	26.1	13.6
Australia	27.7	21.8	24.8	5.9
USA	26.3	21.5	23.9	5.5
Sweden	19.6	24.5	22.0	-4.9
Canada	24.3	18.9	21.6	5.4
Brazil	-	-	-	-

⁷ <http://www.who.int/whosis/whostat/3.xls>

Appendix 2 - Statistical reliability

The sampling tolerances that apply to the percentage results are given in the table below. This table shows the possible variation that might be anticipated because a sample, rather than the entire population, was interviewed. **As indicated below, sampling tolerances vary with the size of the sample and the size of the percentage result.** For example, on a question where 50% of the people in a sample of c.1,000 respond with a particular answer, the chances are 95 in 100 that this result would not vary by more than 3 percentage points, plus or minus, from a complete coverage of the entire population using the same procedures (i.e., between 47% and 53%).

Approximate sampling tolerances applicable to percentages at or near these levels					
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
Size of sample on which survey result is based					
C. 1,000	2	3	3	3	3

Source: Ipsos MORI

Tolerances are also involved in the comparison of results from different parts of the sample. A difference, in other words, must be of at least a certain size to be considered statistically significant. The following table is a guide to the sampling tolerances applicable to comparisons.

Strictly speaking these tolerances are based on perfect random samples, and design effects such as clustering and weighting are likely to increase them. In practice, good quality quota sampling has been found to be as accurate as random samples with a similar design.

Approximate differences required for significant at or near these percentages									
Circa.	10% or 90%	or	20% or 80%	or	30% or 70%	or	40% or 60%	or	50%
Argentina vs. Denmark (1,000 vs. 1000)	3		4		4		4		4
Men vs. Women in GB (502 vs. 498)	4		5		6		6		6
15-24 year olds vs. 65+ in GB (164 vs. 209)	6		8		9		10		10

Source: Ipsos MORI

Appendix 3 - Questionnaire

Global Lung Cancer Coalition – FINAL QUESTIONNAIRE

Q1. Which of the following cancers do you think kills the most people in your country? You may choose up to two.

IF TELEPHONE MARKET- READ OUT. ROTATE OPTIONS. MULTICODE UP TO TWO. ALLOW 'NONE' OR 'DON'T KNOW' RESPONSES – DO NOT READ THEM OUT AS OPTIONS THOUGH
IF FACE-TO-FACE MARKET – SHOWCARD. REVERSE OPTIONS MULTICODE UP TO TWO. ALLOW 'NONE' OR 'DON'T KNOW' RESPONSES BUT DO NOT INCLUDE THEM ON THE SHOWCARD

SHOWCARD [REVERSE]:

- Bowel or Colon cancer
- Breast cancer
- Lung cancer
- Prostate cancer
- Skin cancer

Q2. Lung cancer is mainly caused by smoking cigarettes and other tobacco products. Bearing this in mind, to what extent do you agree or disagree with the following statement...

READ OUT. SINGLE CODE ONLY. ALLOW 'DON'T KNOW' - BUT DO NOT READ OUT AS OPTION

- I have less sympathy for people with lung cancer than people with other types of cancer

IF TELEPHONE – READ OUT [REVERSE OPTIONS]

IF F2F THEN SHOWCARD [REVERSE]

Strongly agree

Tend to agree

Neither agree nor disagree

Tend to disagree

Strongly disagree