

## **Brief summary of the survey on European Code Against Cancer**

### **Surveyed countries and respondents**

Data has been collected in 6 countries: Bulgaria (n=144), Croatia (n=92), Germany(n=70), Ireland(n=21), Portugal(n=833), Spain(n=132) and on a EU-wide basis. A total of 1292 responses were collected.

The majority of the respondents were female (ranging from 70% in Bulgaria to 90% in Ireland). Regarding the age group of the respondents, respondents from Bulgaria, Croatia and Portugal were mostly under the age of 40, while those from Germany, Ireland and Spain were mostly over 40 years old. In terms of education level of the respondents, except Bulgaria and Germany where the majority of respondents completed secondary education, respondents in all other countries had a master or equivalent level of education.

Most respondents found out the survey through Facebook, but for respondents in Ireland and Spain, they mostly learned about the survey via a link in an email.

### **General Cancer Prevention Awareness**

Among the 6 countries we surveyed, most respondents believed that from 30-50% of the cancers can be prevented, with a few interesting facts such as some respondents in Bulgaria answered that 100% of cancer can be prevented and some respondents in Portugal were unsure about the figure.

When asked about the general risk of getting any type of cancer in the future, an overwhelming proportion (70-95%) of respondents indicated that 'I think people could reduce their risk of getting cancer in the future by making changes to their lifestyle'. Similarly, the vast majority of respondents also indicated they believed it was very likely and fairly likely that they will make lifestyle changes to reduce the risk of getting cancer.

### **Information on where the respondents heard about the Code**

Among the surveyed respondents, except in Ireland (80%), only 14-35% of the respondents have heard about the European Code Against Cancer prior to answering the current survey. With Bulgaria and Croatia being the exceptions, respondents in all other countries heard about the Code at work, as part of their professional life instead of during their private life. In terms of the awareness of the recently published revised code, only Germany, Spain and Ireland (borderline at 50%) had more respondents knowing that there was a new edition of the code.

### **New knowledge**

Considering new knowledge conveyed by the code, 44-58% of respondents in Croatia, Bulgaria and Spain agreed that they have learned something new about cancer prevention by reading the code. On the other hand, most respondents in Germany, Ireland and Portugal thought they did not learn about new about cancer prevention through the code.

When respondents were asked about how likely reading the 12 recommendations will change their lifestyle, most respondents in all countries except Germany (rather unlikely) answered yes or

probably. From 79% in Bulgaria to 100% in Ireland, respondents confirmed the usefulness of the list of 12 recommendations for the general public.

### **Health Behaviour**

The survey also included a number of questions on the health behaviour of the respondents.

The first question surveyed the **habit of smoking or use of tobacco** among the respondents. From 53% in Bulgaria to 95% of respondents in Ireland said they never smoked, while the remaining respondents either frequently or occasionally smoked.

Apart from Croatia (around 50% for each location), respondents from all countries (70% or above) indicated that their home or workplace are **smoke free places**.

More variations across countries were found regarding the question over a **'healthy body weight'**. Ranging from 30% to 60% of respondents responded that they knew for certain that they have a healthy body weight, whereas 10-30% of respondents thought they may have a healthy body weight but weren't certain. It should also be noted that another 10-40% of respondents said they knew for certain that they do not have a healthy body weight.

In terms of **physical activity** in a typical week, the overall pattern in all countries except Ireland was that respondents often had moderate level of physical activity during their free time and little to no physical activity in the workplace. Respondents in Ireland responded that they mostly had a good level of physical activity during their free time and a moderate level of physical activity in the workplace.

The next question asked respondents about their **typical diet and frequency of consumption** in various products. Respondents in all countries but Croatia (sometimes) said they consumed whole grains and pulses regularly. The surveyed respondents in all countries consumed fruits and vegetables regularly and for foods high in sugar or fat, processed meat, and red meat, they were consumed sometimes. Sugary drinks were also consumed from time to time in Bulgaria, Croatia, Germany and Portugal, while respondents in Ireland and Spain said they never consumed sugary drinks. Food high in salt was also consumed occasionally in all countries except Ireland (never).

Respondents from the six countries also provided information on their **alcohol consumption** during a typical week. With Ireland being the exception where on average, respondents drank alcohol for 0-1 day per week and 0-1 drinks were consumed on a typical drinking day. For Ireland, respondents drank alcohol on 1-2 day(s) per week and they consumed 1-2 drinks per day.

The next health behaviour surveyed was **sun exposure** and some differences across the six countries were also observed. While there was an overwhelming trend that respondents in all countries regularly ensured that any child in their care is protected from the sun, and regarding the application of sun protection when going out into the sun, respondents from the six countries either put on sun protection regularly or sometimes. Respondents from Germany and Spain expressed that they almost never had sunburnt after being exposed to the sun, and the rest of the respondents got sunburn occasionally. Last but not least, only respondents from Croatia revealed that they use sunbeds from time to time, and all other respondents said they almost never used sunbeds.

Respondents from the six countries also had varied degree of **knowledge of finding clear and safety instruction on the control of cancer-causing substances at work**. 20% to 48% of respondents

provided a 'yes' answer to this question. On the other hand, the vast majority of respondents (86-97%) in all countries never had their home tested for the level of radon exposure.

**Female respondents** had the opportunity to indicate whether they received **hormone replacement** therapy in the survey. From 11% of female in Ireland to 27% in Croatia had received hormone replacement therapy.

Among respondents with children, we surveyed the practice of **exclusive breastfeeding**. For the first and second child, the majority of respondents breastfed for a minimum of 6 months, and in certain countries, such as Croatia, Germany and Portugal, mothers often breastfed beyond the first six months. In Ireland, a lot of respondents also breastfed beyond the first six months for the second child.

For respondents who were parents or legal guardians of children, they were asked about the **vaccinations** of their children received against **Hepatitis B** (as a newborn) and **Human papillomavirus (HPV)**. In the six countries surveyed, from 40% in Ireland to 86% of the first born child in Portugal were vaccinated against Hepatitis B. And among the second child, from 56% in Bulgaria to 85% in Portugal and Spain received the vaccination. There was a general trend that the vaccination rate increased with the later born children in the family (i.e. the third or fourth born child). With regard to HPV vaccination, Portugal was the only country with a higher uptake, with about 40% of first and second born child respective with no HPV vaccination. The figures for first born children in other countries without HPV vaccination ranged from 50-78%, the corresponding number for second born children was 48-100%.

The last section of the survey asked respondents to report their participation in regular cancer screening activities. Respondents first indicated whether they received an invitation to participate in bowel (or colorectal), breast and cervical screening respectively, then reporting whether they had ever participated in at least once such screening in their lifetime.

### **Bowel (or colorectal) cancer screening**

Among cancer screening of the three types of cancer, the rate of invitation was the lowest for bowel (or colorectal) cancer. Only 2% (Bulgaria) to 33% (Ireland) of respondents received an invitation for a bowel (or colorectal) cancer screening.

The low rate held for the screening in bowel (or colorectal) cancer that the respondents had participated in. Only from 7% in Bulgaria to 56% in Ireland had ever participated in this type of screening.

### **Breast cancer screening**

Ranging from 20% of respondents in Bulgaria to 50% in Ireland had received an invitation for breast cancer screening activity.

About one-third of respondents in Bulgaria, Croatia and Portugal had had at least once breast screening during the lifetime, and the figures increased to 57% in Spain and almost four-fifth in Germany and Ireland.

### **Cervical cancer screening**

Finally, cervical cancer screening was the type of cancer in which respondents were most often invited to undergo a screening.

The participation of cervical cancer screening showed a similar pattern that of breast cancer. From 35% of those in Croatia to 45% in Portugal had undergone cervical screening whereas almost four-fifth of respondents in Germany and Ireland had received cervical screening.

### **Date of last screening**

There was no overall general pattern of last date of screening for the three types of cancer across the six countries. For bowel cancer screening, most respondents from Bulgaria and Croatia were not sure when their last screening was done, while the screening was performed at different time points in different countries, last 1-3 years in Germany, last 1-2 years ago in Ireland, and last 12 months in Portugal and Spain.

For Bulgaria and Croatia, both breast and cervical cancer screening were mostly performed in the past 6 months, but the corresponding numbers were last 3-6 months in Germany and 1-2 years ago in Ireland. Respondents in Portugal often had breast cancer screening in the last 6 months but cervical cancer screening in the last 12 months (so was Spain).