

CANCER SCREENING PROGRAMMES IN THE CZECH REPUBLIC AND IMPORTANCE OF PERSONALISED INVITATION

Press release by the Institute of Biostatistics and Analyses, Masaryk University

in cooperation with

WHO Office in the Czech Republic,
Kolorektum.cz Initiative,
Office of Member of the European Parliament Dr. Pavel Poc

The Czech project of personalised invitation to the participation in breast, colorectal, and cervical cancer screening will be launched in January 2014. The main aim of the project is to increase the insufficient attendance of Czech citizens for screening examinations; therefore, those individuals will be invited who have not yet participated in the screening programmes and on that account are at higher risk of being diagnosed with cancer. The programme is coordinated by the Czech Ministry of Health in cooperation with health care payers and expert medical societies. Clients will be invited by their health insurance companies, which will also cover all required examinations. This press release appeals to the citizens of the Czech Republic to participate in cancer screening programmes.

Why does the Czech Republic need to strengthen cancer prevention?

Unfortunately, cancer burden in the Czech Republic is among the highest worldwide; each year, more than 77,000 Czech citizens are diagnosed with cancer, and almost 28,000 die from it. Moreover, the number of patients has steadily increased, partly as a result of ageing of the Czech population. At the end of 2013, more than 450,000 people will live in the Czech Republic who were diagnosed with any type of cancer in the past. These numbers are alarming enough to underline the need for effective cancer prevention. The following table summarises the epidemiology of selected cancer diagnoses in the Czech Republic.

		Year 2000	Year 2010	Prediction for year 2014
Malignant tumours in total (C00-C97)	incidence	58,410	77,035	-
	mortality	28,539	27,834	-
Cervical cancer (C53)	incidence	1,052	994	1,022 (861; 1,181)
	mortality	363	342	-
Breast cancer (C50) in women	incidence	5,004	6,498	7,313 (6,578; 8,049)
	mortality	1,939	1,655	-
Colorectal cancer (C18-C20)	incidence	7,484	8,136	8,743 (7,987; 9,504)
	mortality	4,336	3,810	-

Incidence: number of newly diagnosed cancers (source: Czech National Cancer Registry)

Mortality: number of deaths from the particular disease (source: Czech Statistical Office)

What is the purpose of cancer screening and who is it intended for?

The best ways of prevention are naturally any measures that might prevent cancer development, particularly a healthy lifestyle. If a tumour develops anyway, it is important to detect it as early as possible. Tumours diagnosed in early stages have a very high likelihood of successful treatment. This statement is valid for all types of tumours; furthermore, an early detection of some types of tumours is so effective and safe that a preventive screening examination can be offered. Namely, this is breast cancer, colorectal cancer, and cervical cancer.

Screening programme	Target population	Screening method
Breast cancer	Women over 45 years	Biennial mammography
Colorectal cancer	Men and women over 50 years	50-54 years of age – annual faecal occult blood test
		Since 55 years of age – biennial faecal occult blood test OR screening colonoscopy once per 10 years
Cervical cancer	All adult women (invited from 25 years of age)	Annual pap smear cytology at preventive gynaecology examination

Why personalised invitation to the participation in a screening programme?

Screening programmes significantly reduce mortality rates from particular cancer diagnoses. A sufficient participation rate of individuals in risk age categories is an essential condition for the effectiveness of any screening programme. Citizens of developed countries are therefore usually invited in order to ensure that all of them receive information about cancer risk and screening benefits. Unfortunately, such approach has not yet been implemented in the Czech Republic, which is undoubtedly one of the main reasons for low participation rates.

Who will be invited and how?

Health insurance companies will be addressing people aged under 70 years who have not yet attended cancer screening examinations. Invitations will be sent in the form of letters that will include the description of specific steps necessary for the participation in a screening programme. People will be invited continuously over the entire year according to the month of their birth. Health insurance companies will assess participation rates of invited citizens; invitation of non-responders will be repeated. The table below summarises expected numbers of people to be invited (analysis performed in April 2013).

Programme	Total number invited	1-month estimate
Breast cancer	494,651	41,221
Colorectal cancer	1,444,153	120,346
Cervical cancer	585,385	48,782

Where will be the citizens invited?

Involvement of general practitioners is essential for a correct performance of screening programmes. Colorectal cancer screening will be generally carried out at GP offices, but also at gynaecologists offices (for women in the target population). The clients will be offered a faecal occult blood test (FOBT); those aged over 55 years will also be offered a colonoscopy examination. GPs and gynaecologists can also offer their female clients a request form for mammography to be performed in a specialised centre. Cervical cancer screening is performed within regular gynaecological check-up.

How is safety and capacity of cancer screening programmes ensured?

Mammography, colonoscopy, and pap smear cytology examinations can be only performed at health care facilities recommended by committees of the Czech Ministry of Health; these facilities must meet previously specified requirements and criteria. All screening facilities are regularly monitored, and their performance indicators are evaluated. In the Czech Republic, there are currently 69 mammography centres, 168 colonoscopy centres, and 37 laboratories for pap smear cytology.

How effective are Czech cancer screening programmes?

Czech cancer screening programmes are well established, and ensure the detection of a high proportion of tumours in their early (or even precancerous) stages. Higher attendance of people will strengthen this effect even further. The breast cancer screening programme was attended by more than 600,000 women in 2012; breast cancer was found in 3,000 of them, mostly in an early stage, and therefore with a high chance for a successful treatment. Faecal occult blood test is performed annually in more than 500,000 men and women. Each year, subsequent colonoscopy examinations (in case of positive results of FOBT) reveal adenoma in approximately 9,000 patients; these adenomas, which might eventually develop into colorectal cancer, are routinely removed during colonoscopy. Unfortunately, approximately 800 carcinomas are detected in the colorectal screening programme as well; however, an early detection, gives the patients a high chance for successful treatment. More than 2 millions of women undergo cervical screening annually. Non-malignant tumours that can be treated (and thereby prevent the development of cervical cancer) are detected in several thousands of them.

Where to find further information?

Cancer epidemiology data are available at www.svod.cz.

Detailed information on individual cancer screening programmes is available at:

- www.mamo.cz (breast cancer screening)
- www.kolorektum.cz (colorectal cancer screening)
- www.cervix.cz (cervical cancer screening)