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# Colorectal cancer screening in the Czech Republic at the advent of population-based program

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3rd European Colorectal Cancer Days  
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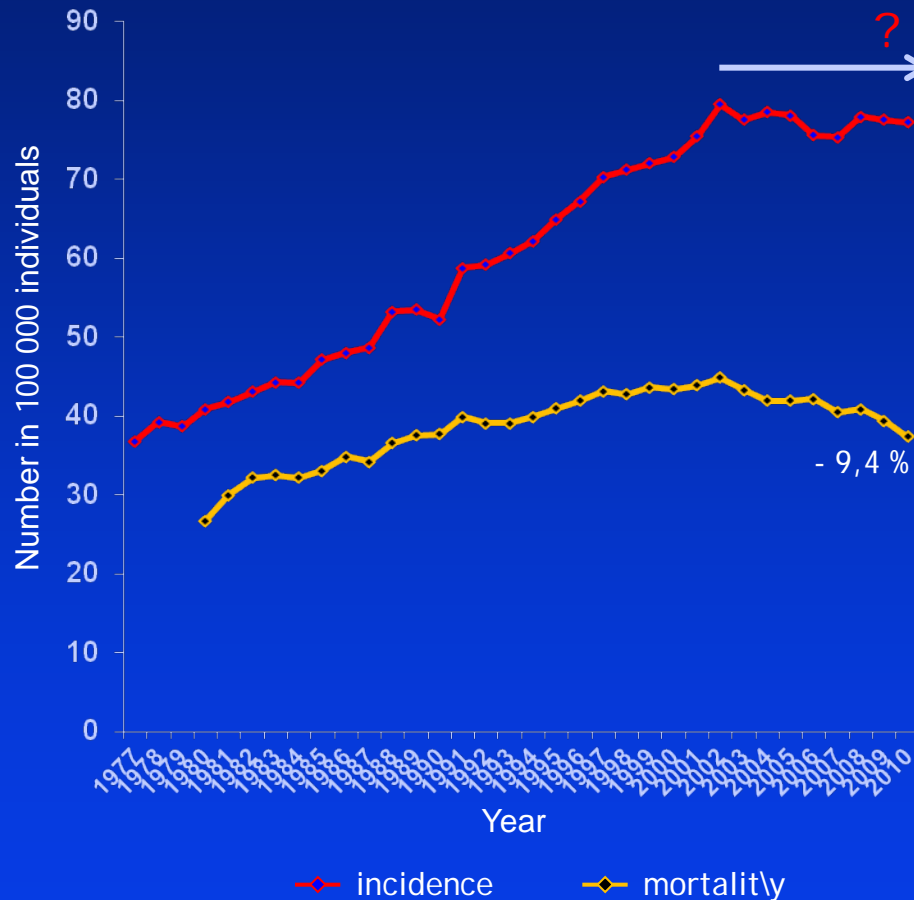
# Population screening

- WHY?
- HOW?
- EFFECT?

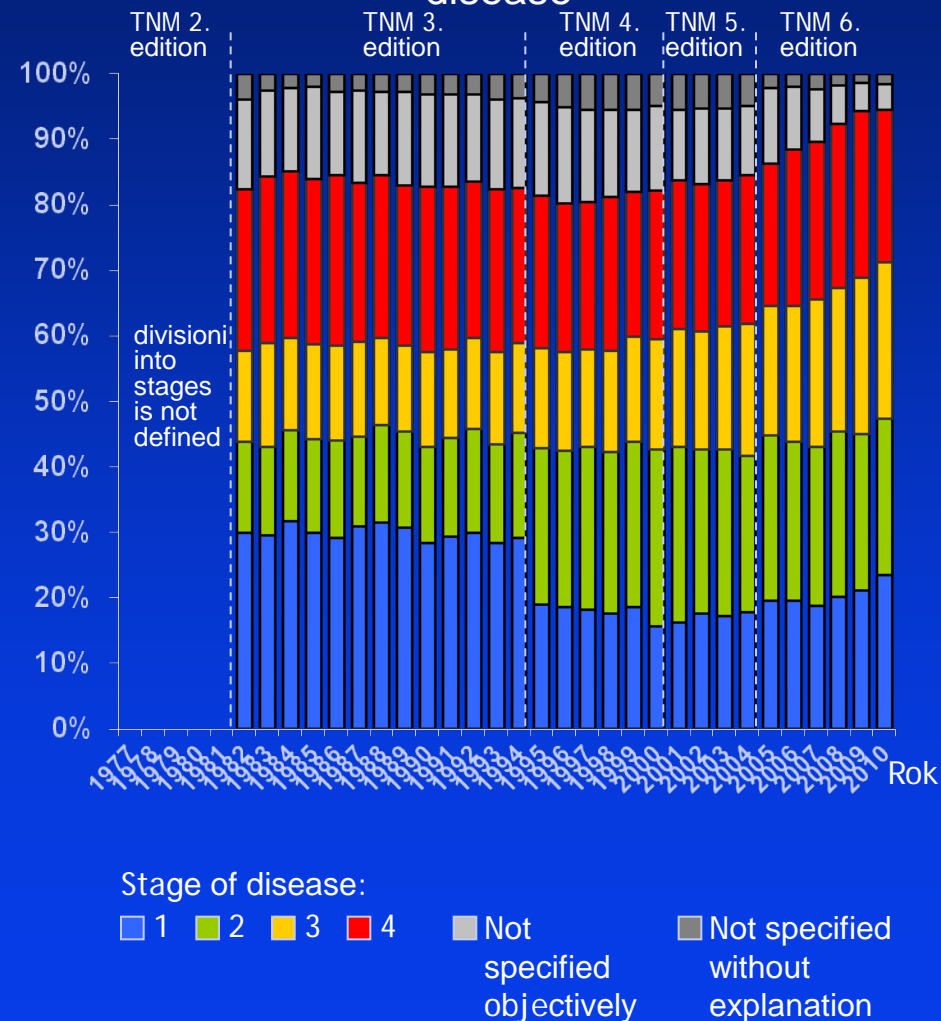
# Reasons for population screening

# 1. CRC epidemiology

Trends in incidence and mortality

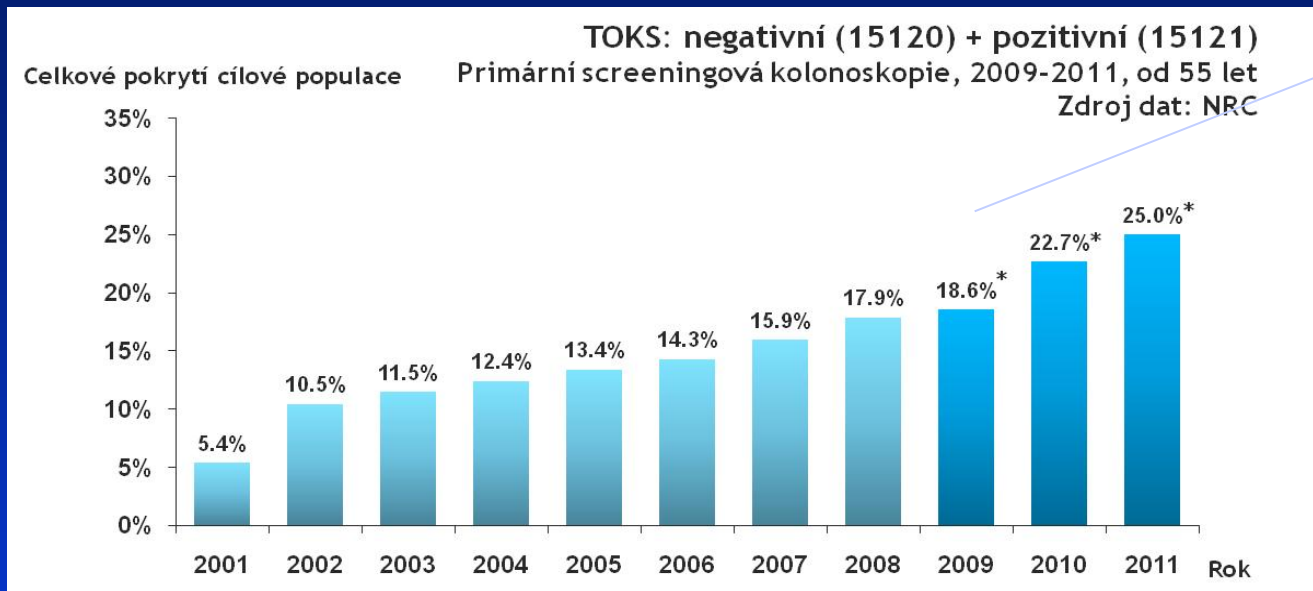


Development of detection stages of the disease



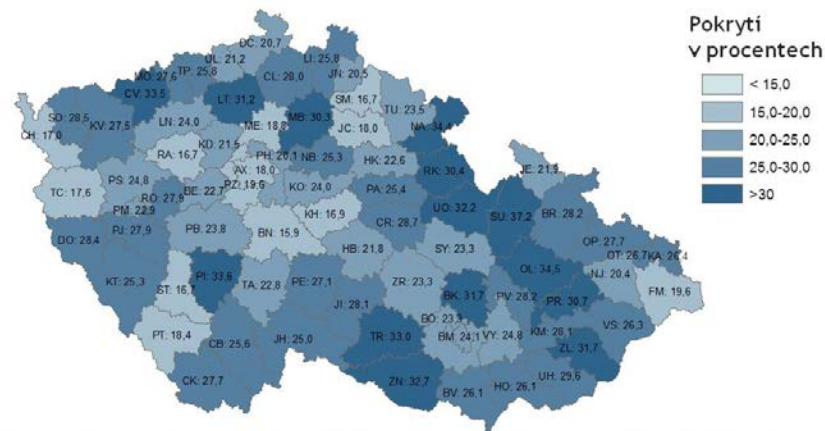
Source: National Cancer Registry

## 2. program improvement



Muži a ženy od 50 let

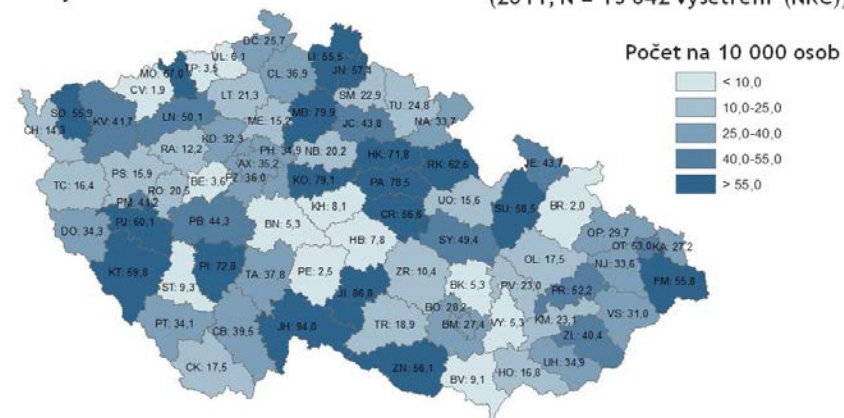
**TOKS: negativní (15120) + pozitivní (15121)**  
(2010-2011, N = 952 012 vyšetření (NRC))



Celkové pokrytí (2010-2011): **24,8 %** (rozsah mezi okresy ČR: 15,9-37,2 %)

Muži a ženy od 50 let

**Screeningová kolonoskopie (15101)**  
(2011, N = 13 642 vyšetření (NRC))

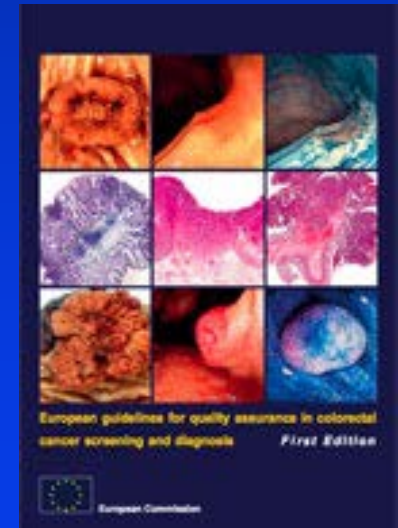


Míra využití v cílové populaci (2011):

**35,5** screeningových kolonoskopií na 10 000 osob (rozsah mezi okresy ČR: 1,9-94,0)

# 3. international recommendations

- 2003:
  - EU Council Recommendation on CRC Screening
- 2006:
  - IARC Handbook of Cancer Prevention
- 2010
  - European guidelines for quality assurance in CRC screening and diagnosis
    - population screening
    - coverage: minimal 45%, ideal 65%



## 4. evidence-based medicine

State	Age	Project period	Procedure of address invitation	Participation in 1.round	Participation in 2. round
England	50 – 69	2000 – 2004	Screening unit send kit	P:59%	DM: 48% DW: 56%
France	50 – 74	2003 – 2006	HI – invitation card to GP reminder 6M	PM:54% PW: 57%	
Netherlands	50 – 74	2006 – 2007	Centrally invitation letter reminder 6T	gFOBT: 50% FIT: 62%	
Scotland	50 – 69	2000 – 2007	screening center, 1st kit 2nd kit 6 weeks	PM: 50% PW: 60%	DM: 49% DW: 57%
Spain	50 – 69	2000 – now	Centrally invitation letter reminder 6weeks	PM: 17% PW: 18%	DM: 21% DW: 24%
Finland	60 – 69	2004 – now	National screening center send kit	PM: 62% PW: 77%	DM: 68% DW: 80%

P: 1st round, D: 2nd round, M: men, W: women, HI: health insurance

# Realization



# Address invitation project

- 3 screenings programs
  - colorectal cancer (age 50 – 70 )
  - cervical cancer (age 25 – 70 )
  - breast cancer (age 45 – 70 )
- financing: European Union program
- organization:
  - Ministry of Health CR + expert team
  - initiation: 1. January 2014
- duration: until year 2015, sustainability

# Invitation system

- system I: health care payers (HCP)
  - databases of insured persons
  - persons not participating in the screening
  - repeated inviting, control effectiveness
- system II: diagnostic centers
  - GP, gynecologists, mammographic centers
  - repeat visits
  - not response → transition to system I

# Uninvited individuals

- foreigners or a long-term living abroad
- incomplete address, non-delivery shipments
- recorded performances / diagnosis:

Diagnositics < 3 years	Diagnositics < 5 years	Terapeutics	Diagnosis
<u>FOBT:</u> 15120, 15121	<u>Colonoscopy:</u> 15101, 15105 15403, 15404	<u>Endotherapy:</u> 15475, 15950  <u>Surgeon:</u> 51636, 51415, 51357 51359, 51365	C18.x – C20.x

# Organization

- personal address invitation, by letters
- spread in time (in months)
- not to overload the diagnostic centers capacity
- „birthday invitation“ system
- evaluation and re-invitation:
  - after 1 year since the initial letter

# Capacity plan

Program	Number of invited in total	Number of invited per month
Colorectal cancer	1 444 153	120 346
Cervical cancer	585 385	58 782
Breast cancer	494 651	41 221
<b>Total</b>	<b>2 524 189</b>	<b>220 349</b>

# Evaluation

# Evaluation – current status

- complex evaluation
  - too soon, results expectation in July 2014
- January – March 2014
  - sent about 0,5 million letters
- March 2014
  - media campaign
  - TV and radio spots, billboards
  - „road show“

# Conclusion

- Project of address invitation in the Czech Republic was launched in the beginning of this year
- This led to the transition of opportunistic CRC program to population based program
- For the first three months were sent out 0,5 million letters
- The first results of the project can be expected in the second half of 2014



Thank you for your attention