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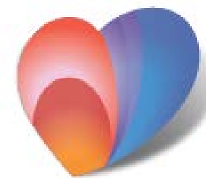

The National Colorectal Cancer Screening Program in Croatia: how it started and where we are?

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Croatian National Institute of Public Health, Epidemiology service
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INCIDENCE:

1990.g.- 1648 (34,5/100.000)

2010.g.- 3068 (69,4/100.000) ⇑ 86%, ⇑ rate 100%! **CAUSES?**

1827 Males (85,6/100.000), 1241 Females (54,3/100.000)

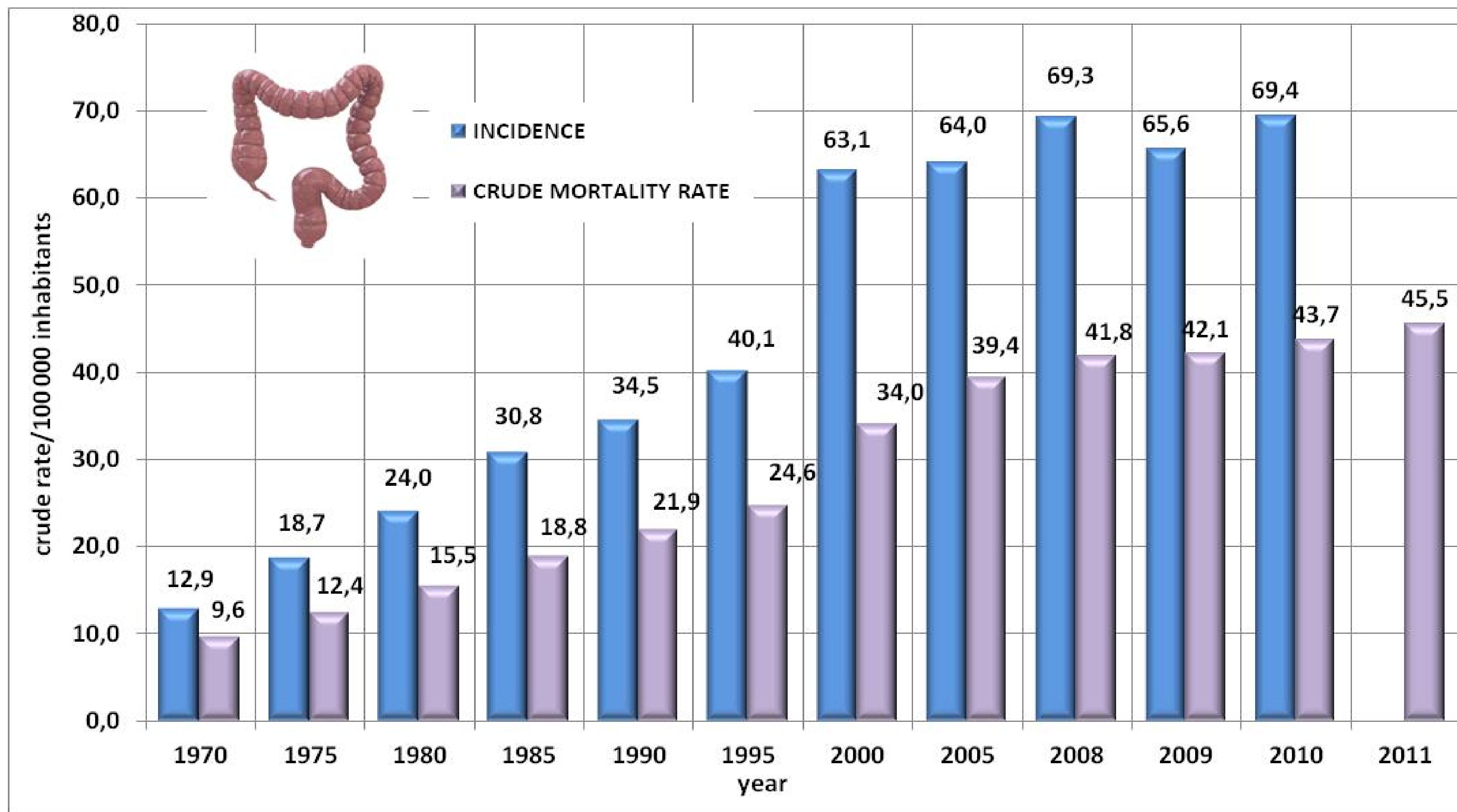
MORTALITY:

1990.g.- 1049 (21,9/100.000)

2011.g.- 2009 (45,5/100.000) ⇑ 92%, ⇑ rate 108%

1164 Males, 845 Females

Incidence and mortality rate



Data: cancer registry and mortality base (CNIPH, Federal bureau od statistics)

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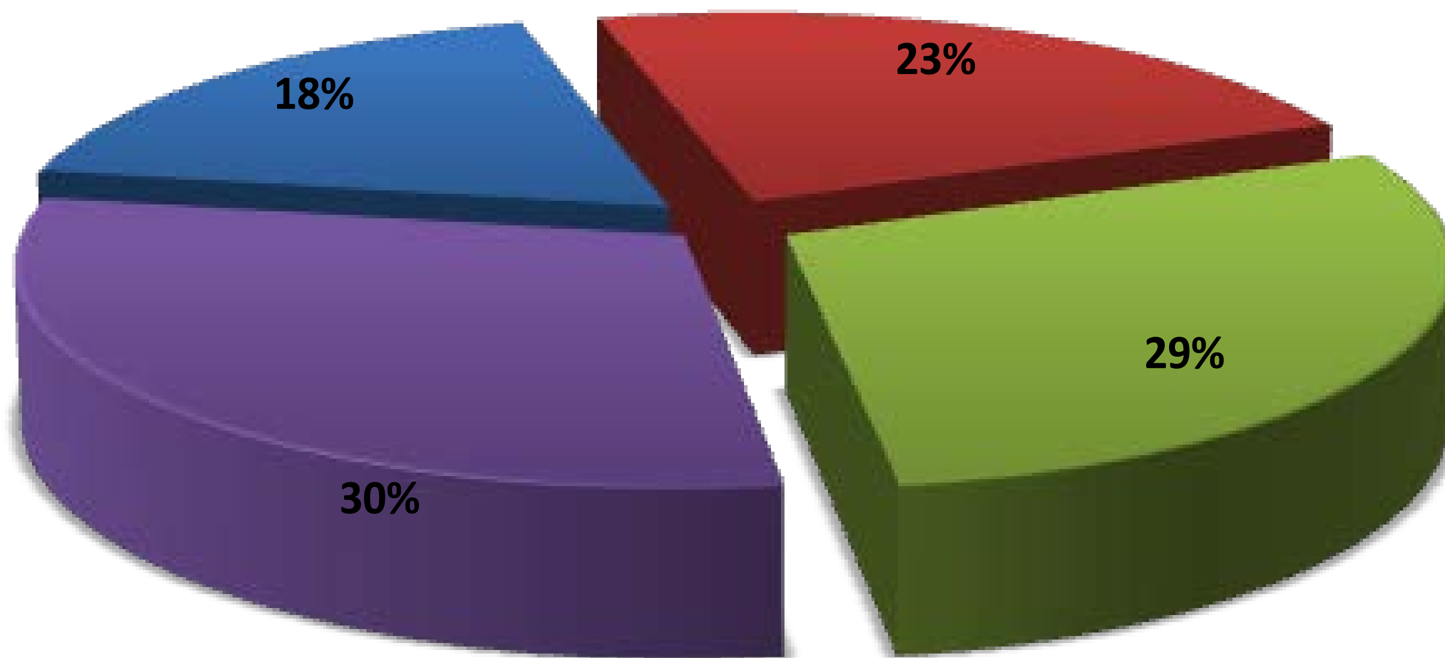
CRC localization in time of diagnose



Data: cancer registry Croatian national institute of public health

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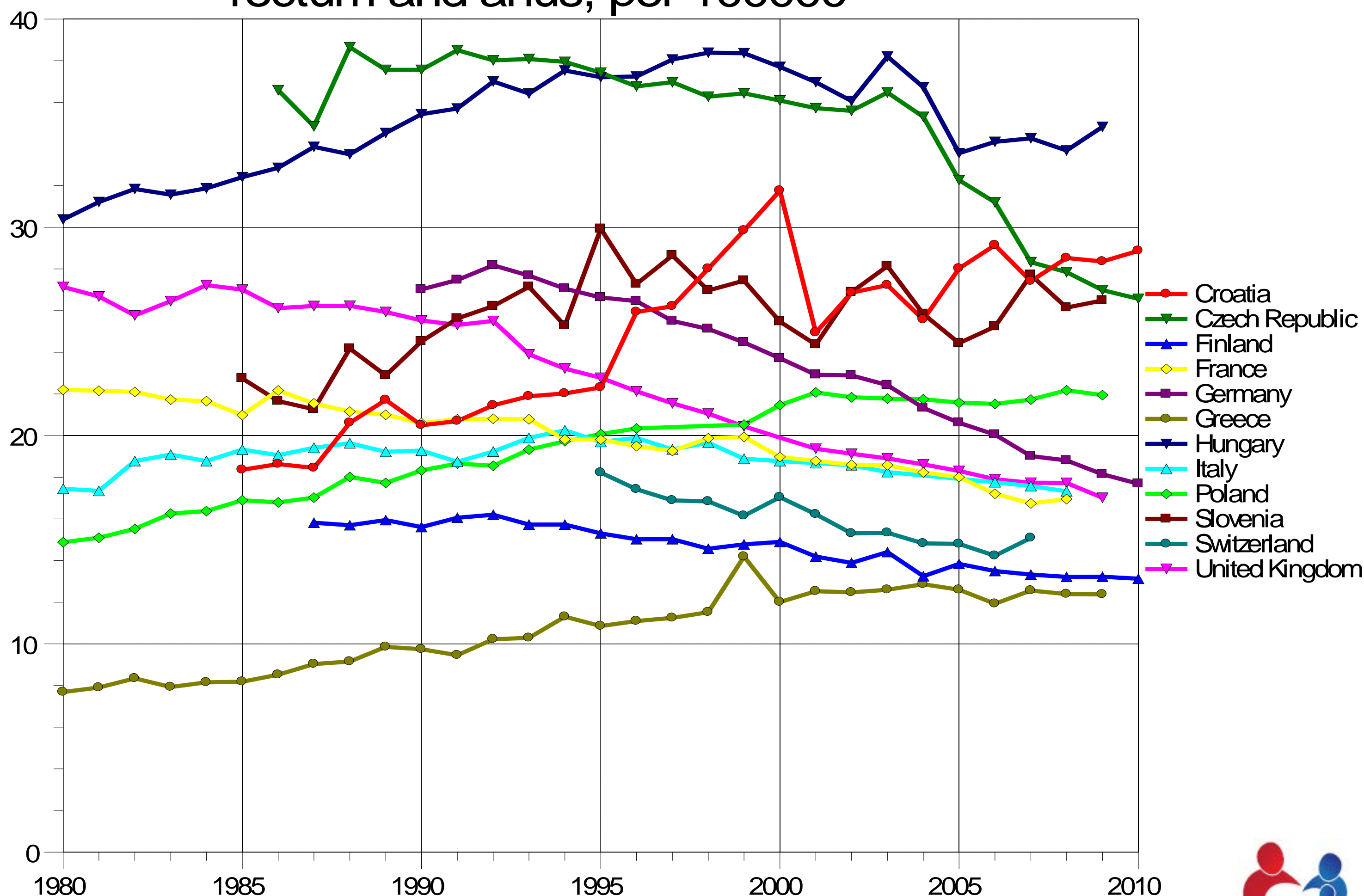
Standardized death rate-country comparison



Data: WHO Europa, Health for all

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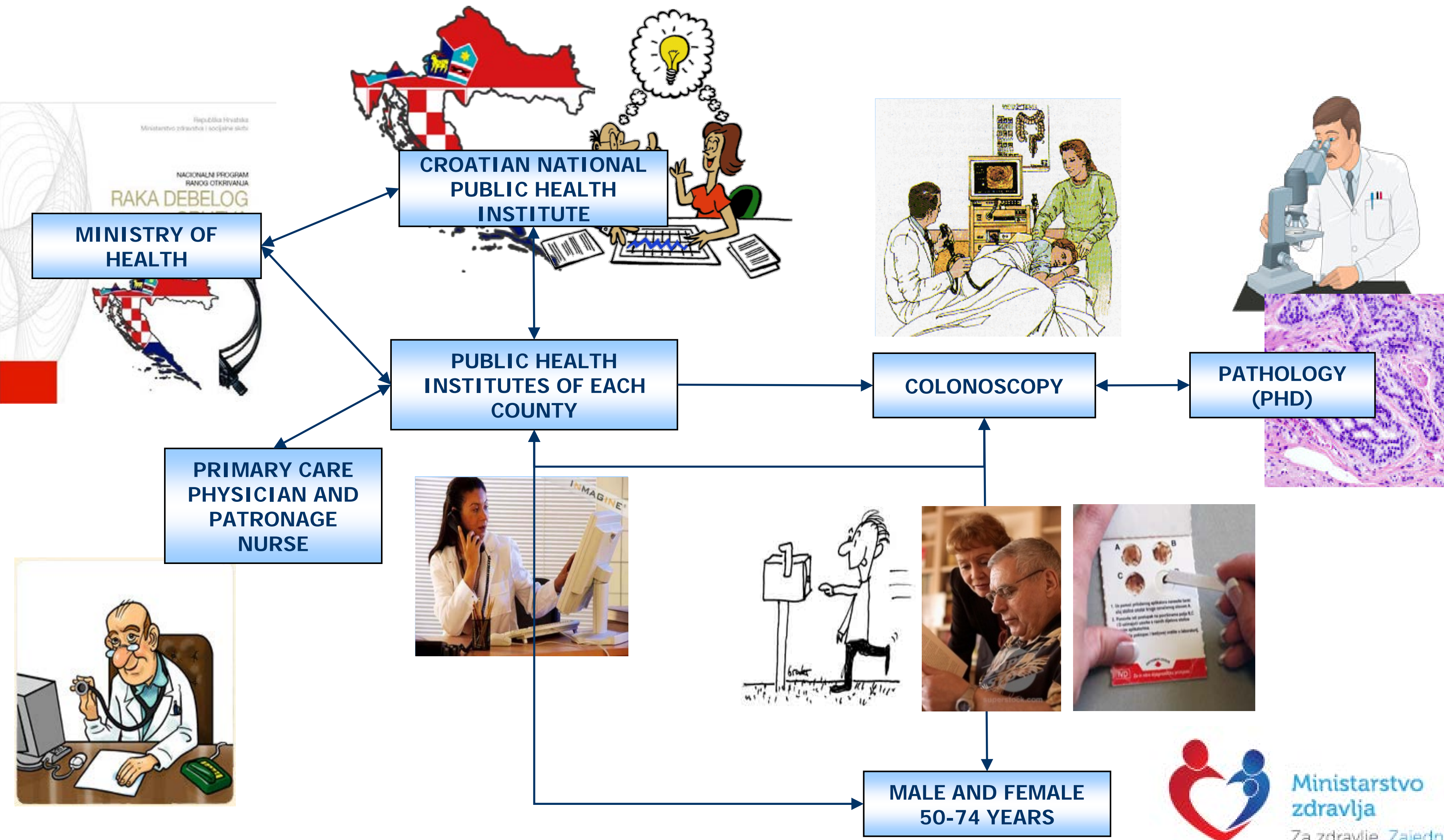
Current organization



- included 1.414.466 (99%) persons who were sent test-package
- returned 287.808 envelops (with or without specimens)-20.3% (according to EU guidelines in 1. cycle, expected values for national program: 17.2-70.8%)
- analysed 246.750 persons (3 test cards for each)
- FOBT pozitive persons: 15.494 (6,3%)→better compliance in already symptomatic people, hipersensitive test (EU quidelines expected values: 1.5-8.5%)

(data obtained by PHI and CNIPH coordinators)

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Colonoscopy

- colonoscopy done in 10439 people (80%)
- persons diagnosed with carcinoma: 560-2.3/1000 of tested (EU guidelines: 1.2-2.3/1000)
- persons diagnosed witih polyp(s): 4112-39% of colonocopied persons (EU guidelines: to 36,3%)
- 800 persons-negative (false positive-9%)
- persons diagnosed witih haemerhoids: 2972
- persons diagnosed witih diverticula or other diseases: 1728

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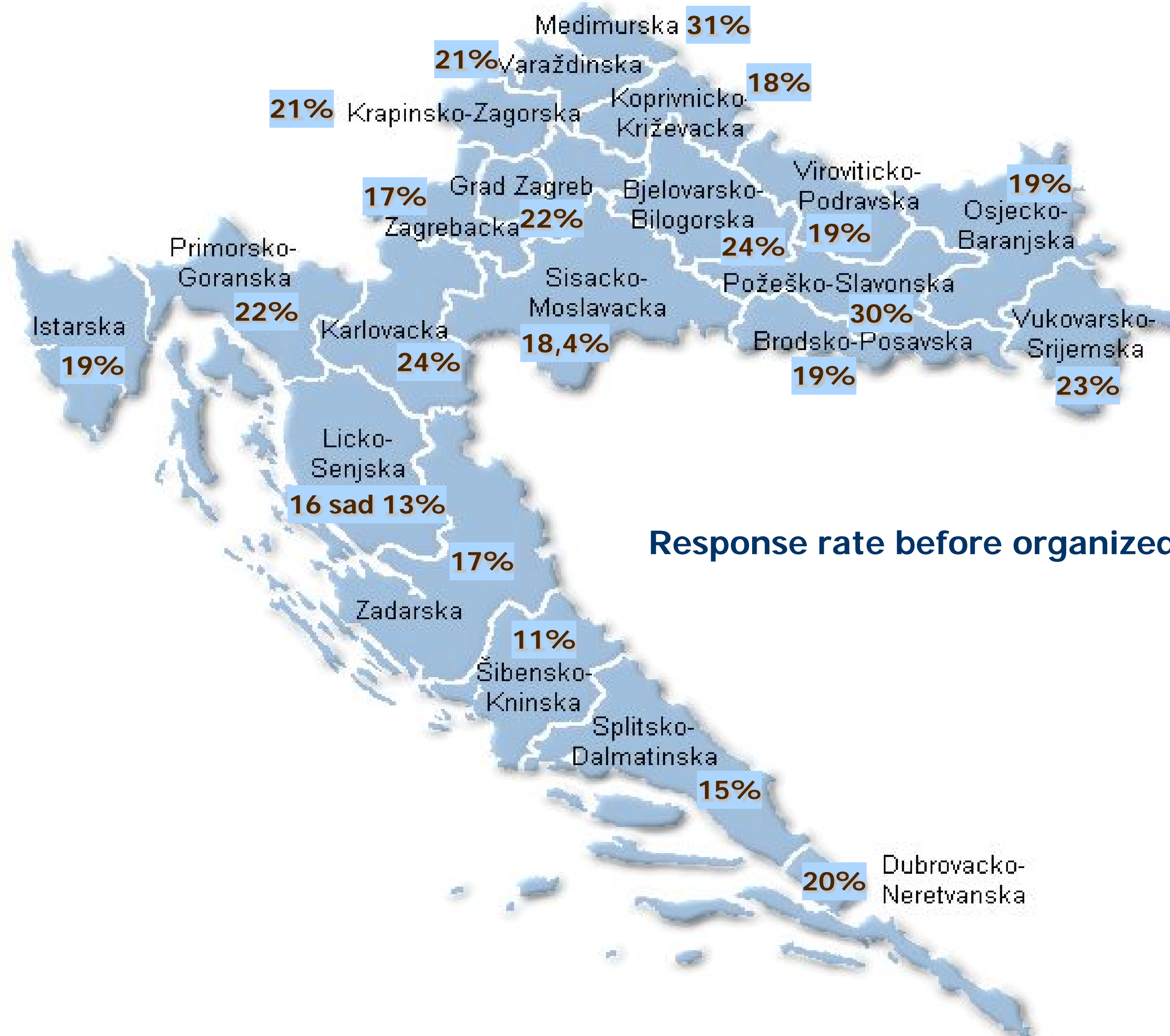
Geographic, resources and population diversity-organizational challenge



Response rate before organized screening-6%!

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- centralised system
- in pilot-response was in 2009.-36%
- 2010-57%
- 2011.-66%-effective promotive and educational actitvities
- now-70% crc detected in program!

Financial aspect

- costs for crc treatment in Slovenia-45.450.000 Eur
- year costs of program-5.000.000 Eur
- after 2 years they save 3.998.000 Eur
- after 5 years total save 20 mil. Eur

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Place for empoverment

- in 4 years 560 persons were diagnosed crc
- three times program was stoped (public procurement law, other law changes during EU accession procedure)
- 2011.-just 21 persons were diagnosed→we missed to detect CRC in 130 persons, and in cca 1100 persons detect and remove polyp
- each year incidence is 3000 people
- if we arise compliance to accepted values (45%) till now we could detect CRC in 1350 persons/year, and remove polyps in 7500!

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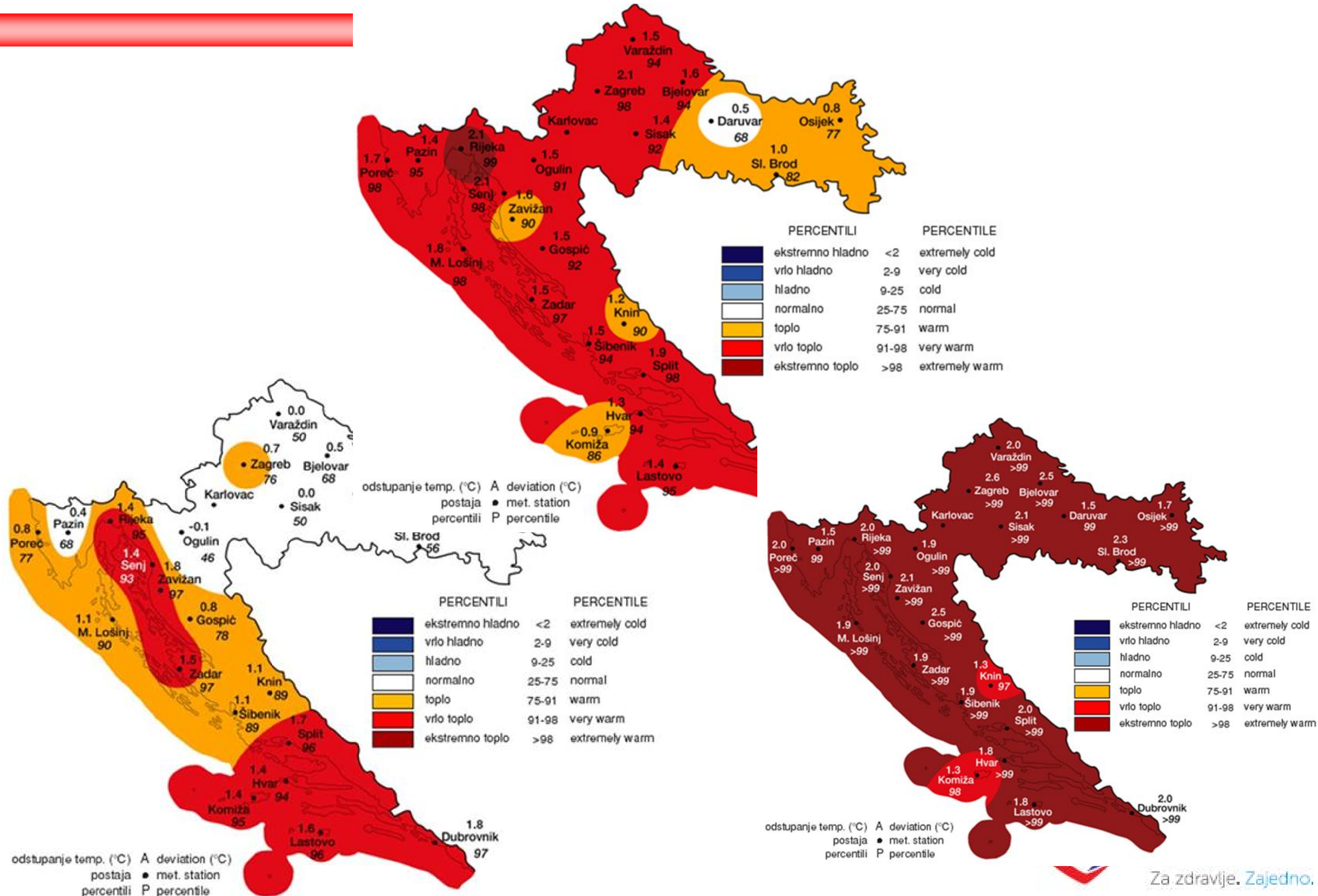
What is connection between meteorology and CRC screening?



FOBT

- probability of the iFOBT being positive-17% lower in summer than in winter
- increase in temperature of 1°C - 0.7% reduction in probability of a FOBT being positive
- the probability of detecting a cancer or an advanced adenoma in the summer was about 13% lower than in the winter
- in Croatia more than 2/3 of year, temperature above 20°C, in post-cases about 24-25°C if placed on sunshine
- iFOBT testing must be centralized, educated personel, informatically connected to CRC-screen aplication

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Reorganization

- first phase added-invitation letter
- educational and promotional activities, continue previous activity of Cromsic-medical student organization-"stolica glavu čuva", "mRak kampanja"
- new unique visual identity together with new program for cervical cancer, and well organized breast cancer program
- planned renewal of informatic application and connection with primary care CEZIH
- planned more active inclusion of primary care physicians, nurses, and field nurses (patronage)

NO CHANGES:

- 3 card/each 4 window gFOBT, stabile to transport in pvc bags
- mailing FOBT to home addresses
- organization-public health institutes, hospital colonoscopy units with pathology units

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Primary care physicyans, patronage nurses-informing eligible population before invitations,

eligible population M and F 50-74 yrs.

Letter-invitation for testing, broshure, addressed envelop to local public health institute

no response or dislike testing, second invitation, PCP, patronage

returned with information: dead, temporary absent, unknown (noncompliance)

person already have crc or done testing or colonosopy in ast 2 years

returned answer, signed informed conset that like testing

send envelop with 3 card tests, prescription, questionary, pvc sealed package-patient returne specimens to institute

non-compliancecauses

correctly placed specimens on all 3 cards and fulfilled questionaire

NEGATIVE- invitation after 2-3 years in next cycle

returned empty or fulfilled questionaire or incorrectly placed specimens or cards without specimen-about 3% (in most cases tel. number and name of PCP, about 1/3 never send another specimen)

POZITIVE-invitation to colonoscopy+purisan+instructions

INFORMATION to primary care physician

within 6 weeks

consultation and additional advices at primary care physician

POZITIVE- Cancer-phd and final diagnose at colonoscopy unit NOT TO BE INVITED IN NEXT CYCLE! (STILL NOT APPLICABLE)

POZITIVE, OTHER DISEASES OF COLON OR RECTUM-instructions for management at colonoscopy unit

POZITIVE, POLYP-POLIPECTOMY at same, eventually next colonoscopy (regular procedure), waiting for phd and final diagnose at colonoscopy unit NOT TO BE INVITED IN NEXT CYCLE! (STILL NOT APPLICABLE)

NEGATIVE- INVITATION IN NEXT CYCLE AFTER 2 YEARS

INFORMATION to primary care physician

additional exams and staging of disease

THERAPY, TREATMENT

OUT OF PROGRAME

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CANDB

Page Safety Tools

Suzenje lumena: ☐
Bolnost: ☐
Nedovoljno ciscenje: ☐
Na zahtjev bolesnika: ☐
Ostalo: ☐

Ostalo

Ulcerozni kolitis	Morbus Crohn	Ostali kolitisi
☐	☐	☐

Komplikacije

		Ima komplikacije	Nema komplikacije
Vrijeme nastanka			
Tijekom kolonoskopije	nakon kolonoskopije	do 7 dana	do 30 dana
☐	☐	☐	☐
Vrsta komplikacije			
Krvarenje	Perforacija	Kardiorespiratorni poremecaj	
☐	☐	☐	
Ishod lijecenja komplikacije			
Konzervativno/endoskopski	Kirurski zahvat	Smrt	
☐	☐	☐	

Inspekcija anokutane regije:nalaz uredan.
DRP:nalaz uredan, uvećana prostata, na prstu rukavice oskudan krvav trag.
Kolonoskopski nalaz:učinjena totalna kolonoskopija.U analnom kanalu lako podraženi unutarnji hemoroidi.U sigmi veći broj ovećih i dubokih divertikula.U ostalom dijelu nema promjena.Valvula Bauchini voluminoznija.
terminalna ileoskopija:bez poteđškoća se uđe u terminalni ileum.Pregleda se oca 30 cm tankog crijeva koje je uredne suznice.

Misljenje (DG) endoskopicara o uzroku pozitivnog nalaza:

Dg:Noduli haemorrhoidales interni
Dr.Bonacin

Zavrsno misljenje gastroenterologa-endoskopicara:

Unesi

Done | Internet | 100%

start | CANDB - Windows Int... | Microsoft Excel - KRK... | Microsoft PowerPoint ... | 11:54

starstvo
zdravlja
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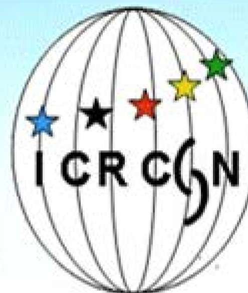
International ColoRectal Cancer Screening Network



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The ICRCSN members (in alphabetical order of country's name):

- Australia: Ms Andriana Koukari, Professor Graeme Young
- Canada: Dr Heather Bryant, Professor Linda Rabeneck, Ms Jean Sander, Dr Laura Sware, Dr Huiming Yang
- Chile: Dr Francisco López-Kostner
- Czech Republic: Dr Štepán Suchánek, Professor Miroslav Zavoral
- Croatia: Dr Nataša Antoljak
- Finland: Dr Nea Malila
- France: Dr Rosemary Ancelle-Park, Dr Emmanuelle Salines, Dr Jérôme Viguier, Dr Lawrence Von Karsa
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ORIGINAL ARTICLE

Results of National Colorectal Cancer Screening Program in Croatia (2007-2011)

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Author contributions: Katičić M and Antoljak N designed the study, ensured the acquisition, analysis, and interpretation of data and wrote the first draft; Stamenić V, Strnad Pešikan M, Šamija M and Ebling Z designed a plan of Colorectal National Screening Program and critically revised this paper; Kujundžić M and Štimac D were involved in supervision and supportive activities during program implementation; Skoko Poljak D and Kramarić D assured funding, administration, technology and material support.

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Abstract

AIM: To study the epidemiologic indicators of uptake and characteristic colonoscopic findings in the Croatian National Colorectal Cancer Screening Program.

METHODS: Colorectal cancer (CRC) was the second leading cause of cancer mortality in men (n = 1063, 49.77/100 000), as well as women (n = 803, 34.89/100 000) in Croatia in 2009. The Croatian National CRC Screening Program was established by the Ministry of Health and Social Welfare, and its implementation started in September, 2007. The coordinators were recruited in each county institute of public health with an obligation to provide fecal occult blood testing (FOBT) to the participants, followed by colonoscopy in all positive cases. The FOBT was performed by hypersensitive guaiac-based Hemognost card test (Biognost, Zagreb). The test and short questionnaire were delivered to the home addresses of all citizens aged 50-74 years consecutively during a 3-year period. Each participant was required to complete the questionnaire and send it together with the stool specimen on three test cards back to the institute for further analysis. About 4% FOBT positive cases are expected in normal risk populations. A descriptive analysis was performed.

RESULTS: A total of 1 056 694 individuals (born between 1933-1945 and 1952-1957) were invited to screening by the end of September 2011. In total, 210 239 (19.9%) persons returned the envelope with a completed questionnaire, and 181 102 of them returned it with a correctly placed stool specimen on FOBT cards. Until now, 12 477 (6.9%), FOBT-positive patients have been found, which is at the upper limit of the expected values in European Guidelines for Quality Assurance in CRC Screening and Diagnosis [European Union (EU) Guidelines]. Colonoscopy was performed in 8541 cases (uptake 66%). Screening has identified CRC in 472 patients (5.5% of colonoscopied, 3.8% of FOBT-positive, and 0.26% of all screened individuals). This is also in the expected range according to EU Guidelines. Polyps were found and removed in 3329 (39% of colonoscopied) patients. The largest number of polyps were found in the left half of the colon: 64% (19%, 37% and 8% in the rectum, sigma, and descendens, respectively). The other 36% were

Skinuti zaštitnu traku s poleđine podloška

Sanitarni podložak
Pomoćno sredstvo za uzimanje uzoraka stolice

Sanitarni podložak služi za sigurno i higijensko sakupljanje uzoraka stolice, potrebnih za dobivanje pouzdanih rezultata pretraga.

Skinuti zaštitne trake sa sanitarnog podloška i zalijepiti ga na dasku WC školjke. Pri tome paziti da podložak ne dođe u doticaj s vodom, sredstvom za čišćenje ili osvježavanje WC školjke.

Uzorak stolice uzeti u skladu s uputama.

Skinuti zaštitnu traku s poleđine podloška

Nakon uzimanja uzorka, istovremeno odlijepiti oba kraja podloška s daske i spustiti u školjku. Kako bi se olakšao odvod, prije ispiranja WC školjke pričekati da papir omekša.

Preporuča se korištenje BioGnostovog sanitarnog podloška bez obzira na vrstu WC školjke, u zdravstvenim ustanovama i za kućna testiranja.

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HemoGnost® TEST KOMPLET

UPUTA ZA PACIJENTE
POSTUPAK SAKUPLJANJA UZORAKA STOLICE

Slikovni prikaz na drugoj strani →

NAMJENA I SASTAV TESTA

HemoGnost test karton je brzi test za otkrivanje skrivenog (nevidljivog, okultnog) krvarenja u stolici.
Komplet se sastoji od tri HemoGnost test kartona, 12 kartonskih štapića, upute za korisnike i povratne kuverte s vrećicom za zaštitu uzorka. Može sadržavati i 3 sanitarna podloška.

UVOD

HemoGnost test karton je jednostavan test kojim je moguće ustanoviti postoji li u stolici (izmetu) golim okom nevidljivo krvarenje, jer takvo krvarenje ima dijagnostički značaj u ranom otkrivanju zloćudnih bolesti debelog crijeva.

UPUTE ZA KORISNIKA PRIJE SAKUPLJANJA UZORKA STOLICE

Kako bi testiranje bilo pouzdano, potrebno je dobro proučiti ovu uputu jer neke bolesti i stanja mogu djelovati na rezultate testiranja. Potrebno je pridržavati se dolje navedenih preporuka:

- Test treba odgoditi krvarite li iz hemoroida ili mokraćovoda, ili imate proljevili menstruaciju.
- Sakupite uzorke iz tri stolice tijekom tri različita dana i to po četiri uzorka s različitih mjesta iz svake stolice.
- Ne uzimajte vitamin C (askorbinska kiselina) u količini većoj od 250 mg dnevno tri dana prije testiranja. To se odnosi i na dodatke hrani koji sadrže askorbinsku kiselinu, limune i naranče, voće i sokove. Npr. prosječna naranča sadrži 70-75 mg vitamina C.

Prije početka testiranja obavezno pročitati ovu uputu za izvođenje testa i upoznati se s izgledom HemoGnost test kartona.

Test karton sastoji se od prednje strane na kojoj se nalazi veliki poklopac i naziv testa HEMOGNOST, i stražnje strane na kojoj se nalaze dva manja poklopca s naznakom da je poklopac dozvoljeno otvoriti samo u laboratoriju. **Pacijent prilikom testiranja otvara i zatvara samo veliki poklopac na prednjoj strani testa, dok se stražnju stranu testa ne smije dirati.**

VAŽNO!

- Spriječiti doticaj stolice s vodom u zahodu stavljanjem presavinutog novinskog papira na površinu vode. Nakon uzimanja uzorka, isprati zahod. Ako je priložen, na dasku postaviti sanitarni podložak.
- Zaštititi HemoGnost test karton od prekomjerne hladnoće, vlage, topline i izravnog sunčevog svjetla.
- HemoGnost test karton čuvati na sobnoj temperaturi izvan dohvata djece.
- HemoGnost test karton s nanijetim uzorcima stolice poslati u zdravstvenu ustanovu unutar 7 dana od sakupljanja prvog uzorka.

POSTUPAK TESTIRANJA (tijekom tri dana)

1. Na prednju stranu HemoGnost test kartona napisati: IME, PREZIME, ADRESU I DATUM.

2. Otvoriti prednji veliki poklopac HemoGnost test kartona. Otvara se na donjem dijelu gdje se nalazi crvena strelica i natpis "OTVORITI OVDJE".

3. Priloženim kartonskim štapićem nanijeti uzorak stolice veličine zrna pšenice i namazati ga u tankom sloju unutar kruga označenog slovom A.

4. Ponoviti isti postupak na površinama polja B, C i D uzimajući novim kartonskim štapićima uzorke s raznih dijelova stolice.

5. Zatvoriti poklopac HemoGnost testa tako da se zakači na mjestu označenom crvenom strelicom i natpisom "ZATVORITI OVDJE". Taj natpis postaje vidljiv tek nakon što se otvori prednji veliki poklopac. (Vidi slike!)

6. Spremiti karton u priloženu vrećicu za slanje u zdravstvenu ustanovu.

Ponoviti postupak na identičan način i drugi i treći dan, uz upotrebu NOVOG HemoGnost test kartona i NOVIH, ČISTIH kartonskih štapića.

Sva tri HemoGnost test kartona zatvoriti u vrećicu, staviti u priloženu kuvertu i ubaciti u poštanski sandučić.

Slikovni prikaz na drugoj strani →

HEMOGNOST
Test na krv u stolici
NE ZABORAVI, TRI UZASTOPNA DANA PO JEDAN TEST!
ZDRAVSTVENA USTANOVA
POŠTA

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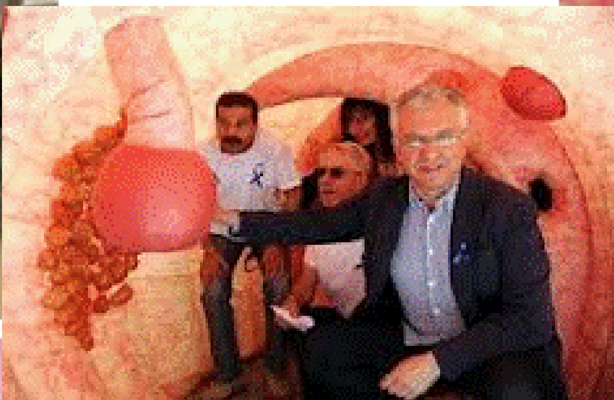
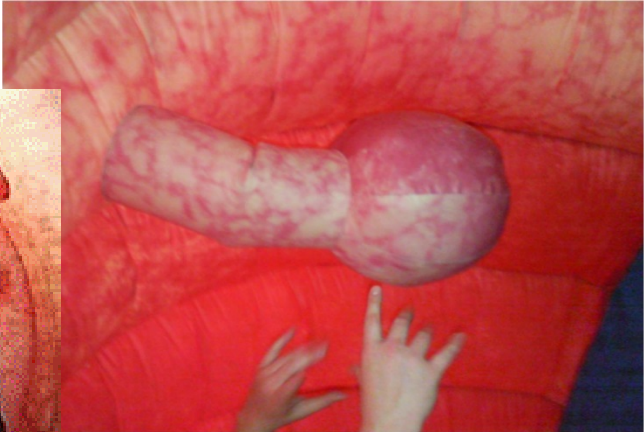

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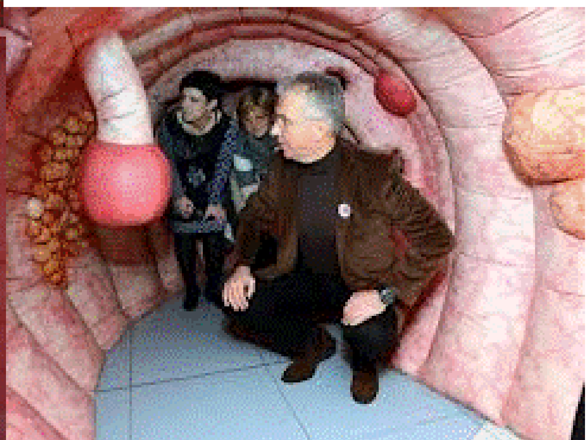

Preventivni
program
Nacionalni program
ranog otkrivanja
raka debelog crijeva

COMING TOGETHER IS A BEGINNING ,

KEEPING TOGETHER IS PROGRESS,

WORKING TOGETHER IS SUCCESS

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