

COLORECTAL CANCER SCREENING PROGRAM

ANNUAL REPORT ON SCREENING IN 2022

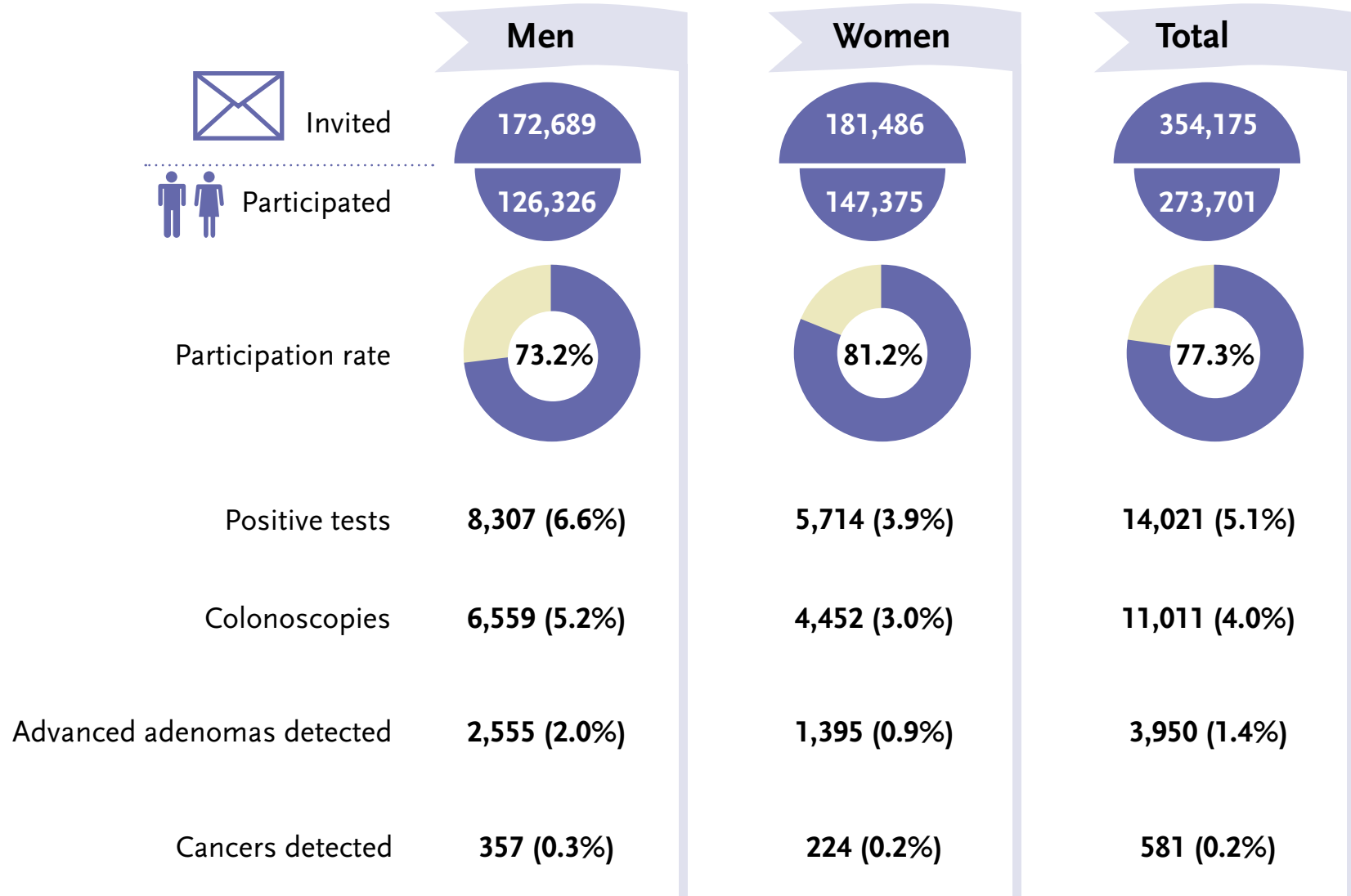


FIGURE 1. Screening program process for women

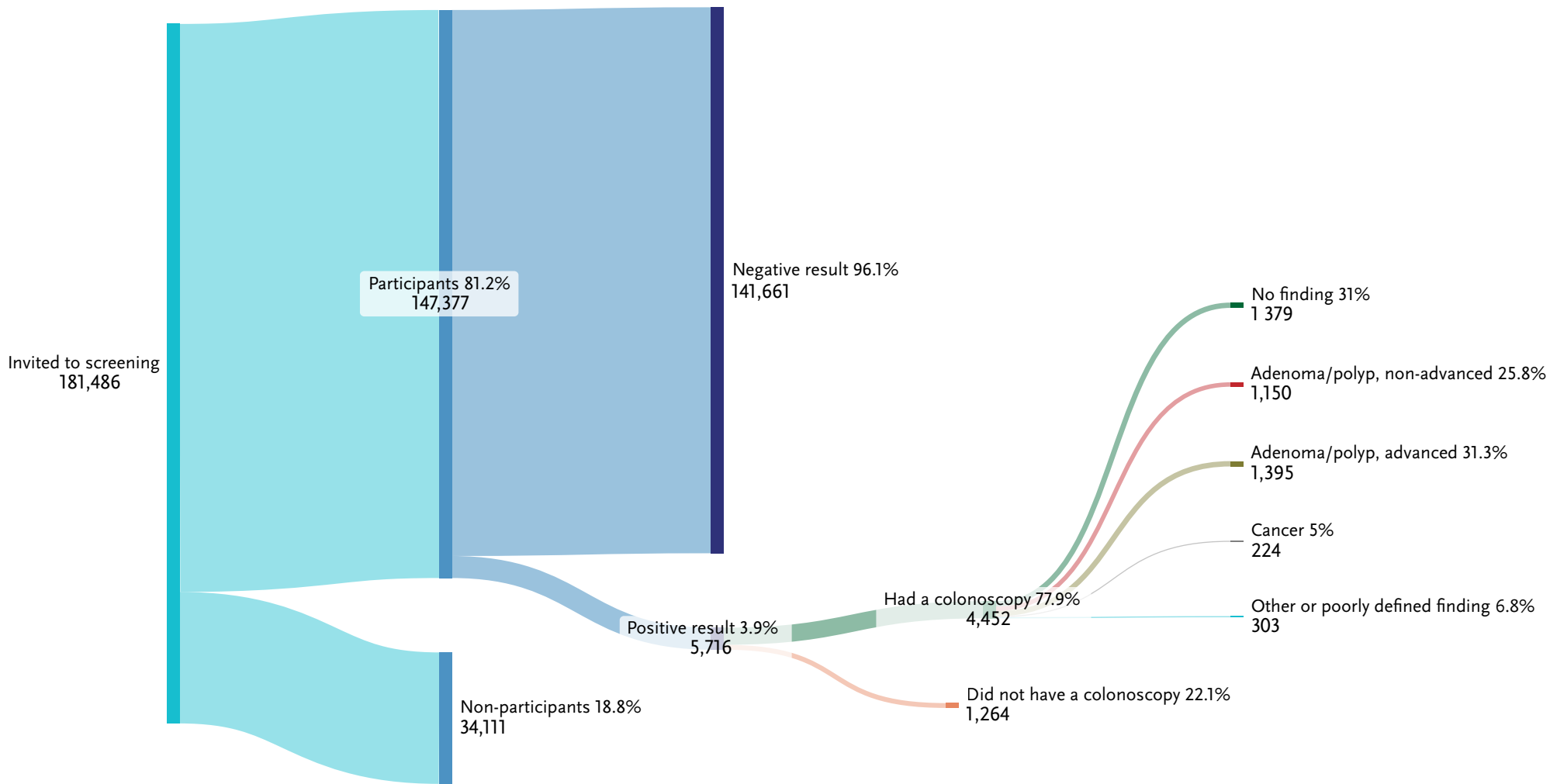
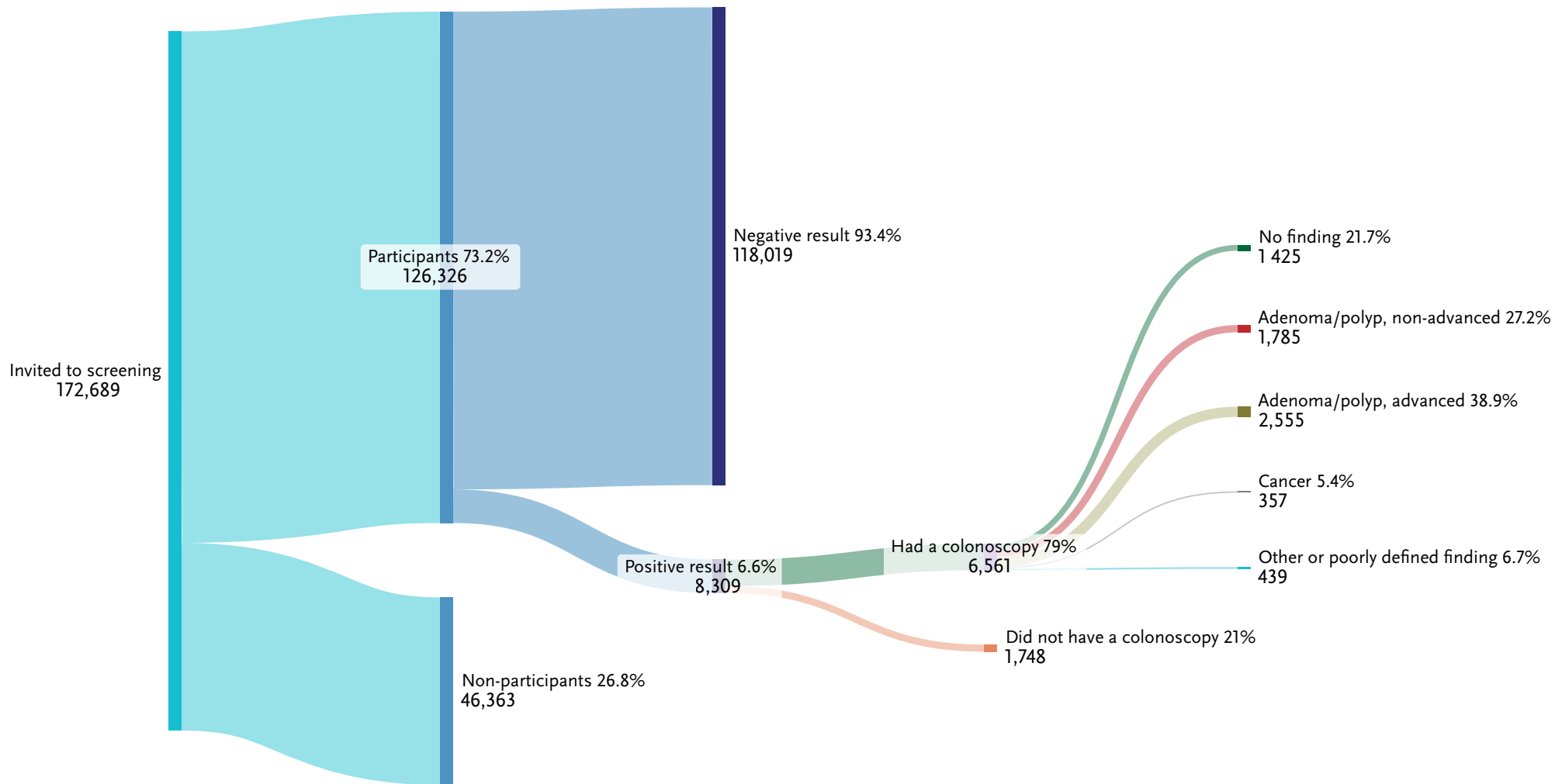


FIGURE 2. Screening program process for men



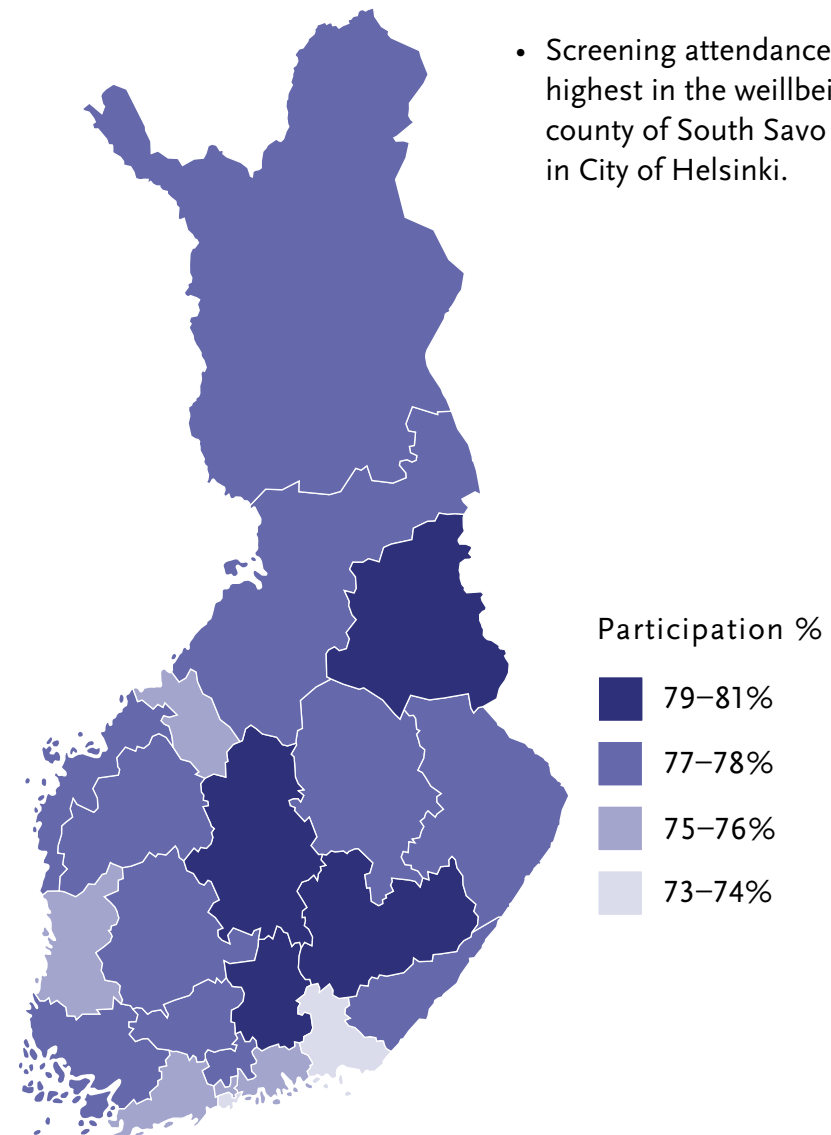
SECTION 1. PARTICIPATION IN THE SCREENING PROGRAM

TABLE 1. Invitations and participation in colorectal cancer screening by age group in 2022

Age group	Sex	Invited N	Participated	
			N	%
60	Men	36,233	24,769	68.4%
60	Women	36,542	28,573	78.2%
62	Men	35,030	25,038	71.5%
62	Women	36,331	29,122	80.2%
64	Men	33,278	24,592	73.9%
64	Women	34,782	28,444	81.8%
66	Men	34,849	26,445	75.9%
66	Women	36,919	30,580	82.8%
68	Men	33,299	25,482	76.5%
68	Women	36,912	30,656	83.1%
Total	Men	172,689	126,326	73.2%
Total	Women	181,486	147,375	81.2%

- Participation in colorectal cancer screening is associated with age, older age groups participating more actively than younger ones.

FIGURE 3. Participation in colorectal cancer screening by wellbeing services county in 2022



- Screening attendance was highest in the wellbeing services county of South Savo and lowest in City of Helsinki.

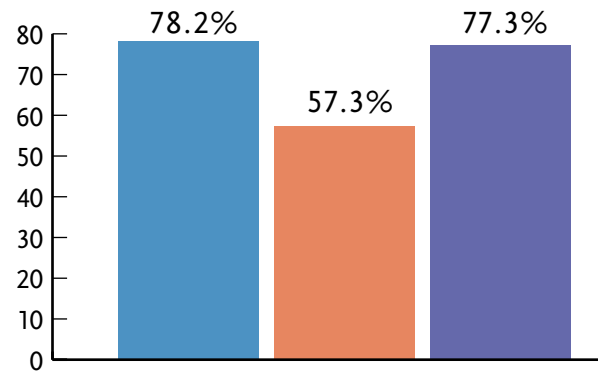
SECTION 2. RESULTS OF THE SCREENING PROGRAM

TABLE 2. Invitations and participation and main findings in 2022 by wellbeing services county

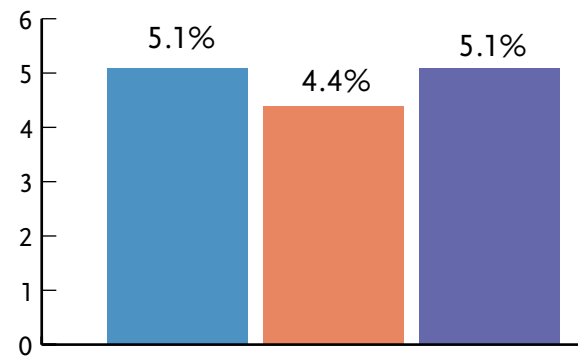
Wellbeing services county	Invited	Participated		Test positive (% of those participated)		Underwent colonoscopy (% of test positive)		Adenoma/polyp, advanced (% of colonoscopies)		Cancer (% of colonoscopies)	
	N	N	%	N	%	N	%	N	%	N	%
Central Finland	17,979	14,388	80	665	4.6	548	82.4	135	24.6	27	4.9
Central Ostrobothnia	4,225	3,219	76.2	158	4.9	137	86.7	50	36.5	5	3.6
Central Uusimaa	12,475	9,826	78.8	515	5.2	361	70.1	140	38.8	14	3.9
East Uusimaa	6,523	4,936	75.7	266	5.4	206	77.4	70	34.0	15	7.3
Helsinki	35,104	25,690	73.2	1,282	5.0	929	72.5	436	46.9	52	5.6
Kainuu	6,019	4,780	79.4	269	5.6	209	77.7	66	31.6	7	3.3
Kanta-Häme	12,157	9,532	78.4	521	5.5	425	81.6	153	36.0	31	7.3
Kymenlaakso	12,228	9,029	73.8	540	6.0	410	75.9	143	34.9	24	5.9
Lapland	13,972	10,837	77.6	588	5.4	468	79.6	148	31.6	26	5.6
North Karelia	12,737	9,967	78.3	338	3.4	302	89.3	77	25.5	23	7.6
North Ostrobothnia	25,116	19,809	78.9	955	4.8	751	78.6	218	29.0	26	3.5
North Savo	18,463	14,519	78.6	807	5.6	600	74.3	273	45.5	33	5.5
Ostrobothnia	10,335	8,071	78.1	374	4.6	294	78.6	133	45.2	12	4.1
Pirkanmaa	31,540	24,528	77.8	1,252	5.1	976	78.0	279	28.6	34	3.5
Päijät-Häme	14,481	11,501	79.4	564	4.9	451	80.0	202	44.8	25	5.5
Satakunta	15,346	11,627	75.8	660	5.7	565	85.6	118	20.9	28	5.0
South Karelia	9,465	7,455	78.8	418	5.6	324	77.5	144	44.4	20	6.2
South Ostrobothnia	13,622	10,539	77.4	540	5.1	451	83.5	138	30.6	24	5.3
South Savo	11,145	9,058	81.3	476	5.3	419	88.0	158	37.7	31	7.4
Southwest Finland	30,576	23,632	77.3	1,297	5.5	1,026	79.1	394	38.4	52	5.1
Vantaa-Kerava	14,235	10,698	75.2	545	5.1	400	73.4	175	43.8	28	7.0
West Uusimaa	26,432	20,060	75.9	991	4.9	759	76.6	300	39.5	44	5.8
Total	354,175	273,701	77.3	14,021	5.1	11,011	78.5	3,950	35.9	581	5.3

FIGURE 4. Participation in screening and screening results by native language in 2022

Participated

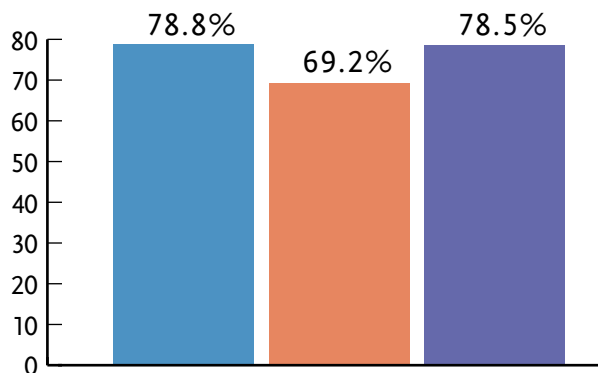


Test positive (% of those participated)



- Individuals whose native language was other than Finnish or Swedish participated in screening notably less than those whose native language is Finnish or Swedish. The positivity rate was slightly lower.

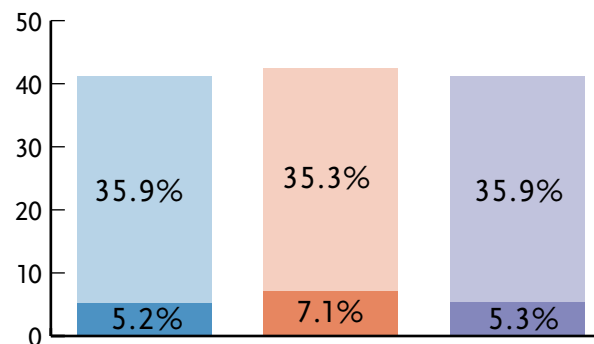
Underwent colonoscopy (% of test positive)



Adenoma/polyp

Light = Advanced (% of colonoscopies)

Dark = Cancer (% of colonoscopies)



Native language

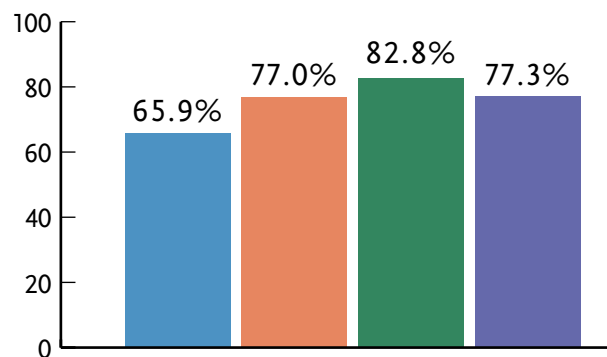
Domestic

Other

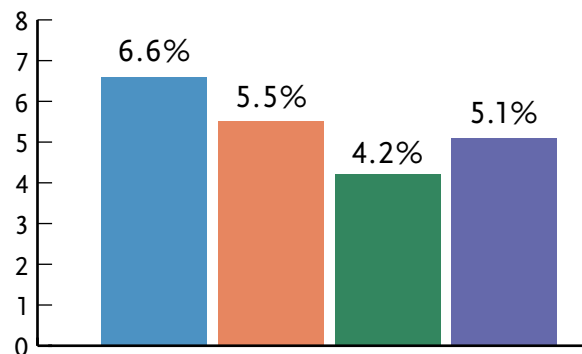
Total

FIGURE 5. Participation in screening and screening results by education level in 2022

Participated

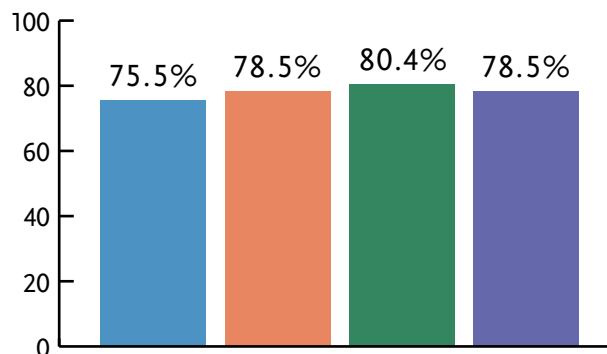


Test positive (% of those participated)



- Differences in educational background are evident at many stages of the screening process. Higher-educated individuals had higher participation rates and lower positivity rates.

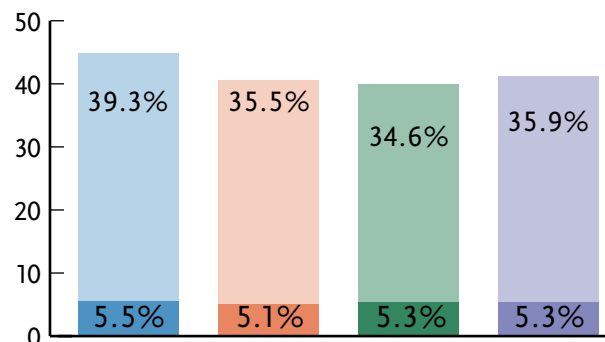
Underwent colonoscopy (% of test positive)



Adenoma/polyp

Light = Advanced (% of colonoscopies)

Dark = Cancer (% of colonoscopies)



Education level



Primary or missing



Secondary



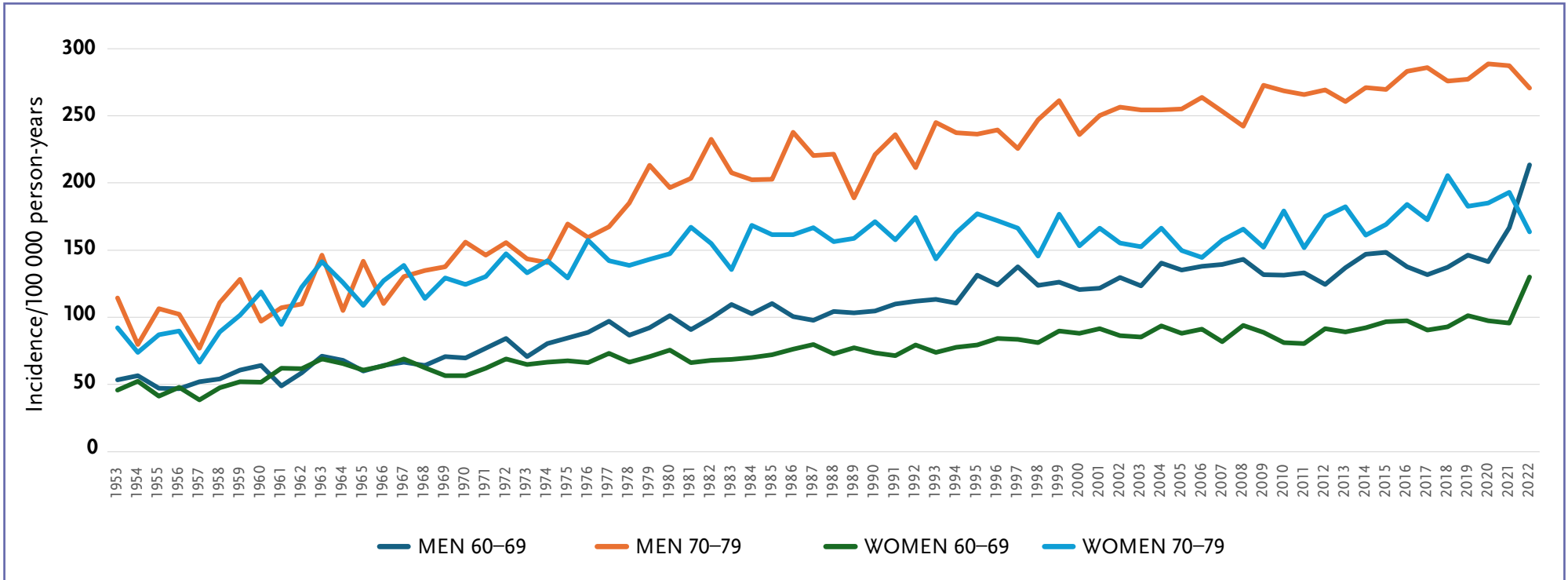
Higher



Total

SECTION 3. CANCER INCIDENCE

FIGURE 6. Age-specific incidence of colorectal cancer in Finland from 1953 to 2022



- The colorectal cancer screening program in 2022 resulted in a notable increase in cancer incidence among screening-age individuals, with both men and women.

Colorectal cancer screening program in Finland

- The national colorectal cancer screening began in Finland in 2022. This was preceded by a pilot in 12 municipalities from 2019 to 2021. Additionally, from 2004 to 2016, screening was studied in a randomized trial using an older faecal occult blood test test.
- The goal of the screening program is to reduce mortality from colorectal cancer by detecting cancers at an early stage. By detecting and removing precancerous lesions (adenomas) before they turn into cancers, cancer incidence can also be reduced in long term.
- Municipalities were responsible for organizing the screening program until the end of 2022, after which the responsibility has been with the wellbeing services counties and the city of Helsinki. The region of Åland is not included in the national screening program.
- According to the Government decree on screening in 2022, individuals aged 60, 62, 64, 66, and 68 were invited to screening. The screening test is free for the eligible population, but specialized healthcare units may charge a fee determined by the hospital district.
- The target population for the screening program was 354,628, and addresses for 354,175 individuals (99.9%) were obtained from the Digital and Population Data Services Agency for invitations.
- Along with the invitation letter, all eligible individuals received a sample collection kit for fecal immunochemical testing (FIT). Those with positive test results were referred to a screening nurse for further evaluation. The primary follow-up examination was colonoscopy, performed on 11,011 screening participants. Fewer than 100 alternative CT colonographies were reported.
- After colonoscopy, patients are referred for possible colonoscopy surveillance or specialized care for surgery or oncological treatment based on certain findings.

GLOSSARY

Histological sample

Tissue sample.

Adenoma/polyp

Adenoma, sessile lesion, or hyperplastic polyp.

Advanced adenoma/polyp

Adenoma, sessile lesion, or hyperplastic polyp requiring intensified colonoscopy surveillance due to additional criteria (large size, dysplasia, large number of polyps).

FIT

Fecal immunochemical test.

Colonoscopy

Endoscopic examination of colorectum.

Other findings

Cases registered in the mass screening registry with a known polyp or tumor, but detailed classification into other categories is impossible due to incomplete histological or other information. Includes also rare neoplasia that are neither cancers nor considered as precursor lesions of colorectal cancer.

Cancer incidence

The number of new cancer cases relative to the population or accumulated follow-up time during a specific period.

CT colonography

Non-invasive imaging examination of the colon.

DATA SOURCE AND DEFINITIONS

This annual report is based on screening data reported to the Finnish Cancer Registry by September 30, 2024. The classification of findings uses only data from the screening registry, meaning the figures do not include tests, cancers or precursor lesions of cancer reported outside the screening program. Statistics production utilized identifiable data on education provided by Statistics Finland under permit TK/2743/07.03.00/2023.

Education categories were created by combining the categories of pre-primary, lower primary, and upper primary education into the primary education category, combining secondary education and special vocational qualifications into the secondary education category, and combining lower and upper tertiary education and doctoral education into the tertiary education category. Unknown and missing data were combined with the primary education category. The education data is from the year preceding the screening year (2021).

Native language is based on data from the Digital and Population Data Services Agency.

FURTHER INFORMATION

Colorectal cancer screening:

<https://cancerregistry.fi/screening/colorectal-cancer-screening/>

Annual statistics on colorectal cancer screening:

<https://stats.cancerregistry.fi/joukkistilastot/colorectal.html>