

Non-Communicable Diseases Watch

January 2020



Fighting Colorectal Cancer

Key Messages

- ※ In Hong Kong, colorectal cancer has become the commonest cancer. According to the Hong Kong Cancer Registry, the number of newly diagnosed colorectal cancer increased from 2 022 in 1990 to a record high of 5 635 in 2017.
- ※ Colorectal cancer is preventable through a healthy lifestyle. Members of the public are encouraged to increase intake of dietary fibre, reduce consumption of red and processed meat, have regular exercise, maintain a healthy body weight and waist circumference, abstain from or quit smoking, and avoid alcoholic drinks.
- ※ To reduce the incidence and mortality of colorectal cancer, the Hong Kong Government launched the Colorectal Cancer Screening Programme (CRCSP). Using a public-private partnership model, CRCSP subsidises asymptomatic Hong Kong residents aged between 50 and 75 to undergo screening tests in private sector to prevent colorectal cancer. Information regarding the CRCSP is accessible at www.colonscreen.gov.hk.



Fighting Colorectal Cancer

Colorectal cancer is a major public health problem. Between 1990 and 2017, the Global Burden of Disease Study showed that the incidence of colorectal cancer increased substantially from about 0.82 million to 1.8 million. In 2017, colorectal cancer was the second leading cause of death among cancers with an estimated 0.9 million deaths globally.¹ In Hong Kong, colorectal cancer has become the commonest cancer and the second ‘cancer killer’. According to the Hong Kong Cancer Registry, the number of newly diagnosed colorectal cancer increased from 2 022 in 1990 to a record high of 5 635 in 2017. While colorectal cancer risk increased significantly starting from age 50, the median age was about 68 years at diagnosis. More importantly, about half (49.4%) of colorectal cancer cases were diagnosed at an advanced stage (Stage III or IV) in 2017.² The number of registered deaths attributed to colorectal cancer also increased from 889 in 1990 to 2 314 in 2018.³

Primary and Secondary Prevention of Colorectal cancer

Primary prevention refers to intervening before the disease occurs through measures such as altering risk behaviours known to be associated with the disease. For colorectal cancer, primary prevention is of utmost importance as many of the risk factors are lifestyle-related and are hence modifiable. Studies have shown that leading a healthy lifestyle can markedly lower the risk of colorectal cancer.^{4,5}

Government’s Cancer Expert Working Group (CEWG) recommends members of the public to —

- ✓ Increase intake of food with high dietary fibre, such as fruit and vegetables, whole grains and pulses;
- ✓ Reduce consumption of red and processed meat, such as sausage, ham, bacon and luncheon;
- ✓ Have regular exercise and perform at least 150 minutes of moderate-intensity physical activities or equivalent amount per week;
- ✓ Maintain a healthy body weight and waist circumference. For Chinese adults in Hong Kong, aim for a body mass index between 18.5 and 22.9, and a waist circumference of less than 90 cm (about 36 inches) for men and less than 80 cm (about 32 inches) for women;
- ✓ Abstain from or quit smoking; and
- ✓ Avoid alcoholic drinks.

The Government will continue to organise systematic health communication campaigns to increase health literacy of the local population, raise public awareness of the importance of primary prevention of cancer and instill the concept of healthy lifestyle. The Government will also work with the community and members of the public to build a healthy-enhancing environment and promote the health of all Hong Kong people.

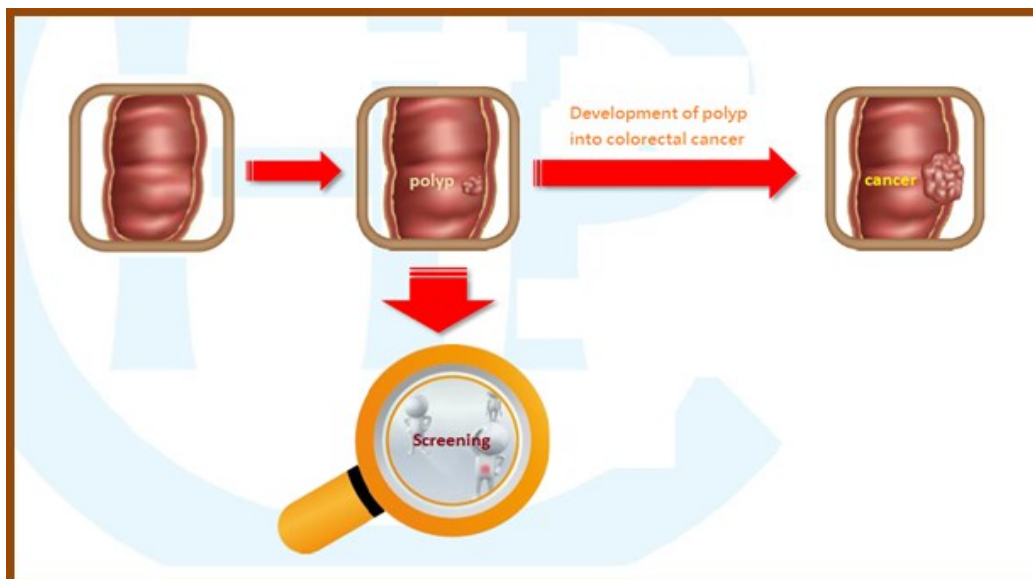
Secondary prevention involves screening individuals without symptoms in order to detect disease or identify individuals who are at increased risk of disease for early intervention. Since colorectal cancer usually begins as a polyp that may take more than 10 years to progress into cancer (Figure 1), it is thus one of the few cancers that can be effectively prevented through organised and evidenced-based screening. In some countries (e.g. Australia, Canada and the United Kingdom), population-based colorectal cancer screening has shown to be effective in reducing the incidence of colorectal cancer.⁶ However, colorectal cancer screening approach should be adapted to the risk of each population.⁷

For people at higher risk of colorectal cancer (such as those with one first-degree relative diagnosed with colorectal cancer at or below 60 years of age, those who have more than one first-degree relatives diagnosed with colorectal cancer irrespectively of age at diagnosis, or those who have mutated gene of hereditary bowel diseases such as familial adenomatous polyposis or Lynch Syndrome), the CEWG recommends them to undergo screening at an earlier age and repeat at shorter time intervals depending on their individual condition and age. They may consult their family doctors in order to decide an appropriate screening option.

Based on review of local and international evidence and practices, the CEWG recommends that average-risk individuals aged 50 to 75 without significant family history of bowel diseases should consult their doctors to consider screening by one of the screening methods:

- ◇ annual or biennial faecal occult blood test; or
- ◇ sigmoidoscopy every 5 years; or
- ◇ colonoscopy every 10 years.

Figure 1: Colorectal screening for earlier detection of precancerous polyp



Colorectal Cancer Screening Programme

To reduce the burden arising from colorectal cancer, the Hong Kong Government launched the Colorectal Cancer Screening Programme (CRCSP) as a pilot programme in September 2016 and regularised in August 2018. Using a public-private partnership model, the programme subsidises asymptomatic average-risk Hong Kong residents aged between 50 and 75 to undergo screening tests in private sector to prevent colorectal cancer. Under the programme, eligible participants would first receive subsidised faecal immunochemical test (FIT, a newer version of faecal occult blood test) from an enrolled primary care doctor. If the FIT result is positive, the primary care doctor will refer the participants to receive subsidised colonoscopy examination services provided by an enrolled colonoscopy specialist to find out the cause of occult bleeding. If polyps are found and considered safe to remove during colonoscopy, they will be removed and sent for histopathology examination to exclude malignancy. If the FIT result is negative, the participants will receive subsidised FIT again (re-screening) every two years until they fall outside the recommended screening age of 75. Participants due for re-screening will receive notification through SMS, email or postal mail to remind them to consult an enrolled primary care doctor.

The CRCSP is heavily subsidised by the Government. The subsidy amount per primary care doctor consultation is \$280. Although primary care doctor may charge a co-payment amount, most do not. FIT positive participant can receive the subsidy amount of \$8,500 for standard colonoscopy examination service if polyp removal is necessary, while the amount is \$7,800 if no polyp removal is needed. Colonoscopy specialist can charge a co-payment for the subsidised screening service subject to a cap of \$1,000. The co-payment level, if imposed, is published in www.colonscreen.gov.hk.

As at end December 2019, about 780 primary care doctors have successfully enrolled in the CRCSP covering around 1 080 locations throughout the territory, and 97% of these locations will not charge any co-payment. In addition, about 195 colonoscopy specialists have joined the CRCSP to provide colonoscopy examination services at around 460 service locations. About 70% will not require additional charges irrespective of polypectomy. In other words, it is easy to find a primary care doctor and colonoscopy specialist without additional charge for completing the FIT and colonoscopy (i.e. receiving the subsidised services totally free of charge).

For the first three years of programme implementation (i.e. 28 September 2016 – 27 September 2019), screening outcomes showed that —

- ◆ More than 154 000 participants submitted FIT specimen with analysable results. Of these, 12.6% participants had positive results in the first round of screening. Among participants joining the re-screening after 2 years, 9.9% had positive results. Regarding the waiting time from knowing the FIT positive results to receiving colonoscopy, the median is 16 days (around two weeks).
- ◆ Of 17 800 FIT positive participants who underwent colonoscopy examination under the programme, around 66.7% of them had colorectal adenomas and about 6.6% had colorectal cancer.

It is noteworthy that by removing colorectal adenoma in the course of colonoscopy can prevent them turning into cancer. Even for a colorectal cancer detected at colonoscopy, preliminary analysis of 755 screen-detected cancer cases revealed that about 59% of the cancer cases detected through CRCSP belonged to earlier stages of the disease comparing with around 44% of those who had not joined CRCSP. Such preliminary screening results are encouraging as the CRCSP proceeded well to pick up a significant number of adenoma and early stage colorectal cancer cases with very short waiting time for colonoscopy. These individuals received clinical management well before symptoms occur, thus offering protection against cancer formation and better prognosis for cancer cases. It also reflects the importance of undergoing timely screening tests for identifying people at increased risk of disease or at early stage of disease for early intervention. Eligible persons (i.e. Hong Kong resident aged 50–75) are encouraged to join the CRCSP for prevention of colorectal cancer. For further information, they are welcome to call the enquiry line 3565 6288, which is manned by trained staff to answer enquiries during office hours; or visit the thematic website at www.colonscreen.gov.hk for the list of enrolled doctors and information of CRCSP.

For continuous service improvement, the Department of Health will continue to keep a close watch over the CRCSP through the routine data collected by the designated information technology system, feedback from stakeholders, service providers and users as well as the general public, and other monitoring activities; and will also continue to implement publicity drives for enhancing the programme participation.

References

1. The global, regional, and national burden of colorectal cancer and its attributable risk factors in 195 countries and territories, 1990-2007: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet Gastroenterology Hepatology*. 2019;doi.org/10.1016/S2468-1253(19)30345-0.
2. Cancer Statistics. Hong Kong SAR: Hong Kong Cancer Registry, Hospital Authority.
3. Mortality Statistics. Hong Kong SAR: Department of Health and Census and Statistics Department.
4. Aleksandrova K, Pischon T, Jenab M, et al. Combined impact of healthy lifestyle factors on colorectal cancer: a large European cohort study. *BMC medicine*. 2014;12:168.
5. Gonzalez S, Grubb M, Levine R. Primary and secondary prevention of colorectal cancer: An evidence-based review. *Fam Med Comm Health*. 2017;5(1):78-84.
6. Araghi M, Soerjomataram I, Bardot A, et al. Changes in colorectal cancer incidence in seven high-income countries: a population-based study. *Lancet Gastroenterology Hepatology*. 2019;4(7):511-518.
7. Navarro M, Nicolas A, Ferrandez A, et al. Colorectal cancer population screening programs worldwide in 2016: An update. *World J Gastroenterology*. 2017;23(20):3632-3642.



World Cancer Day is an initiative of the Union for International Cancer Control (UICC) which takes place every year on 4 February. It aims to unite the world in the fight against cancer. The theme for World Cancer Day 2019-2021 is: ‘**I Am and I Will**’, urging everybody to make a personal commitment to reduce the impact of cancer for themselves, the people they love and the world. To know more about World Cancer Day, please visit <https://www.worldcancerday.org/>. For live updates, follow #WorldCancerDay or #IAmAndIWill.



Lazy Lion has also committed to support, take immediate action and move more! Let's join him and please follow his Facebook page (www.facebook.com/lazylionhk) and Instagram (www.instagram.com/lazylionhk) pages for his latest moves.

Non-Communicable Diseases (NCD) WATCH is dedicated to promote public's awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community. The Editorial Board welcomes your views and comments. Please send all comments and/or questions to so_dp3@dh.gov.hk.

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