Pancreatic Cancer Screening in BC For Individuals at Increased Risk: FAQ

Who should be screened for pancreatic cancer (PC)?

Indication	Age to start screening (PC = pancreatic ca)
Anyone with a germline *CDKN2A* mutation	age **40** or 10 years before youngest PC diagnosis in the family, whichever is earliest
Anyone with a germline *STK11* mutation (Peutz-Jeghers syndrome)	age **30-35** or 10 years before youngest PC diagnosis in the family, whichever is earliest
Anyone with a germline mutation in *BRCA1, BRCA2, ATM, PALB2, MLH1, MSH2,* or *MSH6, EPCAM, TP53* AND a first or second degree relative (parent, sibling, child) affected with PC*	age **50** or 10 years before youngest PC diagnosis in the family, whichever is earliest
Anyone with at least 1 first-degree relative with PC who also has a first-degree relative with PC (familial PC kindred)	age **50** or 10 years before youngest PC diagnosis in the family, whichever is earliest

**Some groups have recommended pancreas surveillance for P/LP variant carriers in the absence of a family history*

What pancreatic screening tests should be offered?

- Alternating MRI/MRCP and EUS, depending on local availability; annual surveillance is recommended in the absence of concerning lesions
- Referral for baseline assessment with a GI specialist at a centre with expertise to discuss the benefits and limitations of current surveillance methods
- Screening should be ideally performed by multidisciplinary teams in centres with appropriate expertise that are involved in research to track outcomes
    - The NCCN panel cited below recommends that such screening only take place after an in-depth discussion about the potential limitations to screening, including cost, the high incidence of benign or indeterminate pancreatic abnormalities, and uncertainties about the potential benefits of pancreatic cancer screening

- The BC Cancer Familial Pancreatic Cancer Program participates in an international collaboration to evaluate the impact and outcomes of screening (precedestudy.org), this registry does not order screening tests

Where can patients be referred for pancreatic cancer screening?

- Pacific Gastroenterology Associates (St Paul's Hospital)
  - tel: 604.688.6332; fax: 604.689.2004
  - https://pacificgastro.health/
- Vancouver General Hospital
  - tel: 604.875.5474; fax: 604. 628.2419
- Kelowna Gastroenterology Associates
  - tel: 250.763.6433; fax 250.763.3818
- Pacific Digestive Health (Victoria)
  - tel: 250.412.1864; fax: 1.888.398.7091

When should pancreatic cancer screening stop?

- There is no consensus on a specific age to stop screening. We recommend that screening be considered until age 75 with review of benefits/risks on a case by case basis after that age based on health status/clinical indication.

What else should patients know about increased pancreatic cancer risk?

- We strongly advise families with an increased risk of pancreatic cancer to avoid smoking, which is a significant risk factor for pancreatic cancer.

- Any new signs/symptoms of diabetes should be investigated carefully with referral to a GI specialist. Annual diabetes screen (consider fasting glucose or HbA1C) can be offered beginning at 40.

- The BC Cancer Familial Pancreatic Cancer Program is a research arm of the Hereditary Cancer Program. We encourage people to contact our program for the most up to date information on pancreatic cancer screening and related research.

  - Research Assistant: Eugene Cheung, email: eugene.cheung1@bccancer.bc.ca; tel:604-877-6000 ext. 3287
  - Genetic Counsellor: Carol Cremin, email: ccremin@bccancer.bc.ca; tel:604-877-6000 ext. 4602

Hereditary Cancer Genetic Testing and Pancreatic Cancer

There are sporadic, multifactorial and hereditary forms of pancreatic cancer. **All individuals diagnosed with pancreatic cancer are eligible for genetic testing.** Any doctor can order this blood test using the HCP Multi-Gene Cancer Panel Requisition on

the Mainstream Testing section of the Cancer Genetics and Genomics Laboratory website. The requisition and results information sheets can be printed off here and the sample can be drawn at any lab: https://cancergeneticslab.ca/hereditary/mainstreamed-testing/. Results go directly back to the ordering provider. The lab automatically refers patients with positive or suspicious findings to the Hereditary Cancer Program for more information and support.

Individuals with a close family history of pancreatic cancer and who have not yet been assessed by the Hereditary Cancer Program can be referred using the current referral form or by visiting http://www.bccancer.bc.ca/our-services/services/hereditary-cancer

Pancreatic cancer can be associated with several inherited cancer syndromes. Hereditary pancreatic cancer should be considered for asymptomatic patients with a family history of or suspicious for a germline variant in *LKB1/STK11* (Peutz-Jeghers syndrome), CDKN2A (familial atypical multiple mole melanoma syndrome), *BRCA1, BRCA2, ATM, PALB2, MLH1, MSH2, MSH6, EPCAM, or TP53.*

Version date: May 26 2025
Created by: Carol Cremin/Intan Schrader

References

Goggins, M., Overbeek, K. A., Brand, R., Syngal, S., Del Chiaro, M., Bartsch, D. K., ... & Fockens, P. (2020). Management of patients with increased risk for familial pancreatic cancer: updated recommendations from the International Cancer of the Pancreas Screening (CAPS) Consortium. *Gut*, *69*(1), 7-17.

Canto, M. I., Harinck, F., Hruban, R. H., Offerhaus, G. J., Poley, J. W., Kamel, I., ... & Levy, M. J. (2013). International Cancer of the Pancreas Screening (CAPS) Consortium summit on the management of patients with increased risk for familial pancreatic cancer. *Gut*, *62*(3), 339-347.

Diabetes Care- BC Guidelines: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/diabetes

NCCN: NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic Version 3.2024 — February 12, 2024