



Screening for Abdominal Aortic Aneurysm (AAA)



This tool provides guidance for primary care practitioners on the screening test and recommended ages to screen for AAA.

Population	Screen for AAA?	Frequency	Test	Strength of Recommendation
Men 65 – 80	Yes	Once	Abdominal ultrasound	Weak
Men >80	No	N/A	N/A	Weak
Women	No	N/A	N/A	Strong

AAA = Abdominal Aortic Aneurysm

N/A = Not Applicable

- A **STRONG** recommendation means that most individuals should receive the intervention.
- A **WEAK** recommendation means that clinicians recognize that different choices will be appropriate for individual patients and help patients make decisions consistent with their values and preferences. It implies that most people would want the recommended course of action but many would not.

1. Why is the Canadian Task Force on Preventive Health Care (CTFPHC) making this recommendation?

- Research shows that one-time screening for AAA in ultrasound in men aged 65–80 reduces the risk of AAA-related mortality, rupture, and emergency repair.
- Some elective procedures result from identification of an AAA that might never have ruptured (overdiagnosis). However, in the judgment of the CTFPHC, this possible harm is outweighed by the likely benefit of screening in reducing rates of both rupture and AAA-related mortality.

2. Why is it a weak recommendation to screen?

- There is concern that the declining prevalence of AAA in populations similar to Canada's (due, in part, to the steady decrease in smoking) reduces the absolute benefit of screening.
- There is also concern about overdiagnosis, and its potential for harm.

3. How should I implement a weak recommendation to screen?

- A weak recommendation implies having a discussion with patients about the benefits and harms of screening for AAA with an ultrasound to help them make a decision that is consistent with their values and preferences.
- Factors that could be considered in the decision on whether or not to screen include: a past or present history of smoking, a family history of AAA, and co-morbidities that increase the risk of procedures to repair an AAA.

4. Why is there a recommendation not to screen women?

- Women experience much lower rates of AAA than men do, and there is no direct evidence that screening women has a positive impact on their health.

5. Why should men older than 80 years not be screened?

- The benefit of screening men older than 80 years is likely to be lower than that of screening younger men. This is because men older than 80 years are more likely to experience medical conditions that increase the risk of procedures to repair an AAA.



Abdominal Aortic Aneurysm (AAA) Screening



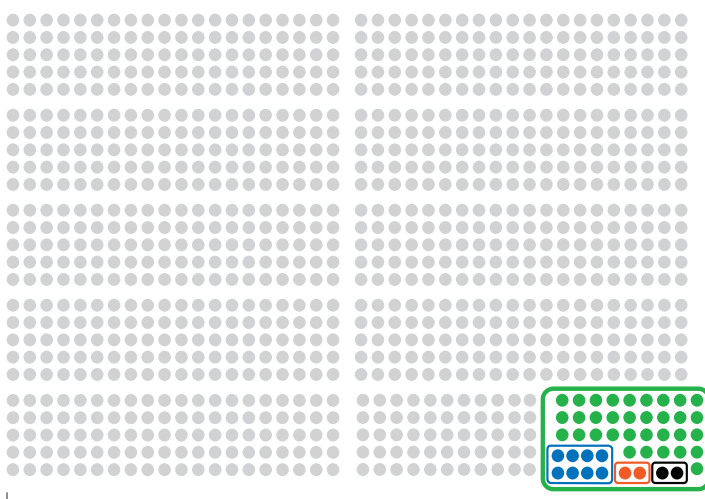
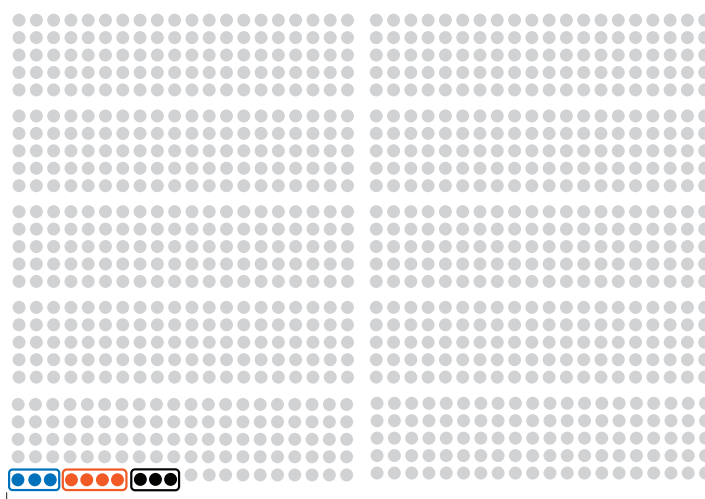
We recommend one-time screening with ultrasound for AAA in men aged 65 to 80.

We recommend not screening men older than 80 years for AAA.

We recommend not screening women for AAA.

Key Points

- Screening involves examining someone who does not show symptoms of a condition or illness.
- Screening uses a specific tool to identify a condition or illness.
- AAA is a weakening in the wall of the aorta that bulges due to pressure from blood flow.
- **Male sex, family history, and older age** are all associated with an increased risk of AAA.
- Being a **current or former smoker** is also an important risk factor for AAA.
- Women are less likely to have an AAA, and there is no evidence that screening has a positive impact on their health.

1000 men aged 65 to 80 who get screened*1000 men aged 65 to 80 who are not screened*

- Men with an AAA identified from a screen and monitored each year depending on the size of the AAA (<5.5 cm)
- Men who undergo an elective procedure†
- Men who experience a ruptured AAA
- Men who die from their AAA (rupture or complications)

45	0†
8	3
2	4
2	3

Screening is a personal decision. It is important that you weigh the benefits and harms for yourself and then discuss your decision with your primary care provider.

*Follow-up period of 3–5 years.

†If you are not screened, your AAA is not identified by a screening test.

‡Surgery that is planned in advance, rather than in an emergency.

References:

Ali, et. al. (2016). Screening for abdominal aortic aneurysm in asymptomatic adults. *Journal of Vascular Surgery*, 64(6), 1855 - 1868.

Norman, P.E., Jamrozik, K., Lawrence-Brown, M.M., Le, M.T., Spencer, C.A., Tuohy, R.J., et al. (2004). Population based randomised controlled trial on impact of screening on mortality from abdominal aortic aneurysm. *BMJ*, 329(7477), 1259.