



The new pneumococcal vaccine

There is a lack of awareness in the community about how serious infection with the bacterium *Streptococcus pneumoniae* (the pneumococcus) can be as you get older. The evidence for that is lower than ideal immunisation rates. As people age, immune systems become less effective, which means increased vulnerability to infections. Worldwide, pneumococcal infections are a common cause of illness, increased frailty, dependence and death. Pneumococcal disease can go unrecognised until too late because it can present with vague symptoms such as fever and general unwellness before a rapid decline.

Why would you take this risk if it's preventable with vaccination?

From 1 July 2026, the government has changed the adult pneumococcal vaccination program. The new preferred vaccine, Capvaxive, is a 21-valent pneumococcal conjugate vaccine — meaning it covers 21 strains of the pneumococcus, replacing the previous combination of Prevenar 13 and Pneumovax 23 on the NIP. The design of the conjugate vaccine is also thought to deliver a stronger immune response, and it is needed as a single shot. It is not known at this stage whether or when a booster might be needed.

The eligibility changes are significant. Adults aged 65 and over are now eligible for a free shot — the eligible age has dropped from 70 — as are First Nations people from the age of 25, down from 50. Adults aged 18 and over who are at particular risk of serious consequences from pneumococcal infection are also eligible. This includes people with poorly functioning immune systems, previous serious pneumococcal infections, some chronic lung diseases including COPD, heart disease, and chronic liver or kidney disease. In total, around five million Australians are now eligible for NIP-funded vaccination, up from 3.2 million under the old schedule. You can find the full list of eligible risk conditions in the Australian Immunisation Handbook.

References

Immunisation Coalition. New adult pneumococcal vaccine now available through the National Immunisation Program. July 2026.
<https://immunisationcoalition.org.au/new-adult-pneumococcal-vaccine-now-available-through-the-national-immunisation-program/>

Australian Immunisation Handbook. Pneumococcal disease. Department of Health, Disability and Ageing.
<https://immunisationhandbook.health.gov.au/pneumococcal-disease>

NCIRS. Annual Immunisation Coverage Report 2025 Summary.
<https://ncirs.org.au/immunisation-coverage-data-and-reports/annual-immunisation-coverage-report-2025-summary>

The diet that delays dementia, even for those already at risk

You might wonder why the experts go on so much about diet as an important factor in dementia prevention. The reasons are very straightforward. As you age, you need your brain to be at peak performance. It needs to be plastic — to be able to adapt to the normal and expected processes of ageing — and you don't want preventable disease getting in the way of that adaptation. Diet can also act like a medication, reducing inflammation in the brain.

You can think about diet in layers when it comes to the brain. The foundation is a diet that prevents your arteries narrowing with atherosclerosis, the cause of heart disease, stroke, and vascular dementia. That means an unprocessed diet with a large variety of vegetables, red meat perhaps once a week, as little processed red meat as possible (bacon, ham and so on), and protein from legumes like chickpeas and lentils, fish and some poultry. The fat should ideally be monounsaturated, preferably from extra virgin olive oil. Keeping salt intake down matters too, and a portion-controlled unprocessed diet helps with that.

The cuisine counts as well. Cooking at moderate heat or slow cooking with herbs and garlic allows the preservation, or even the development, of brain-protective substances in the pot.

The next layer is what observations, and some trials of dementia prevention have found: loading that foundation with unsweetened yoghurt, leafy greens like kale, and berries such as strawberries and blueberries further reduces dementia risk. This combination is sometimes called the MIND diet.

Strong support for a high-quality diet has recently come from a Swedish study of nearly 1,900 older people who had no signs of dementia at the start. Researchers assessed their biological risk of developing dementia using blood tests, and then followed them for up to 15 years, tracking how closely their diets adhered to what is known about dementia prevention — particularly through the anti-inflammatory effect. They found that the higher the quality of the diet, the lower the risk of developing dementia over that period. And if participants did develop dementia, it came on later than in those not following a protective diet. This was particularly true for people whose blood tests suggested an elevated risk of dementia to begin with, a finding that gives the dietary message a new dimension — it is not just prevention for the general population, but potentially meaningful protection even for those who may already be on a trajectory toward cognitive decline.

The mechanisms aren't fully understood, but chronic low-grade inflammation appears to be a key pathway. A diet low in inflammatory potential consistently showed the strongest associations, in line with what we know about inflammation as a driver of neurodegeneration.

References

Mharr A, Carballo-Casla A, Grande G, et al. Diet quality and dementia risk in older adults with Alzheimer pathology. *JAMA Network Open*, June 2026;9(6):e2620254. doi:10.1001/jamanetworkopen.2026.20254
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2850780>

AI chatbots and youth mental health

A [US survey](#) of young people aged 12 to 21 found that nearly one in five have used AI chatbots for assistance with mental health issues. Most of them kept it to themselves. Many found it useful. Around 43 per cent used chatbots for mental health advice at least monthly, and many had already seen a doctor. The older the young person, the more likely they were to have used AI for this purpose. Females were more likely to use it than males.

This could be good news, if the advice being given is reliable and the systems have adequate guardrails in place for young people who may be at risk of self-harm. The trouble is that AI chatbots as mental health interventions have not been well studied, and there have been high-profile cases of young people finding ways around inbuilt safety systems, with the chatbot subsequently facilitating rather than preventing harm.

The problems with AI chatbots in this context are more fundamental than safety settings. The way these systems are trained to conduct therapeutic-style conversations is not transparent. More importantly, chatbots are designed to be friendly, engaging and empathic, whereas clinical psychologists are trained to be objective and focussed on the real problems of the person, steering them towards a clear therapeutic strategy. These are not the same thing, and in some presentations, they are directly at odds. A system optimised for engagement may keep a distressed young person talking without ever moving them towards help.

There is also the question of what happens when a young person develops a reliance on a chatbot as their primary source of emotional support. Research on parasocial relationships with AI is still in its early stages, but the concern is that chatbot interaction may substitute for rather than supplement professional help-seeking and real-world connection, particularly in young people who are already socially withdrawn or anxious.

For general practice, the practical implication is straightforward but easy to overlook. Young people presenting with mental health concerns may already be using AI tools regularly, and they are unlikely to volunteer this information. Asking directly and non-judgementally about AI use opens the conversation. The goal is not to discourage it categorically, but to understand what they are using, how they are using it, and whether it is complementing or replacing professional support.

References

Ryan K et al. AI chatbot use and disclosure for mental health among US adolescents and young adults. *JAMA Pediatrics*, June 2026. RAND Corporation. <https://www.rand.org/news/press/2026/06/nearly-1-in-5-us-adolescents-and-young-adults-use-ai.html>