

In brief

Rapid antigen testing

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- [Rapid antigen tests](#) are one of four main types of COVID-19 tests.¹
- The [other test types](#) are nucleic acid amplification tests (PCR), [rapid molecular tests](#) (e.g. Xpert Xpress) and antibody tests.^{1, 2}
- The [strengths of rapid antigen tests](#)³ are:
 - Timeliness, with most taking 15-30 minutes from test to result
 - Sample type used (usually a nasal swab or saliva) which are more acceptable to people
 - No requirement for specialist equipment (although some [use immunofluorescence](#))⁴
 - Relatively [low cost](#), with most costing \$5-\$20 per test.⁵
- Rapid antigen tests have [lower sensitivity and specificity](#) compared with gold standard PCR tests.¹
- Current Australian advice is that rapid antigen tests are not suitable for [diagnostic purposes](#) due to high rates of false positives and false negatives when used as a single one-off test.⁶
- However, rapid antigen tests have value as a [screening step](#) followed by confirmatory gold-standard PCR testing – particularly in outbreaks where there is [high local disease prevalence](#) (such as [currently in Sydney](#)).⁷⁻⁹
- Issues with false positive and false negative test can be addressed by [repeat testing](#).¹⁰
- Rapid tests can play an important role in [expanding testing capacity](#) for example in emergency departments, schools and certain industries.¹¹
- Rapid testing is used differently across jurisdictions, for example a rapid, regular community testing program (lateral flow) for asymptomatic individuals was rolled out [in England](#).¹²
- [Self-testing](#) is currently prohibited in Australia.¹³
- In Australia, the [Royal College of Pathologists of Australasia](#) remains concerned over the uncontrolled use of rapid antigen tests, however recognises that in localised outbreaks use of these tests for surveillance alongside mainstream testing may be appropriate.¹⁴
- The Therapeutics Goods Administration (TGA) recommends antigen tests should be [performed by health professionals](#) in accordance with the manufacturer's instructions.² [Training is required](#) in the correct use of the device and interpretation of results.⁹
- Other options to increase testing capacity include [sample pooling](#).¹⁵

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