

# 15 things not to do when using a rapid antigen test, from storing in the freezer to sampling snot

February 10 2022, by Thea Van de Mortel

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Credit: AI-generated image ([disclaimer](#))

Many of us have taken a rapid antigen test (RAT) or have administered them to our school-aged children.

But how many of us are using them correctly?

Here are 15 pitfalls to avoid if you want to get the most out of your RAT.

## 1. Storing at the wrong temperature

RATs should be kept at [2–30°C](#) for them to work as intended.

Storing at higher temperatures means proteins in the tests can be [denatured](#)—permanent changes to protein structure, just like when you cook an egg.

Don't let the kit [freeze](#). This can also damage the kit components.

## 2. Using straight from the fridge

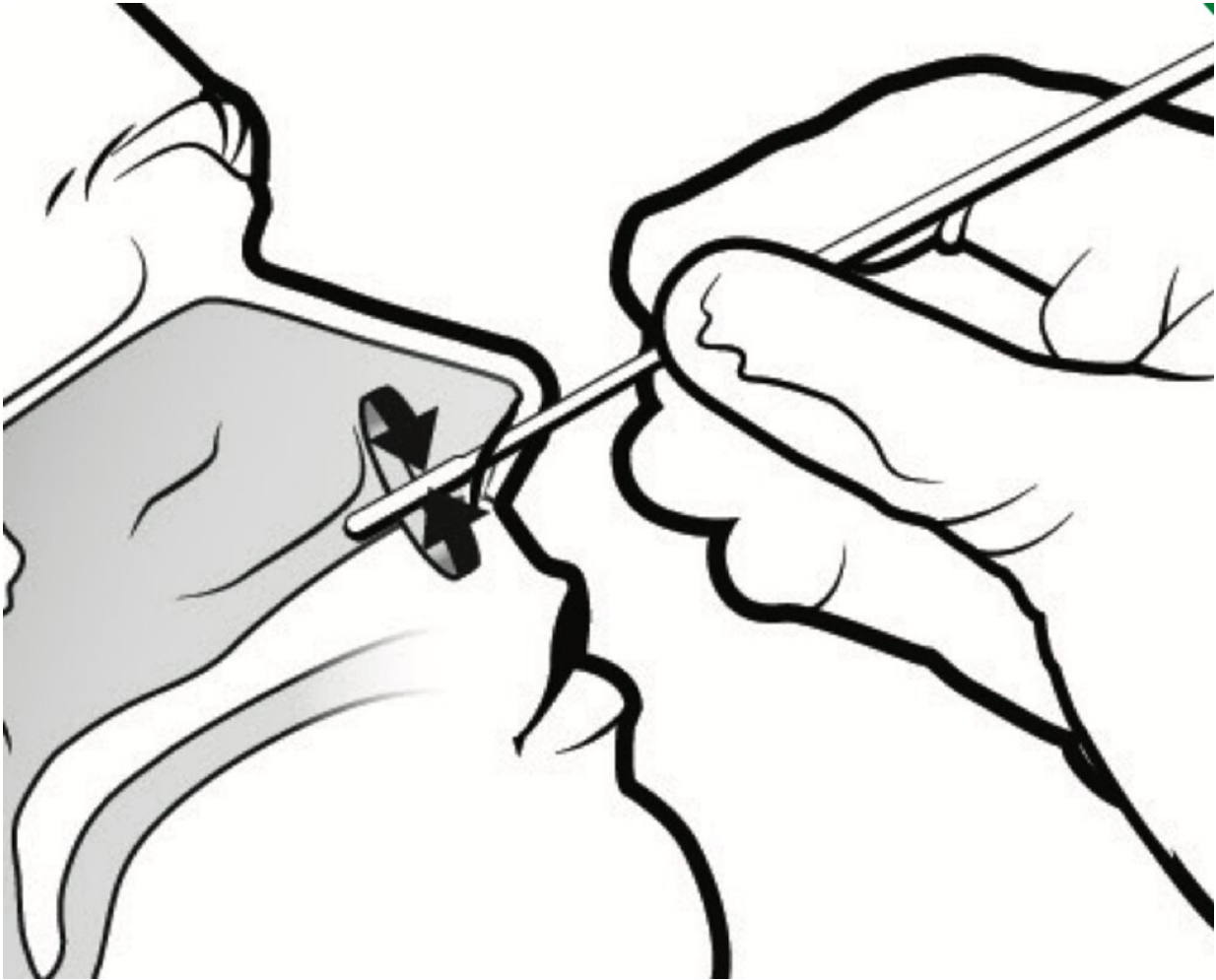
The [reagents](#) (essential [test](#) kit ingredients) will not work properly at cold temperatures. Let the kit sit out of the fridge for about 30 minutes before using it.

## 3. Using an out-of-date test

Always check the use-by date before using, which you'll find on the carton. Expired tests can contain biological or chemical reagents that have gone off or are denatured.

## 4. Opening too early

Do NOT open the test items until you are ready to start. [Storing the test open](#) can lead to [false positives](#) (you can test positive without really having COVID).



Are you taking the sample correctly? Credit: [health.gov.au/PHLN/CDC](https://www.health.gov.au/PHLN/CDC)

## **5. Taking the test too soon or too late after exposure**

A [study](#), which has yet to be reviewed by experts, suggests RATs cannot detect SARS-CoV-2 (the virus that causes COVID-19) until at least day two after exposure. It takes a median of three days to test positive.

RATs also cannot detect the virus later than about [seven or eight days](#) after exposure. So don't wait too long to get tested.

RAT sensitivity (ability to detect a positive case) improves if you [take a daily test, over several days](#).

## 6. Assuming all tests work the same

Some RATs need [nasal swabs](#), others use saliva. The way virus is extracted from the sample, the number of drops to add to the testing device, and the timeframe to read the results differ between brands.

Familiarize yourself with the instructions, especially if it's a new brand, or it's been some time since your last RAT.

## 7. Contaminating the test

Do [NOT touch the tip of the swab](#) (the soft bit that goes in your nose) with your fingers or allow it to come into contact with other surfaces.

## 8. Sampling snot

Blow your nose before doing a nasal swab as you don't want to sample snot. You want to swab the tissue that lines the nasal passages, using the technique below.

## 9. Swabbing at the wrong angle and depth

When inserting the nasal swab, you are not trying to swab the inside of your nostril but the tissue further back in the nasal passages.

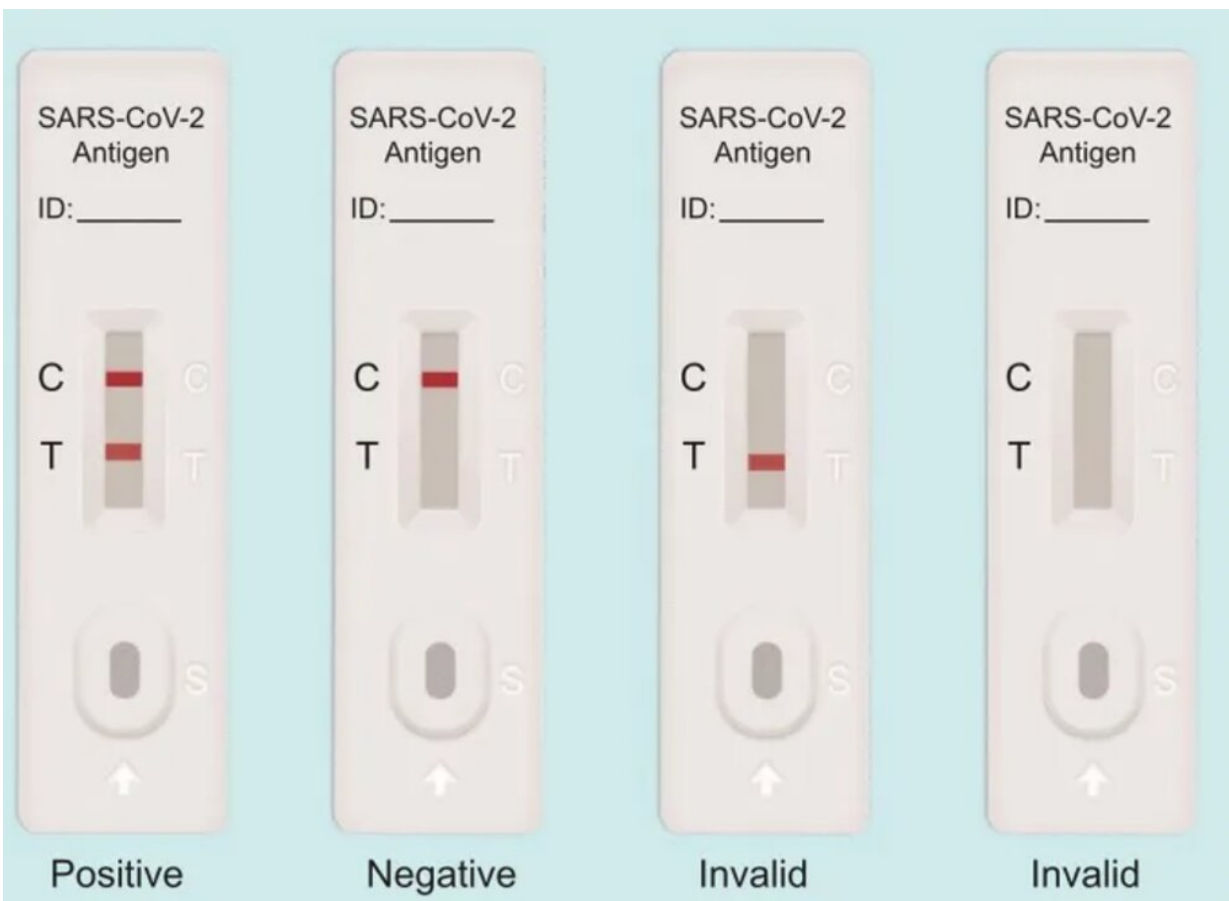
So rather than going directly upwards with the swab, try to go [horizontally](#) and about 2–3 centimeters back. Then rotate the swab gently against the walls of the nasal passage the exact number of times your test recommends. Repeat on the other side.

Because it's easy to get the angle/depth wrong, it's best for [parents or caregivers](#) to take children's samples. Most RATs shouldn't be used on children [under two years old](#), so check the instructions if you're not sure.

## 10. Continuing with a bloody swab

[Blood on the nasal swab](#) will give you an inaccurate result. Discard the test and do another when bleeding has stopped, or swab only on the side that is not bleeding.

Don't use a test that requires nasal swabbing if you are prone to nose bleeds. Use a saliva test instead (see below).



Your test result will look like one of these. Credit: antibodies.com/screenshot

## **11. Eating, drinking, chewing gum, brushing your teeth or smoking before a saliva test**

These can give an [inaccurate result](#). So wait 30 minutes before taking a saliva sample.

It is important that you do not eat, drink, smoke, brush your teeth or chew gum for 10–30 minutes (refer to the instructions provided) before collecting saliva for a rapid antigen test as it may produce an incorrect result. Find out more:

<https://t.co/5ZE60WvvR1> [pic.twitter.com/Xm87Lo7m20](https://t.co/pic.twitter.com/Xm87Lo7m20)

— TGA Australia (@TGAgovau) [February 2, 2022](#)

## **12. Adding too many or too few drops to the indicator device**

Adding the right number of drops will ensure the liquid moves across the test surface in a specific time. If you add extra drops, or too few, you will mess up the timeline and the test will not work properly.

## **13. Reading the result too early or too late**

Read the result at the [time listed](#) in the instructions.

Read the test too early and it is likely to give you a false negative result (the test reads negative but you are really positive). Too late and it might indicate you are positive when you are not.

## 14. Misreading the result

When you read your results (at the correct time):

- two lines means you have tested positive for SARS-CoV-2
- a line at C (for control) ONLY means the test has worked and you have tested negative
- a line at T (for test) (or A for antigen, depending on the kit) but NOT C means your test is faulty. Do another one
- no lines also means your test is faulty and you need to repeat it.

## 15. Disposing of the kit incorrectly

Seal any components of the kit that have come into contact with your nasal or saliva sample (swab, containers, reagents, test device etc) in the plastic bag provided and dispose in the garbage.

Only place the cardboard carton and paper instructions in recycling.

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