

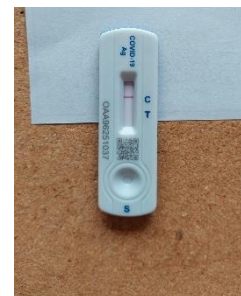
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RATS: Saving Lives... Or Are They?

COVID-19. A virus. A pandemic. One that changed and disrupted our lives for over three years. To date, Worldometer has recorded almost 7 million cases of COVID-19, 96% of whom recovered. Initially, the only way to get a test was by queuing in your cars to wait for PCR testing.

As time went on, our method improved until Kiwis were free to do Rapid Antigen Tests (RATs) in the safety of their own homes – and it was a lot quicker as well! However, it seems there was an unspoken consequence of this new development in Aotearoa’s response to the growing global pandemic.

There were many announcements throughout 2022 from the Ministry of Health, regarding the ordering and distribution of RATs. One such announcement came from the Associate Minister for Health of the time, Hon Dr Ayesha Verrall, who on February 1st, 2022, released a statement confirming the government had secured an extra 36 million antigen tests following the outbreak of the omicron variant. Later that same month, RNZ reported that the government had orders for 180 million more RATs over the next six months alone.



A negative RAT

But where did all these tests go after they’d been completed?

Landfill.

Every test a Kiwi threw out here in New Zealand went to landfill. If our government felt it was necessary to procure hundreds of millions of RAT tests for New Zealanders, you can imagine how many of those tests can stack up to a large pile.

The effects of landfill on the environment aren’t hard to ignore, especially in today’s world where climate change and pollution are such big and talked about issues.

According to a recent update from the Ministry for the Environment at the end of May this year, it was estimated that in Aotearoa New Zealand, we send around 12.59 million tonnes of waste to landfill each year. As of 1997, our country had 327 landfills. Now, over two decades later, it is easy to estimate that this number has grown.

Just picture it. Millions of those tiny plastic bags of tests forming piles in land that could’ve been used



A landfill in Poland

for something else, whether it be housing, tree planting, or conservation. This all relates back to goal 11 of the United Nations’ Sustainable Development Goals (SDGs) and needs to be recognised. This goal is all about sustainable cities and communities. The rate at which we were using and tossing out these RATs was not at all sustainable – and still isn’t – which means there is a problem and we need to fix it.

It can be argued that while this is a large amount of waste, these tests ultimately ended up saving lives. Alerting people to whether or not they were carrying the pathogen for a deadly virus, killing millions around the world. There is no doubt that this awareness ultimately slowed the spread of COVID-19.

Will it be worth it in the end? There's no real way for us to accurately answer that question for now.

However, rapid antigen tests are still going to be used as while COVID-19 seems to be becoming a thing of the past, people will continue to test themselves for it. So, what can we do to solve this issue?

The first apparent solution would be to see if we can start making these tests out of biodegradable materials. In a report by the National Library of Medicine, it has been confirmed that this would be possible. We can use biodegradable polymers and resins for these tests, and it has actually been encouraged by a large number of initiatives following the outbreak of the virus and the increase in use of RATs to detect COVID-19 within communities. This is a solution that not only New Zealand's government but also governments of other countries (particularly those which incinerate their waste) should consider.

In a world with a population of eight billion people, millions of whom have used and disposed of these tests, there is a risk that comes with using these RATs to save lives. We dealt with the crisis as it came, now, it's time to evaluate and make some changes. Starting with this.

It may seem small, but added up, the difference is huge.

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Photo of RAT: own photo

Photo of landfill:

<https://en.wikipedia.org/wiki/Landfill>