

Italy's trailblazing rapid tests fail to halt virus

November 11 2020



Credit: CC0 Public Domain

A doctor in an open-air tent in Rome crouches and scrapes high into his patient's nostrils with a fine straw-like implement. He dabs a strip of paper and produces a result: "Negativo."

Italy was the first country in Europe to bet big on these rapid "antigen" [coronavirus](#) tests—a negative result allows bemasked citizens to wander almost as they please—and its apparent success encouraged Britain, the United States, Slovakia and others to follow suit.

Yet the tests, which are roughly 80 to 90 percent accurate, have not stopped an outbreak that has rocketed from around 500 cases a day in August, when they were first rolled out, to more than 35,000 now—with infections set to top one million on Wednesday.

"I believe these tests are not used properly at the moment, they are just distributed randomly to everybody," Professor Andrea Crisanti of the University of Padua told AFP, saying the government has no overall plan.

He said their use as a measure to protect [vulnerable people](#) in [care homes](#), for example, was "absolutely criminal" because positive cases could slip through the net.

'No alternative'

A vaccine may well be on its way, but not in time to battle the current wave of infections in Europe and elsewhere.

Instead, policymakers are left scrambling for solutions that avoid the economically devastating lockdowns of earlier this year.

Italy has shut bars, restaurants and shops in the worst-affected areas and introduced a nationwide night curfew, but has so far swerved a second shutdown, with the antigen tests becoming a crucial part of its efforts.

They take just minutes to produce a result and they are cheap, unlike the "gold standard" molecular PCR tests that are close to 100 percent

accurate.

"Having such an instrument is fundamental, you have a method to immediately understand if a patient has the virus. It is a good starting point," says family doctor Francesco Stevanato, who has carried out roughly 50 tests from his clinic in Venice.

Rolling them out in airports, it was thought, could help protect the travel industry. With wider availability, schools and businesses could safely stay open.

Professor Sergio Abrignani of the University of Milan, who co-authored a letter with some of Italy's leading scientists in September calling for their widespread use, conceded that they were not an overall solution.

"But there are practical situations where the antigen [test](#) has no alternative," he told AFP.

"For example, when I am boarding a train or a ship and want to reduce the risk. The molecular test takes too long to give me an answer."

Need a better plan

Anyone who tests positive with an antigen test in Italy is supposed to get a PCR test to confirm the result.

But the real danger is false negatives—if the [rapid tests](#) have an accuracy level of 80 or 90 percent, infected people will return negative results.

"If your objective is to screen a community to know if transmission is there, fine," said Crisanti.

However, he said that to halt transmission, rapid tests must be

complemented by the accuracy of PCR tests, along with surveillance tools and stay-at-home orders.

The Italian health ministry told AFP there was no specific strategy for testing beyond boosting capacity.

And the National Institute of Health, in charge of monitoring the epidemic for the ministry, could not provide any data related to the uptake of rapid tests.

An integrated approach is frustrated by the fact health policy in Italy is largely controlled by regional officials—creating wide variations.

But Crisanti said the government should have built a broader plan to capitalise on the lower number of cases after the lockdown.

"If they had built a network for molecular (PCR) tests, if they had integrated this capability with an information tool... and if they had built infrastructure to make the beds available where they are needed, I'm sure we would be in a completely different situation."

© 2020 AFP

Citation: Italy's trailblazing rapid tests fail to halt virus (2020, November 11) retrieved 25 April 2024 from <https://medicalxpress.com/news/2020-11-italy-trailblazing-rapid-halt-virus.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--