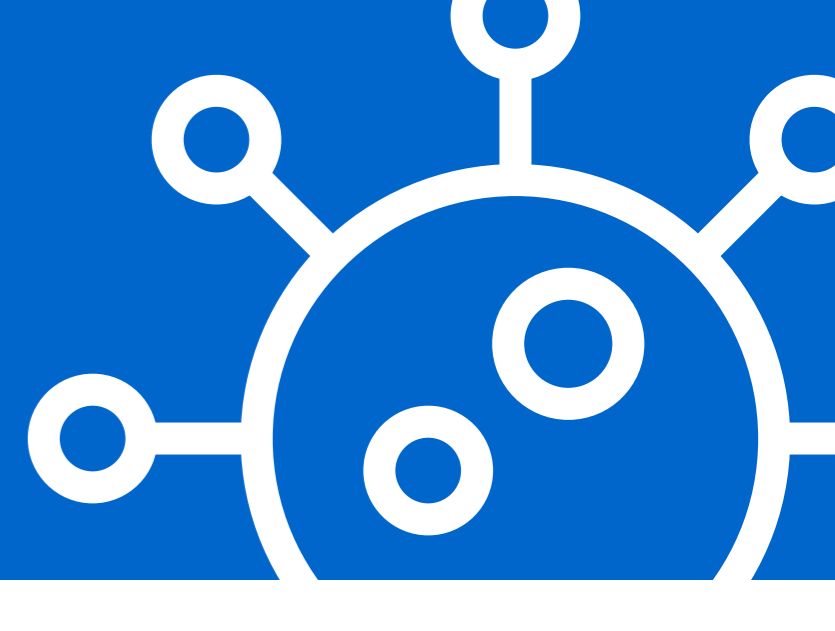


Healthcare professionals depend on reliable serology testing to determine which people have been infected with SARS-CoV-2, and how further spread can be prevented



“Has she had the infection?”

“Is it safe for him to return to work?”

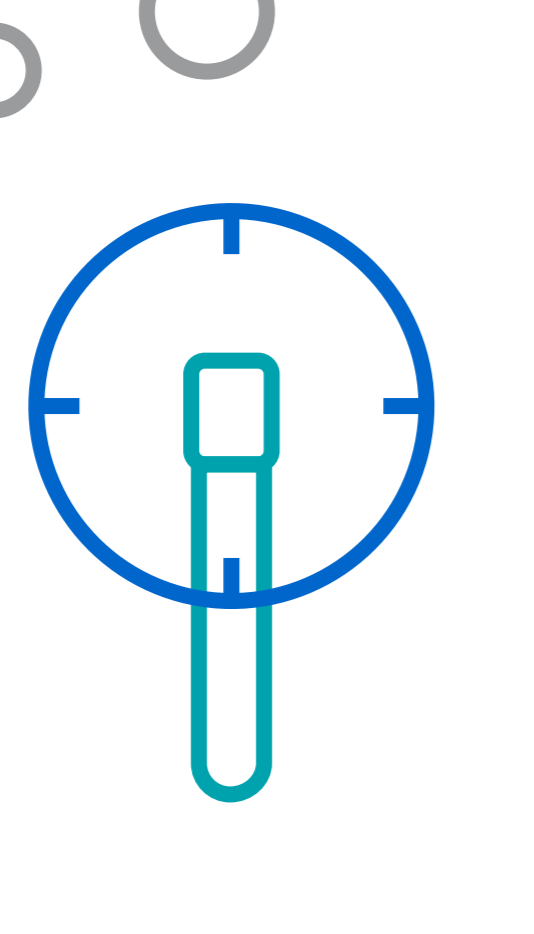
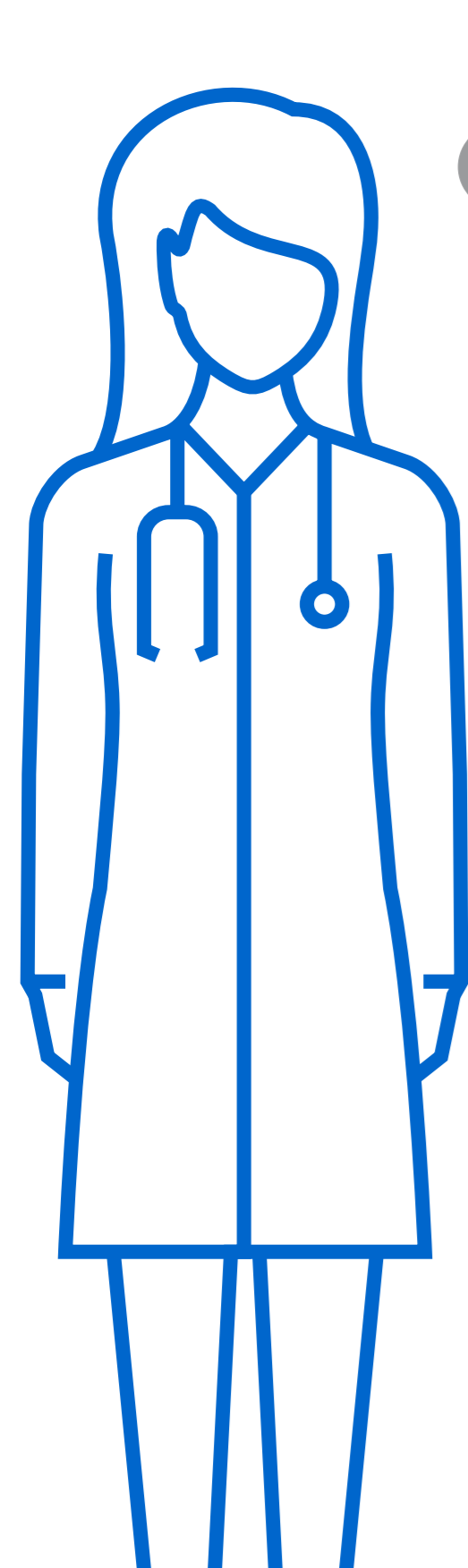
“Could she still transmit the virus?”

How many people are still vulnerable?

How many people have developed antibodies?

How many are infected without symptoms?

“How much confidence can I have in this result?”



+
Positive result

-
Negative result

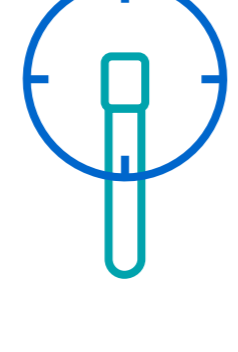
?
A **false positive result** could mislead people into thinking they have developed antibodies while they are still vulnerable to infection.

?
A **false negative result** means that patients might continue to take precautions even though they have had the infection and developed antibodies.

Understanding a test's specificity*, and how often it leads to false positive results^{1,2}

A small increase in specificity can have a big impact in the number of individuals diagnosed correctly.

If **100,000** people who did not undergo SARS-CoV-2 infection are tested:

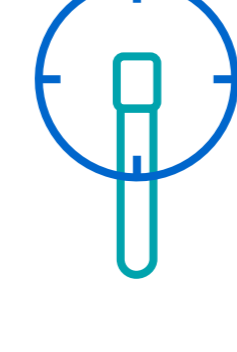


With a **test specificity of 98.81%**, 98,810 people will get correctly tested as negative.

1,190 of those people will receive a **false positive** result.

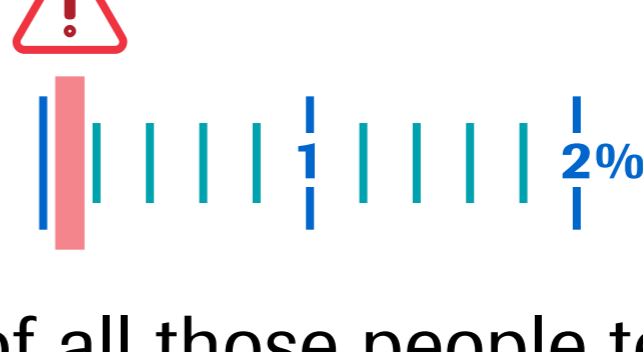


That's **1.19%** of all those people tested who had not been through a SARS-CoV-2 infection.



With a **test specificity of 99.81%**, 99,810 people will get correctly tested as negative.

190 of those people will receive a **false positive** result.



That's **0.19%** of all those people tested who had not been through a SARS-CoV-2 infection.

A positive result in City A may mean something different from a positive result in City B

A test's specificity plays an increasingly important role in populations where the infection rate (or **prevalence**) is lower.^{1,2}



City A Example

100,000 people tested	15,000 people have been infected with SARS-CoV-2	15% prevalence
------------------------------	---	-----------------------

Other on-market antibody test with **98.81% specificity**



with this test we may get **16,012** positive results

because **1.19%** of **85,000** who have not been infected will get a **false positive** result

6% probability that the positive result is **incorrect**



94% probability that the positive result is **correct****

Elecsys® Anti-SARS-CoV-2 with **99.81% specificity**



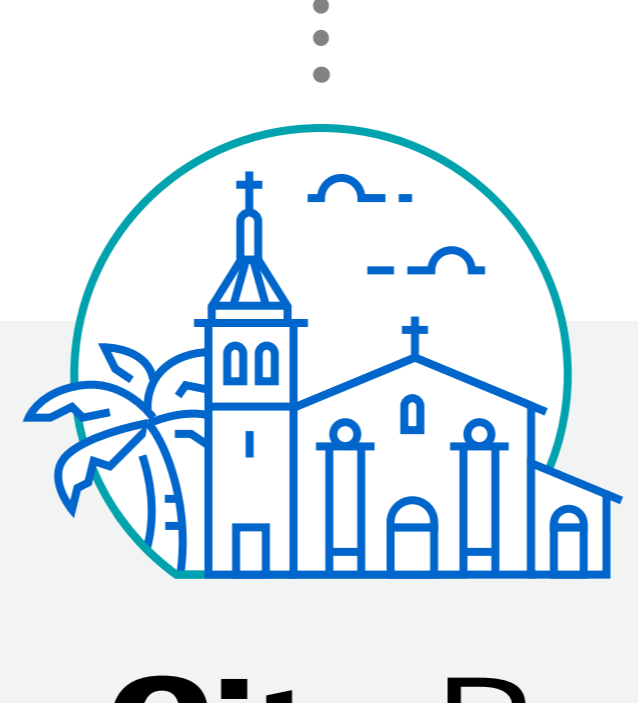
with this test we may get **15,162** positive results

because **0.19%** of **85,000** who have not been infected will get a **false positive** result

1% probability that the positive result is **incorrect**



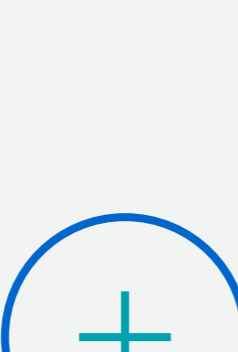
99% probability that the positive result is **correct****



City B Example

100,000 people tested	1,500 people have been infected with SARS-CoV-2	1.5% prevalence
------------------------------	--	------------------------

Other on-market antibody test with **98.81% specificity**



with this test we may get **2,672** positive results

because **1.19%** of **98,500** who have not been infected will get a **false positive** result

44% probability that the positive result is **incorrect**



56% probability that the positive result is **correct****

Elecsys® Anti-SARS-CoV-2 with **99.81% specificity**



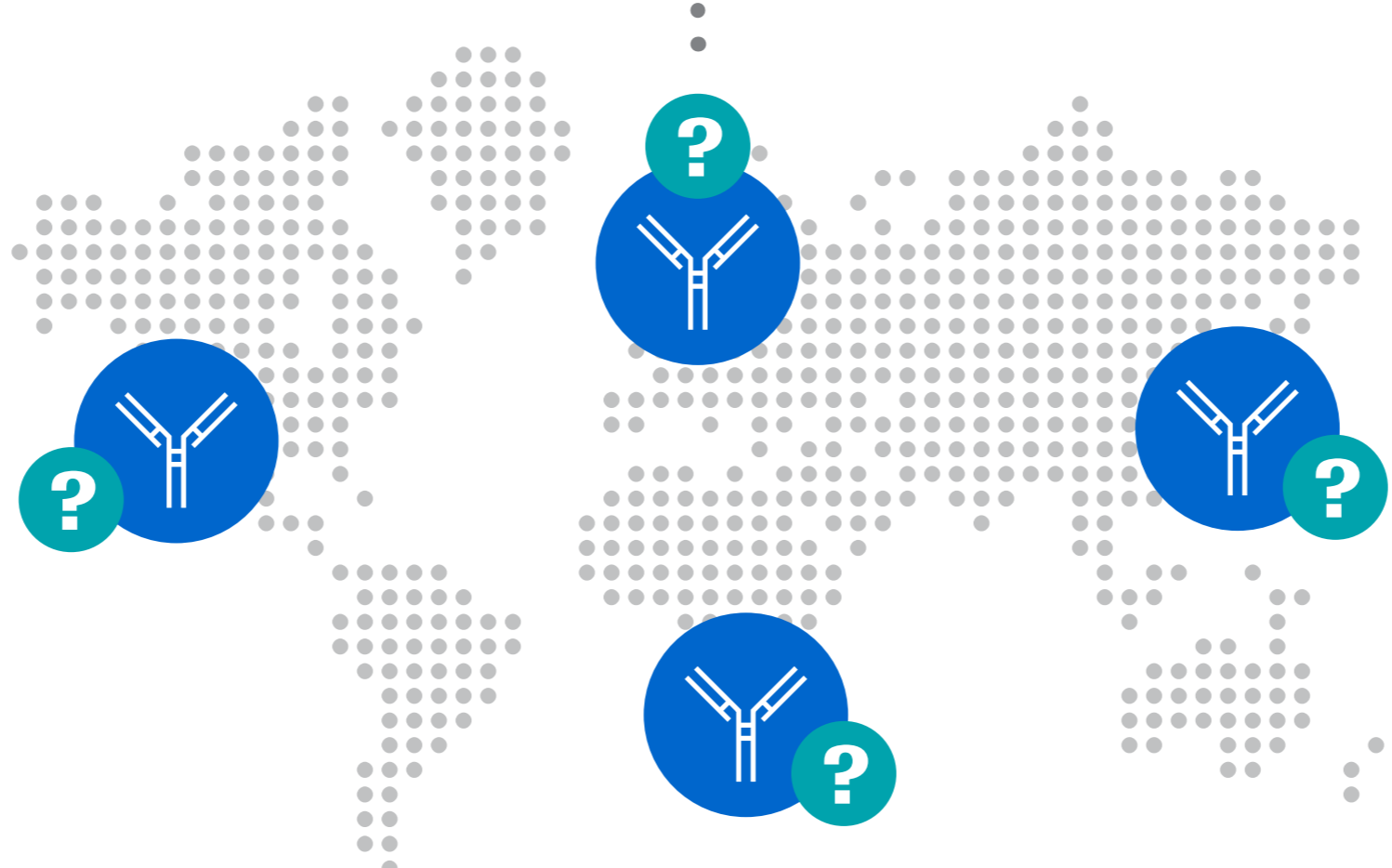
with this test we may get **1,687** positive results

because **0.19%** of **98,500** who have not been infected will get a **false positive** result

11% probability that the positive result is **incorrect**



89% probability that the positive result is **correct****



Today, with the SARS-CoV-2 antibody prevalence being unknown, choosing a test with the **highest possible specificity** enables healthcare professionals to give more confident advice — helping to prevent further spread of the disease and saving lives.

* The specificity indicates how often a test correctly produces negative results, so-called true negatives.
 ** The positive predictive value is the probability that persons with a positive test result truly have the disease.