



COVID-19 TESTING ON WASTEWATER

In March 2020, two independent studies in Netherlands detected SARS-CoV-2 in wastewater^{1,2}. Other studies conducted in different countries have since reported detection of SARS-CoV-2 in wastewater³⁻⁵.

What are the findings?

- SARS-CoV-2 was detected in the wastewater of Amersfoort before the first positive case was confirmed in the city²
- SARS-CoV-2 was detected in higher titre than expected from clinically confirmed cases⁴
- Amount of SARS-CoV-2 in wastewater increased as the numbers of confirmed cases increased^{3,5}

What is the significance?

- The actual prevalence of COVID-19 in the population is much higher than reflected by the clinical data
- Detection of SARS-CoV-2 in wastewater can serve as an early warning sign of COVID-19 outbreak in an area
- Amount of viral genetic materials in wastewater system can serve as an indicator that reflect the infected population in a municipality

Wastewater-Based Epidemiology (WBE)

An approach to monitor the activity or health condition of a municipality via chemical or biological analysis of local wastewater



Limitation of Current Data

In most countries, statistics of infected cases based on clinical testing is often insufficient to reflect the actual infected population, as only severe cases got tested due to limited resources. A person can carry SARS-CoV-2 and show no symptoms⁶.

How do we benefit from COVID-19 WBE?

- Local disease prevalence can be estimated without individual testing
- High risk areas can be identified at early stages
- Early warning signs
- Efficacy of mitigation plans can be better monitored

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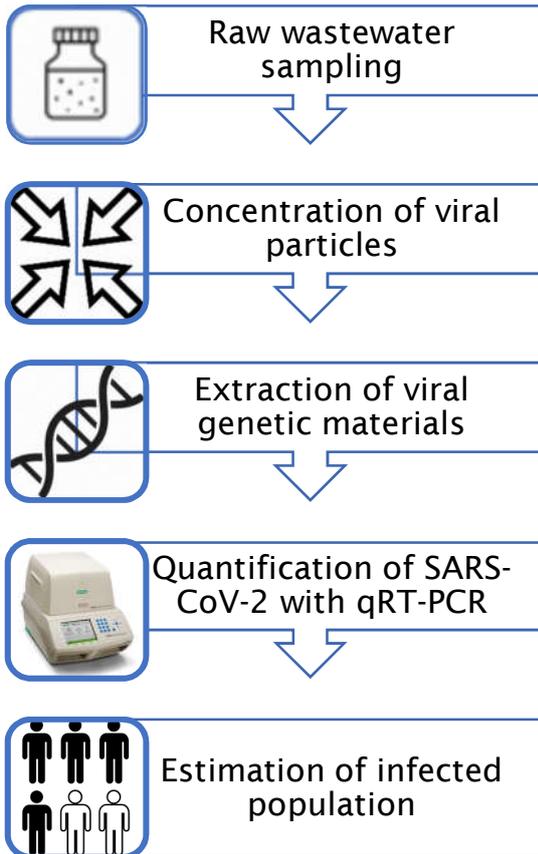
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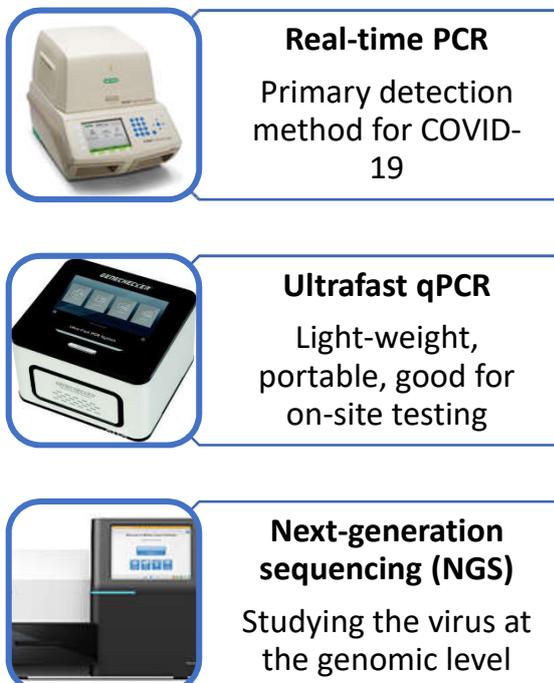
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How is it done?



Our Molecular Testing Capabilities



Right Solutions, Right Partner

Over the years, ALS Malaysia has been providing a wide range of water testing services to the public and private sectors. We are looking forward to contributing to the national efforts of fighting against the COVID-19 outbreak by offering our service or being a research partner.

Talk to us

If you are interested in taking our service or collaboration, please contact us to discuss your analysis requirement and we will assist you with the proposal.

References

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