

To: [redacted] 5.1.2e [redacted] 5.1.2e [redacted]@rivm.nl]  
From: [redacted] 5.1.2e  
Sent: Sun 8/30/2020 12:11:11 PM  
Subject: RE: SARS-CoV-2 in wastewater  
Received: Sun 8/30/2020 12:11:19 PM

Hi [redacted] 5.1.2e

I have been thinking of the webinars to identify challenges in SARS-CoV-2 testing in wastewater in a LMIC

- 1) Viral recovery must be cost effective
  - Some labs using centrifuges which is not sustainable long term
  - Labs at tertiary institutions (where most of the work is done currently) have sophisticated equipment – not always available in standard water utility labs – and not all labs have same equipment – so recommended method must be flexible with regard to equipment/analytical platforms
- 2) Sample transport/Survival of SARS-CoV-2
  - Long distances for samples to be transported – In summer the temperatures are high
- 3) Sample type & volume
  - Grab vs composite – grab would be easier in LMIC
  - Currently 200 ml sewage working well ?what when titres drop – what is minimum volume to be analysed
- 4) Comparative results
  - We use 1 ml for nucleic acid extraction others use 100 ul
  - Which gene optimal to analyse for?
- 5) Reagents
  - Most of our testing was being done at the peak of infection in lockdown – procuring reagents was a nightmare. Competing with diagnostic services for kits, now with limited international flights we have to wait for reagents

Regards

[redacted] 5.1.2e



Dubbel