

To: [redacted] 5.1.2e [redacted] 5.1.2e @rivm.nl]
From: [redacted] 5.1.2e [pyw]
Sent: Mon 5/18/2020 9:38:31 PM
Subject: Re: hello!
Received: Mon 5/18/2020 9:38:40 PM

Hi [redacted] 5.1.2e

Thank you so much, that's great. I would be interested to know how you get on with the infectivity assay in VERO.

It does seem still unclear whether the faecal/oral route is as important as the respiratory one. If the virus doesn't multiply in the gut then it'll be a dead-end and any virus in wastewater won't be as much of a problem. But I wouldn't like to guarantee that just yet!

With best regards,

[redacted] 5.1.2e

[redacted] 5.1.2e

From: [redacted] 5.1.2e <[redacted] 5.1.2e @rivm.nl>
Date: Sunday, 17 May 2020 at 20:25
To: "[redacted] 5.1.2e [pyw]" <[redacted] 5.1.2e @aber.ac.uk>
Subject: RE: hello!

Hi [redacted] 5.1.2e

Great to hear from you! Still going strong I see.

Yes it was great to be the first especially since now we have a national sewage surveillance program under the human surveillance program which is very significant to advise public health interventions. With respect to COVID-19 and WaSH I am on the WHO group. And following literature very closely. In answer to your question. There are now two papers that show that the virus can be cultured from feces and other evidence that it can replicate in feces. There is also a paper that states that they could not. And one paper in which the authors failed to culture the virus from wastewater. You assumed correctly that we are also working on this optimizing the cell culture method on VERO also. No results yet.

We advise to be very careful when working with human waste and wastewater. For sewage workers we already have a risk based approach in the NL because of legionella and endotoxins which is also protective for SARS-CoV-2. With respect to bathing waters we feel that mostly social distancing is important and hygiene. With respect to the water fecal accidents may be an issue as they were before with respect to other pathogens.

If you have any other questions do not hesitate to contact me.

All the best and please give my regards to [redacted] 5.1.2e

[redacted] 5.1.2e

From: [redacted] 5.1.2e [pyw] <[redacted] 5.1.2e @aber.ac.uk>
Sent: vrijdag 15 mei 2020 18:32
To: [redacted] 5.1.2e <[redacted] 5.1.2e @rivm.nl>
Subject: hello!

Dear [redacted] 5.1.2e

Hi! I hope you are well, avoiding Cov2 in a personal (if not professional) sense, and RIVM is treating you well. I'm sure you'll know

where this is going...

5.1.2e and I are on an expert subgroup advising UK Government on the environmental significance of SARS-CoV2. The Government is concerned following reports on sewage workers and potential pollution of recreational waters. They want to know if the risk is really as small as lots of people would hope, or if some of the stuff coming out of China is really credible.

I liked your piece in the Lancet – congratulations on being one of the first groups to find it, it was a really good idea to look at Schiphol treatment plant. We have had a Zoom meeting today and one of the issues is (of course) infectivity. I wondered if RIVM is doing any infectivity studies you can tell us about? CDC seems to have a good assay in VERO cells and there's something going on at the Roslin Institute (Edinburgh) but they are currently not environmentally directed. 5.1.2e (still going!) group is doing something, I believe.

If you have anything you can share I would be delighted to hear from you. Meanwhile, my regards to you and the family - are you still keeping goats?

With kind regards,

5.1.2e

5.1.2e

5.1.2e

DGES,
Aberystwyth University,
Aberystwyth 5.1.2e
United Kingdom.

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