To: (10)(2e) [(10)(2e)@rivm.nl]
From: (10)(2e)
Sent: Sun 5/3/2020 9:08:36 AM
Subject: FW: [EXT] Biosafety in the COVID era
Received: Sun 5/3/2020 9:08:37 AM

jeetje niet....

moet even zien of ik eerst richting (10)(2e) appart reageer of naar heel SWG...?

From: (10)(2e) [(10)(2e)@nibsc.org]
Sent: Saturday, May 02, 2020 2:29 PM
To: (10)(2e); (10)(2e)
Cc: (10)(2e); (10)(2e); (10)(2e) (CDC/OID/NCIRD); (10)(2e); (10)(2e); (CDC/OID/NCIRD); (10)(2e)@pasteur.fr; (10)(2e)@vidrl.org.au; (10)(2e) (CDC/DDID/NCIRD/DVD); (SPmig) (10)(2e)
Subject: Re: [EXT] Biosafety in the COVID era

Thanks both.

We also find low Ct values for SC2 RT-qPCR in sewage samples (down to 28) and high genome copy numbers. There must be a lot of excreters out there (many more than reported cases) or excreters shed hell of a lot of virus in stools (or both).

I wonder how the lock-down is impacting polio and non-polio enterovirus transmission... I guess changes in enterovirus reporting will not give us a real picture as all hospital activities are reduced including sample collection and testing.

As for the use of environmental surveillance for SC2, I think a world-wide study using the great collections of sewage samples at polio labs (unless they have destroyed them already) would give a very good picture of how and when the virus came about in different countries, the extent and speed of transmission and what impact lock-down activities have had. I feel retrospective data from environmental surveillance would fill many gaps from clinical surveillance as detection and testing has been very patchy and inconsistent in many countries. I know this is more of an academic interest but of course it might also help defining and planning lock-down measures required in the future, particularly knowing there is high sensitivity for virus detection in sewage and considering the fact that the proportion of asymptomatic transmitters appears to be very high. I am not advocating that polio surveillance labs convert to COVID surveillance labs, just saying that such research would be of extreme value and perhaps some GSL network labs in co-ordination with regional/global co-ordinations could think in putting together a project provided the said labs have adequate resources or additional resources are identified.

Regards,
(10)(2e)

De volgende pagina is verwijderd i.v.m. dubbel.

From: (10)(2e) < (10)(2e) @nibsc.org>

Sent: May 1, 2020 8:46 PM
To: (10)(2e)) <(10)(2e)@who.int>; (10)(2e) < (10)(2e) @who.int>; (10)(2e) < (10)(2e) @who.int>; (10)(2e) (CDC/OID/NCIRD) <(10)(2e)@cdc.gov>; (10)(2e) (CDC/OID/NCIRD) <(10)(2e)@cdc.gov>; (10)(2e) < (10)(2e) @rivm.nl>; (10)(2e) @pasteur.fr; (10)(2e) @vidrl.org.au; (10)(2e) (CDC/DDID/NCIRD/DVD) <(10)(2e)@cdc.gov>; (SPmig) (10)(2e) < (10)(2e) @nih.go.jp>
Subject: [EXT] Biosafety in the COVID era

Dear experts,

Given that SARS-CoV-2 viral RNA can be found in relevant amounts in stool and sewage samples, I wonder how it is your approach and thinking about biosafety levels now required for handling, processing, analysing, storing, shipping, etc. such samples. I know there is not much evidence yet of infectious virus in stools and sewage (or you might have it already) but we cannot rule out this possibility. It looks like that there is a good chance that any stool and/or sewage sample collected anywhere in the world at the moment might be positive for SARS-CoV-2 viral RNA. Given the lack of evidence of faecal-oral transmission of the virus and that SARS-CoV-2 virus appears not to replicate on L20B or RD cells, we have considered the risk of infection in the laboratory very low and determined that work for poliovirus isolation can continue at BSL2 (PV2 at BSL3). It would be interesting what other countries are doing. Any opinions and experiences? Any issues concentrating sewage? Recommendations to use respiratory PPE (they don't in the UK as it is stated that all work should be conducted in the containment of a Biosafety Cabinet)?

Best regards and keep safe,

(10)(2e)

Dit bericht kan informatie bevatten die niet voor u is bestemd. Indien u niet de geadresseerde bent of dit bericht abusievelijk aan u is verzonden, wordt u verzocht dat aan de afzender te melden en het bericht te verwijderen. Het RIVM aanvaardt geen aansprakelijkheid voor schade, van welke aard ook, die verband houdt met risico's verbonden aan het elektronisch verzenden van berichten.
www.rivm.nl *De zorg voor morgen* begint vandaag
This message may contain information that is not intended for you. If you are not the addressee or if this message was sent to you by mistake, you are requested to inform the sender and delete the message. RIVM accepts no liability for damage of any kind resulting from the risks inherent in the electronic transmission of messages.
www.rivm.nl/en Committed to *health and sustainability*