

To: (10)(2e) (10)(2e) @rivm.nl; (10)(2e) (10)(2e) @rivm.nl; (10)(2e) (10)(2e) @rivm.nl; (10)(2e) @outlook.com]
Cc: (10)(2e) (10)(2e) @rivm.nl]
From: (10)(2e)
Sent: Fri 2/28/2020 10:00:51 AM
Subject: progress on coronavirus modelling

Dear all,

You all have heard that there is now a COVID-19 case in the Netherlands. This doesn't change too much for our activities, but highlights the need to calculate the impact of measures for containment and mitigation. We have achieved quite a lot in the past days in increasing our understanding of the novel coronavirus:

-we are coordinating with other countries in the WHO call scenario studies which scenarios and which parameters to use

- (10)(2e) presented the scenario's at the Outbreak Management Team, this helps to coordinate with all the partners to prepare and increase health care capacity.

(10)(2e) finished the analysis of the Shenzhen data

- (10)(2e) got his estimates for CFR in China for different regions without assuming exponential growth

-Dongxuan calculated the incubation times for Shenzhen, and found that index cases of clusters are often male and a bit older, the contact cases in a cluster are often female and younger.

- (10)(2e) got very good estimates of the proportion asymptomatic after infection.

Our colleagues in Hasselt and Vancouver who are working on the Tianjin data collected by Dongxuan reported serial intervals back of around 4 days, and incubation times of 4-7 days (depending on the time at which they were observed).

-I must have forgotten lots of other important things (sorry for that).

We heard from our colleagues at Johns Hopkins University that they just finished a paper out on the Shenzhen data, on the positive side we now know the attack rates by age among contacts, we know that the age-group up to 20 yr has an infection attack rate like others but doesn't appear to have symptoms and doesn't appear to be as infectious, on the down side we have to rework some parts of our Shenzhen paper before it goes out. Since there was a hiccup in the calculation of the serial interval, we will put our Shenzhen paper on hold for a few days.

Thank you so much for all the hard work. Now we have to turn towards calculating the impact of intervention measures. We are in an excellent position to so, as we have a decent grip on the epidemiological characteristics of the disease.

Best

(10)(2e)

(10)(2e) | RIVM | Center for Infectious Disease Control | Room 16(2e) | Mail: P.O. Box 1, 3720 BA Bilthoven | Visitors: Antonie van Leeuwenhoeklaan 9, 3721 MA, Bilthoven | Netherlands | Email: (10)(2e) @rivm.nl
 (10)(2e) | Leiden University Medical Center | Department of Biomedical Data Sciences | Room (10)(2e) | Mail: P.O. Box 9600, 2300 RC Leiden | Visitors: Einthovenweg 20, 2333 ZC Leiden | Netherlands | Email: (10)(2e) @lumc.nl