



Ministerium für Gesundheit
anlässlich
Ministerium für Gesundheit,
Weißes Haus

Detecting, examining and control

5.1.2e

5.1.2e



The why of COVID-19 surveillance?

- What is the state of the epidemic?
- Signaling and communication of changes in trends/numbers
- Identification of outbreaks and variants
- Grow in understanding of epidemiological phenomena



Interpret



Advice

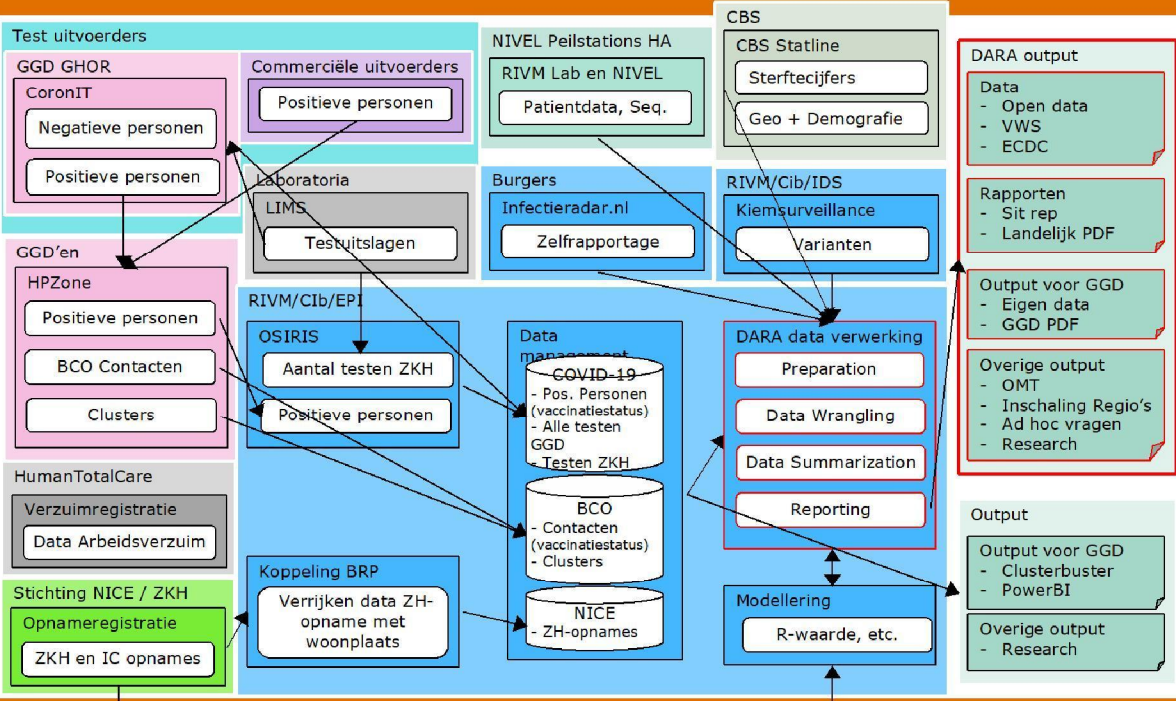


Data interpretation and translation

Meaning of numbers, context-dependent:

Impact of:

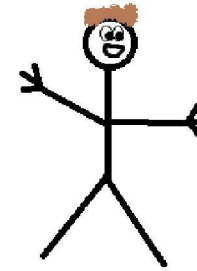
- Test capacity
- Changes in policy
- Testing behaviour (Behavioural unit)
- Restrictions
- Vaccination campaign
- Self tests
- Variants
- Holidays and festivities





Who is "Kees"?

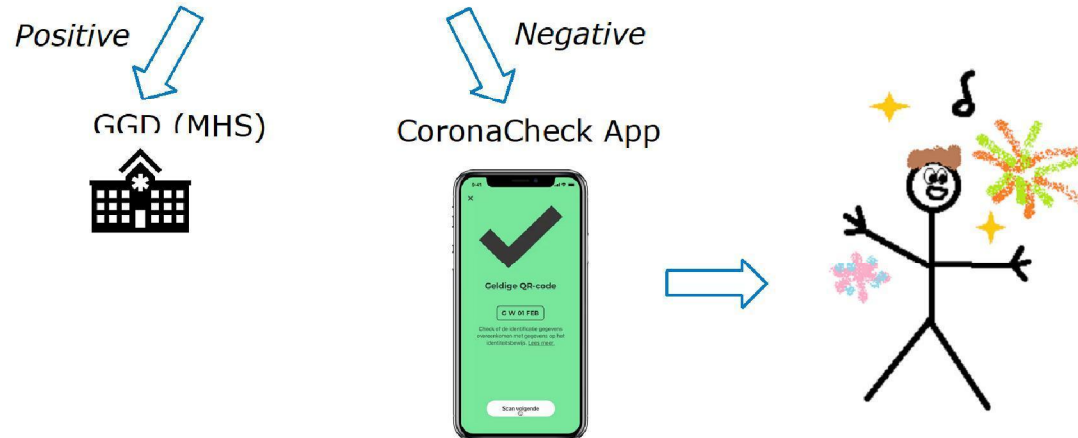
- 28 years old
- He lives in Bilthoven, with Susan
- His best friend is Bram
- Kees wants to go to a party, with Bram





Kees wants to go to a party

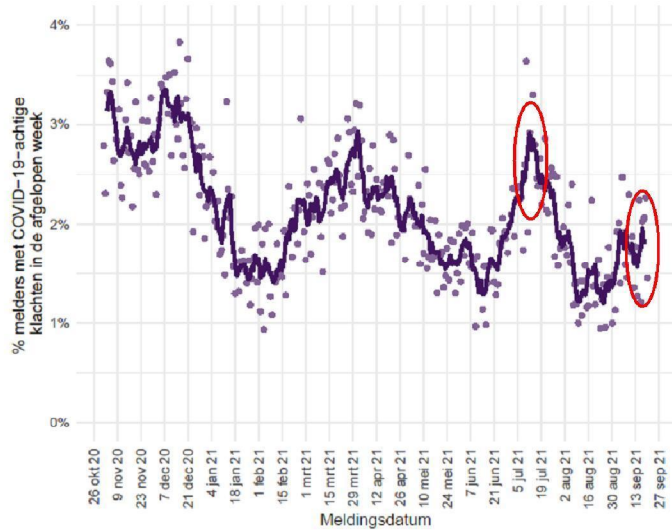
- Testing for entrance ("Stichting Open Nederland")



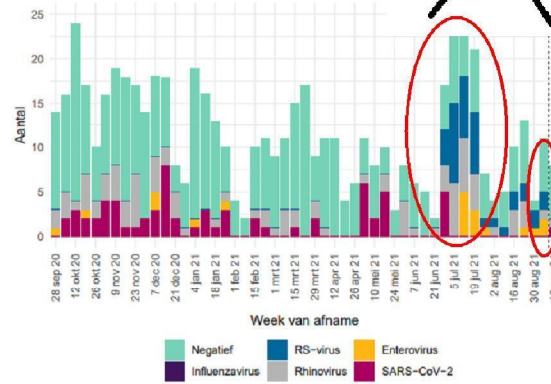


Kees develops Covid-19-symptoms

- Kees is coughing and has a headache ("Infectieradar")



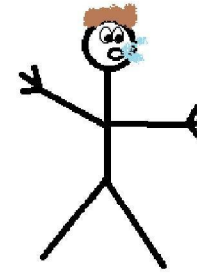
"Nivel" (GP)





Kees takes a self test

- Kees decides he should take a self test
- Self test returns *negative*



Little insight in the people who decide to take a self test

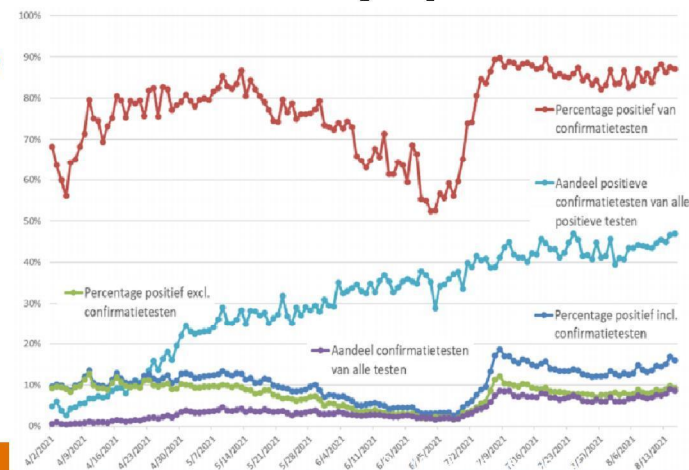


Source: EenVandaag (AvroTros)



Kees makes an appointment at the GGD

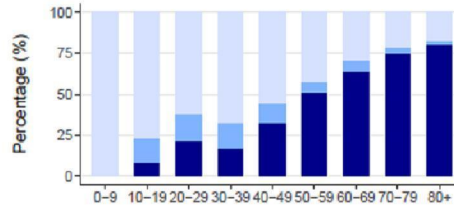
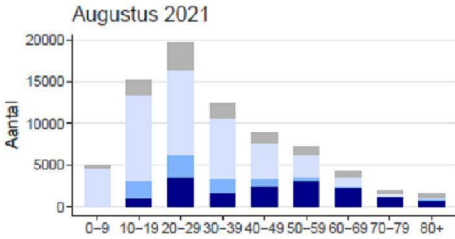
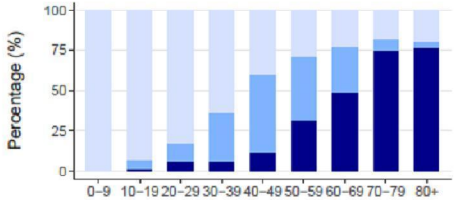
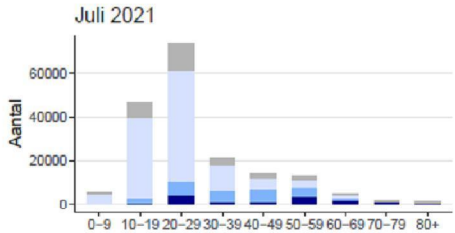
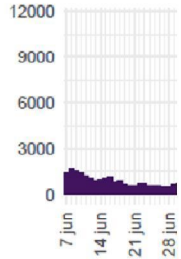
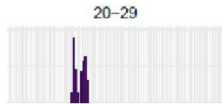
- GGD-test facility
 - PCR
 - Self test
 - Info: age, zip code, symptoms, self test, etc.
- PCR-sample is sent to a **lab**
- Kees' test comes back positive (**CoronIT**)





Kees becomes a case

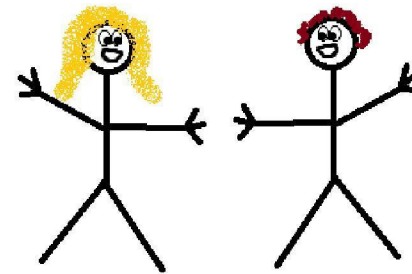
- Notification in Osiris





Susan and Bram are invited to test at the GGD

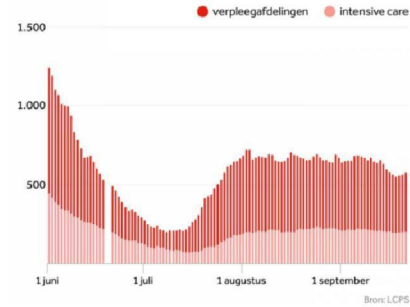
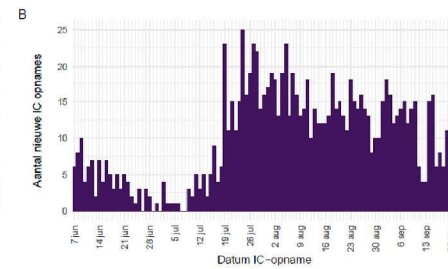
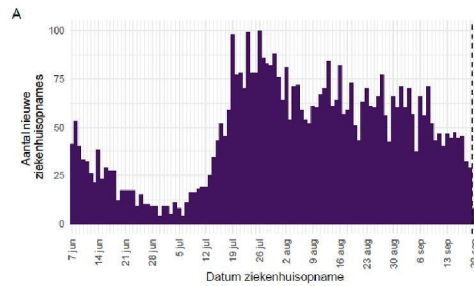
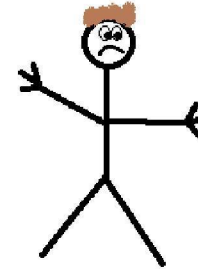
- Susan is *negative*, she was partially vaccinated
- Bram is *positive*, he was partially vaccinated
- Kees + Bram + other party members = cluster





Kees becomes more ill

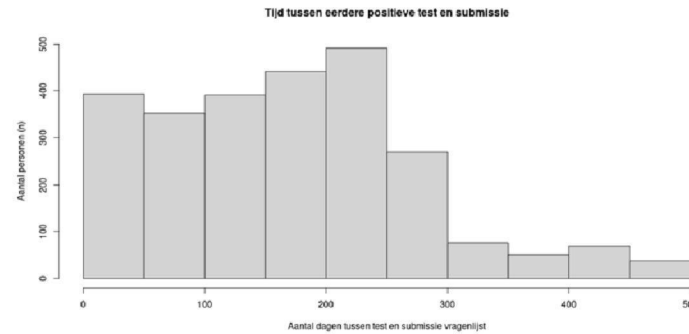
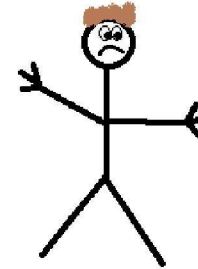
- Kees is admitted to the UMC Utrecht (NICE & LCPS)
- The situation worsens
- Kees requires ventilation and is lying in the IC (NICE & LCPS)





Kees has chronic health complications

- Kees is discharged from the hospital
- Despite this, he maintains some of the symptoms from the infection and develops some new symptoms, like shortness of breath and concentration problems → Long COVID ([questionnaire RIVM](#))
- Kees can participate in many more researches
- Data from Kees (melding, ziekenhuisopname, etc.) is used for modelling
 - R0
 - Prognosis





Data interpretation and translation

Meaning of numbers, context-dependent:

Impact van:

- Test capacity
- Testing behaviour
- Restrictions
- Vaccination campaign
- Self tests

- Changes in testing policy
- Variant
- Holidays and festivities

Kees:

SON, self test, GGD
 testing for entrance, self test with symptoms, confirmation GGD
 quarantine after (close)contact Susan and Bram, day 5 test
 Kees not yet invited, Susan and Bram (32 y.o.) were invited
 Thankfully Kees came in for a confirmation test

e.g. yes/no day 5 test after close contacts
 Chances of transmission changes per variant. Which is dominant?
 Are people willing and able to test after returning from a vacation
 or having been to a party?



Ministerie van Volksgezondheid
en Milieu
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Wetenschap en Sport

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