

AANVRAAGFORMULIER PROJECTIDEE – BOTTOM-UP RONDE

COVID 19 programma

Deadline voor indiening: 14 mei 2020 (14:00 u)

**LEES ALSTUBLIJFT ALLE INSTRUCTIES IN BIJLAGE "TOELICHTING
INDIENING PROJECTIDEE" VAN DE OPROEPTEKST ZORGVULDIG!**

Wanneer u het formulier heeft ingevuld:

1. Zet het formulier om naar een PDF file en controleer de details
2. Upload het complete formulier als een bijlage bij uw indiening in Projectnet
(Let op: dit zijn twee verschillende links, gebruik maar 1 van de 2!)
ProjectNet: [Aandachtsgebied 1 \(voorspellende diagnostiek en behandeling\)](#)
ProjectNet: [Aandachtsgebied 2 \(zorg en preventie\)](#)

BASISGEGEVENS (voorpagina)

NAAM VAN DE HOOFDAANVRAGER:

? Of beter van buiten RIVM?

ORGANISATIE:

PROJECTTITEL:

DATASTEWARD:

Wie is de datasteward die de open science en FAIR data planning in uw project ondersteunt? Zie de webinars op de [ZonMw website](#) om de datastewards te informeren en ondersteunen.

Ik betrek een datasteward bij mijn project:

Naam: Klik of tik om tekst in te voeren.

Instituut: Klik of tik om tekst in te voeren.

E-mail: Klik of tik om tekst in te voeren.

Was aanwezig bij de webinar: Ja Nee

Ik heb nog geen datasteward.

ONDERZOEKSVORSTEL
max 3 pagina's A4
(inclusief literatuurreferenties)

(voorpagina met basisgegevens niet meegerekend -
font type Arial 10 pts)

1. PROBLEEMSTELLING EN DOELSTELLING(EN):

The role of children in spreading the coronavirus is a crucial question since the early days of the COVID-19 pandemic, with conflicting answers. Since we reopen schools and day-care after weeks in lockdown, the need to closely monitor children is urgent. As long as there is community transmission in the adult population, reopening of schools will likely facilitate transmission, as respiratory viruses are known to circulate in schools and day cares. But it is not well understood whether infected children spread the virus in a similar way to adults. If children are also driving the spread of the virus in the community, infections will probably spike in the next few weeks. But other facets of the lock-down are relaxed too. Settling the debate on the role of children in spreading will continue to be an issue. To solve this, high-quality studies that include testing for the presence of the virus and preferably also testing for antibodies as a marker of previous infection are required. One of these studies is the recently ZonMw- financed study 'CoKids', starting in the Netherlands in June 2020.

CoKids is a prospective household study in families with children in three different age-categories. Participating are around 100 families from the European IMI-2 RESCEU study (UMC Utrecht) with children now aged 1-3 years, 100 families from the Dutch birth cohort study MUIS (Spaarnegasthuis Haarlem/UMCUtrecht) now aged 5-7 years, and 150 families from the Generation R study (Erasmus MC, Rotterdam) now aged 13-17 years. These are existing cohorts with families with children at ages relevant to daycare, primary and secondary school closure policies. With children going to day care and school again, the study will quantify the role of children in SARS-CoV-2 transmission making use of a community-based surveillance approach, with regular screening rounds to collect data independent of an index case who is tested because of symptoms. This is essential, since children represent a small fraction of confirmed COVID-19 cases — less than 2% of reported infections in China, Italy and the United States have been in people under 18 years old. And children are also not getting tested as often as adults, because they tend to have mild or no symptoms up till the age of 15 years. In the CoKids study, in addition to the scheduled screening rounds, in case of symptoms of any family member, outbreak data from all household members will be collected. CoKids is relevant next to the RIVM FXX household study, that is recruiting households of COVID-19 index cases with families including children. By design, this studies will lack significant numbers of paediatric index cases. So, the CoKids study is essential for data on this topic of transmission by children as first member. CoKids will however be aligned with the RIVM FXX household study. CoKids is also aligned with the European RECOVER household-studies that make use of the same protocol. Furthermore, by studying transmission of SARS-CoV-2 simultaneously with other respiratory viruses in the same households, a better understanding of how SARS-CoV-2 transmission dynamics may deviate from those of other common respiratory viruses will be gained and potential viral interference can be studied.

In the CoKids study, during screening and outbreak rounds, collection of specimens relies on (self) sampling of deep nose and throat swabbing by family members, without the involvement of trained health care workers. Parents will collect the samples in the young kids. Collection of good specimens like nasopharyngeal and oropharyngeal swabs in children is however difficult. An easier and therefore reliable way to closely monitor children is the collection of saliva. Recent studies show that tracking the virus in saliva by molecular diagnostics is at least as sensitive as the current gold-standard method of viral detection in nasopharyngeal (NP) and/or oropharyngeal (OP) swabs. Saliva collection is without discomfort, does not induce coughing or sneezing and does not require healthcare workers for optimal specimen collection. Saliva can also be used to monitor anti-SARS-CoV-2 antibody presence.

Saliva collection is however not part of the present CoKids study where only NP/OP swabs are scheduled for SARS-CoV-2 viral tracing and capillary blood collection for SARS-CoV-2 antibodies. We now ask budget for additional saliva collection materials and laboratory analysis of saliva at RIVM.

The aims of the SALIVA CoKids are

1. Evaluate the sensitivity and viral load of SARS-CoV-2 in saliva versus NP/OP swab collection in

children and household members

2. Evaluate the sensitivity of saliva antibody presence versus testing for antibodies in blood
3. Study viral interference of other respiratory viruses

All work on saliva will be performed at RIVM, IDS.

2. PLAN VAN AANPAK:

The ZonMw study household CoKids study, relies on sampling by the parents of all children. Despite good instructions, films and apps, collection of saliva as specimen to detect SARS-CoV-2 may prove far easier and more reliable. For this reason, we want to add saliva collection to the now-starting CoKids study.

3. HAALBAARHEID VAN HET PROJECT:

TIJDSSCHEMA

MOTIVATIE HAALBAARHEID

4. RELEVANTIE VOOR DE PRAKTIJK:

Onderbouw de relevantie aan de hand van de in de subsidieoproep benoemde relevantiecriteria

5. DEELNAME VAN DE STAKEHOLDER(S) (e.g. patiënten, zorgprofessionals, etc.):

6. LITERATUURREFERENTIES (optioneel):