

Encouraging results from initial field studies

Fieldlab Events has investigated the possibilities of organising safe events, whilst waiving some of the generic measures issued by the Dutch National Institute for Public Health and Environment (RIVM).

The first two studies took place during the Back to Live Congress on February 15 and Guido Weijers' theatre performance on February 20, both in the Beatrix Theatre in Utrecht. These are so-called Type I events, located indoors and attended by visitors who behave calmly and mainly experience the event from one fixed place.

The core team for the research consists of members of the Fieldlab Events programme team, Radboudumc, Logistics Community Brabant/Breda University of Applied Sciences (LCB/BUAs) and TU Delft. Further support is provided by companies such as Bureau Franken, DCM, bureau Brandeis and researchers from the Netherlands Organisation for Applied Scientific Research (TNO) and UTwente and TU Eindhoven.

In the Fieldlab Events pilots, the research aims to answer the main question: **How do we limit the residual risk that events present?** A risk analysis model has been developed for this, which provides an answer to this question based on the variables related to contact (frequency, time and distance). To this end, the impact of the building blocks on the risk of transmission and the chance of being admitted to hospital is initially compared to the 'home' situation, per hour.

The risk model demonstrates the impact that the building blocks and measures taken during the events have on the risk of transmission and hospitalisation per hour. While these risks are significantly higher at an event without measures, they are almost the same at the test event as the setting at home. The greatest impact is achieved through **an access test, with added impact from intelligent design and logistics of the event and adequate ventilation or outside air.**

Fieldlab Events has presented the research findings to the cabinet, which in turn asks the Outbreak Management Team (OMT) for its recommendations in response to those results.

The proposal of Fieldlab Events is that Type I events, regardless of the lockdown, can resume as soon as possible, even with a high prevalence of SARS-CoV-2, provided that the conditions of the following set of measures are met:

- Rapid test at a decentralised location, close to home

- Rapid test within maximum of 24 hours before the end of the event
- Use of an app or alternative access control for a negative test result
- Attendance of the location limited to 50% capacity, in breach of the 1.5 metre measure
- Use of group separation options based on location
- Use of a face mask during (at least) the movement phase on location
- Ventilation in accordance with building regulations
- Active communication with the visitors, before, during and after the event, in order to share relevant information and to draw attention to compliance with the measures (eg. via an app)

Eight building blocks have been formulated in the research plan drawn up for these pilots, presented below with the most important research questions and the main outcomes:

1. **Behaviour:** *Does the visitor keep his/her face mask on?*

In the theatre setting, **98.4%** of the visitors adhere to the instructions and, if requested, wear a face mask during the entire performance.

2. **Triage, Tracking and Tracing:** *Could good triage prevent people from coming to the event when infectious? How can people be found after the event in the case of a positive test result?*

Triage questions and temperature readings that are taken at the gate do not result in persons being refused entry, but it is useful to ask triage questions prior to departure from home, as a reminder. 80% of visitors download the CoronaMelder app, which simplifies source and contact research.

3. **Visitor dynamics:** *How many contact moments are created when visiting a Type I event? What is the duration and distancing involved?*

The number of high-risk contacts (within 1.5 metres, longer than 15 minutes in all) is relatively limited. During the business congress, most contacts occur while visitors circulate in the foyer. This is due to the fact that this is a **congress** with a large number of peers from the same industry who have actively sought each other at the location.

At the **theatre**, there are less contacts than during the congress. The seating configuration without an intermediate chair is expected to yield the highest number of contacts. One group that goes to its seat with a nibble box immediately after arrival, does not use catering during the intermission. This results in two fewer contacts than visitors who sit next to each other without any space in between. The third group, with space in between and making use of the foyer, comes to the same number as the second group.

4. **Air quality:** *How does the presence of visitors influence the air quality in the theatre?*

Ventilation in the Beatrix Theatre adheres to the building regulations. Measurements indicate that the threshold of insufficient ventilation is not reached during the theatre performance and that the conditions of the building regulations are sufficient. The effect of face shields has not been measured, this is currently being conducted in a laboratory setting at Netherlands Organisation for Applied Scientific Research (TNO).

5. Personal protection: *What is the effect of a face mask on how the event is experienced and what is the influence on the emission and inhalation of aerosols in an event environment?*

The effect of face masks on aerosols has not been measured, this is currently being investigated in a laboratory setting at TNO. However, research has been conducted into how visitors experienced the face masks. A majority of those asked rate wearing a face mask as neutral to positive (61% during their entire stay and 72% when on the move).

6. Cleaning and disinfection of surfaces and materials: No research was conducted into this in the Type I pilots.

7. Vulnerable groups: Vulnerable groups were excluded from the Type I events.

8. Rapid tests: *Is the rapid test logistically deployable? Are there any discrepancies between rapid test results and negative PCR tests? How do visitors react to the test and a potentially positive test result?*

The use of a rapid test on location is limited due to logistics (in this case 10% of all visitors). The rapid test results did not yield positive tests and therefore showed no deviation from the PCR tests that were carried out 48 hours earlier. The people who had to undergo a rapid test gave it an 8.9. The feeling of security is clearly appreciated.

Fieldlab Events's primary objective is to bring the events industry back to the old normal. It is a joint initiative from the events sector, united in the EventPlatform and the Alliance of Events Builders and the Dutch Government. The programme is supported by the Dutch Ministries of Economic Affairs and Climate (EZK), of Justice and Security (J en V), of Education, Culture and Science (OCW), and of Health, Welfare and Sport (VWS).
