FIELDLAB
EVENEMENTEN

ADVICE

REOPENING EVENTS

TYPE VI

FLOW LOCATIONS

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Management summary

Fieldlab Events has as its main goal to bring the event industry back to the old normal. The Fieldlab is a joint initiative from the events sector, united in the EventPlatform and the Alliance of Event Builders and the Government. The program is supported by the ministries of VWS, OCW, EZK and JenV.

A research program was developed to research the possibilities of organizing safe events, with the release of the 1.5-meter measure, and to collect data for this purpose. This program focused on four different types of events:

- Type I - Indoor events with a passive audience
- Type II - Indoor events with an active audience
- Type III - Outdoor events with an active audience
- Type IV - Outdoor events with a free-moving audience (festivals)

In the second phase of the study, other types of events were added:

- Type V - Mass participation (sports) events
- Type VI - Flow events (fairs)

It turned out that these last two types could not be assessed correctly based on the first research phase.

In this document we present the data collected during the pilot events of Fieldlab Events, type V. These are events in which a large number of people participate, such as running events, bicycle tours, hiking events, etc.

We have made a risk analysis of participating in a type VI event by means of the previously tested risk model that was developed for Fieldlab Events.

In collaboration with our research partners, Radboudumc, BUAS, TU Delft, and supported by parties such as Close and DCM, we were able to collect relevant data and process this in the risk model. Based on our data and the risk model, we draw the following conclusions for type VI events.

With the right set of measures, type VI events can take place safely, even with a high prevalence of SARS-CoV-2 or COVID-19. With the right measures, the events form a safe environment, with no maximum number of participants. The generic measures, including the 1.5-meter distance, can be substituted for pre-event or access tests and other recommended measures.

The risk model made by TU Delft shows that the risk per hour at type V events, during Fieldlabs (with measures and pre-tests), depending on the measures, is lower than the risk in social situations at home or with home visits (without test).

The proposal is that type V events can take place again as soon as possible, even with a high prevalence, provided the conditions of the following set of measures are met:

- Rapid test at a decentralized location, close to home and at most 24 hours from the end of the event, if the risk level is worrisome and higher.
- Using an app or otherwise access control on a negative test result
- Occupancy rate:
    - At risk level Severe 75% or Very Severe 50% of the normal occupancy
    - At risk level Worrisome or below 100% occupancy
    - At risk level Very Severe without application of plenary sessions or shows
    - At risk level Severe with additional measures at plenary sessions or shows compliant Type I events.
- Active communication with visitors, for sharing relevant information and pointing out compliance with the measures.
- Indoor locations must meet the corona event ventilation standard of 24 m3/h per person starting from risk level Worrisome; at risk level Vigilant must comply with the Building Decree with due observance of the minimum ventilation standard in accordance with the directive corona events ventilation standard July 2021.
- RIVM regular framework:
    - Applicable outside the event, with special attention to possible audiences at the largest events in the public space.

Based on the collected data and the risk model, we show that with these measures, supplemented by the recommendations at the end of this document, type V events do not pose an additional risk of increasing the spread of the virus or hospitalizations. These measures are based on the building blocks as applied and described in the research approach **Pilots for 'Low-Contact Events'** of Fieldlab Events.

Given the importance for the events sector, we are now submitting the advice for type V events. We request the relevant ministries to use this document containing the results and the proposal when assessing the possibility of allowing this type of event.

Steering Committee and Program Team

Fieldlab Events

Type VI events

These are events where participants have no fixed place and visit various attraction points spread over a venue (such as stands at an expo or fair).

A pilot event was set up for the purpose of researching the possibilities of organizing this type of event in a safe, responsible, but also economically profitable manner:

- May 20 – Event Summit in Jaarbeurs Utrecht

At the time of the pilot, the risk level was 'very severe' with a prevalence above 250 per 100,000.

Safety Measures

To make these pilots possible. a number of precautionary and safety measures were used. These consist of:

- Antigen rapid test in advance, maximum 24 hours prior to the event
- Triage questions
- Event logistics (good inflow and outflow and separation in arrival times)
- Post-test on day 5 after visiting the event
- Refrain from visiting vulnerable groups up until 10 days after the event, or until receiving a negative test result after the test on day 5
- Exclusion of vulnerable groups
- Request to install CoronaMelder app

Little information is available from Stichting Open Nederland for this event in relation to the tests performed. There is, however, data from the GGD.

Event	Pre-tests	Positive	Undetermined	Post-tests	Positive
20-5	Unknown	Unknown	Unknown	Unknown	1

The post-test was also introduced to measure the visitor's willingness to test afterwards. Compared to the previous event, the willingness to test has clearly decreased. From about 81% of the visitors in phase 1, this has dropped to 33.5% and 42.3%. In order to have a complete picture of the positive indices, the reports via GGD have also been included in the overview.

Of the 1 people with a positive test result after the event (via testing on day 5 and GGD), contact tracing has shown no infections are related to the pilot.

Building Blocks

As can be seen in the research plan that was drawn up for these pilots, research was done into the following building blocks for the pilots:

1. Behavior
2. Triage, Tracking and Tracing
3. Visitor dynamics
4. Air quality
5. Personal protection
6. Cleaning and disinfection of surfaces and materials
7. Vulnerable groups
8. Rapid tests

For each building block, it was researched how data can be collected that can contribute to improving the risk model.

Classification and Measures bubbles

Bubbles are not used in this pilot. However, the visitors were placed in different time slots, which resulted in a good spread over the day.

Triage, Tracking and Tracing

For the triage, tracking and tracing building block, it was researched whether it is possible to prevent people from coming to the event through good triage and how people can be found after a positive test result after the event.

Research questions

- Can we ensure that every visitor registers individually for the purpose of contact tracing afterwards?
- How can a health check based on RIVM triage questions take place most efficiently?
- Do the working agreements with the GGD work?

Results

By properly organizing ticket sales and registration, we have ensured that we had contact details for all individual persons. The basic principle is that one person can purchase several cards, but then personalize the cards on an individual basis for communication purposes. Adding an app (in the case of the pilots the Close app) with which communication is set up on an individual basis has helped with this. As seen before at events, 99% of visitors installed this app.

- 99.0% of all visitors install the communication app
- 100% of the visitors are registered individually (including staff)

A health check based on the triage questions took place via the communication app four hours prior to the event. Due to privacy legislation, the data of the answers is not stored.

Recommendation

Triage

1. It is advisable to include a rapid test close to home in the customer journey at high risk levels (Severe and higher), so that there is also a protective effect on the travel movements.
2. In the customer journey, the triage questions work as a reminder about four hours after the event, to make a well-informed choice whether or not to travel. We recommend this as part of the communication with the visitor.

Tracking

3. It is not allowed outside the scope of a research to track visitors to be able to perform a very detailed BCO in the event of contamination[1]. We therefore recommend good agreements with local and national GGD for BCO.

Tracing

4. A call to download the Coronamelder app is easy to apply in the communication with the participants. We would advise this in the communication to visitors, to simplify BCO.
5. Offer from event organizer to local GGD to email visitors as support for BCO. The basis for this protocol has already been developed by GGD and Fieldlab Events in collaboration with RIVM and GGD Amsterdam. The organizers of the events must have a good facility to be able to contact visitors at the request of the GGD for BCO.

Visitor Dynamics

For the visitor dynamics building block, it was researched how many contact moments of which duration and at which distance are created when visiting a type V event.

Research questions

- How many contacts are there between people during the event?
- What are the contact moments and what it the contact duration?
- What is the dynamic of a contact?
- Do the measures such as 1-way traffic vs. 2-way traffic in footpaths work?

The study is based on six contact categories. For the collected data we refer to appendix 1, research results BUAS.

Time slots have been used to limit the number of contacts during inflow and outflow[2]:

Time slot	Visitors
10.00h - 11.00h	500
11.00h - 12.00h	500
12.00h - 13.00h	500

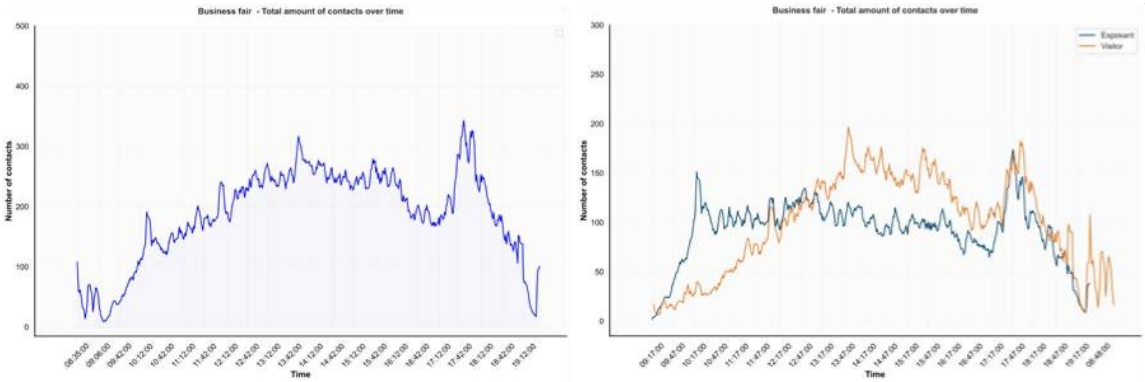
A total of 1,263 visitors and 200 exhibitors came to the event. The fair took place on 6,148 m2, which corresponds to an occupancy of approximately 70%.

[1] Research privacy Bureau Brandeis commissioned by Fieldlab Events
[2] See report BUAS

Results

Contact moments

Contact moments The number of contacts runs gradually through the day, with a peak at the end of the day, characterized by a closing network drink.

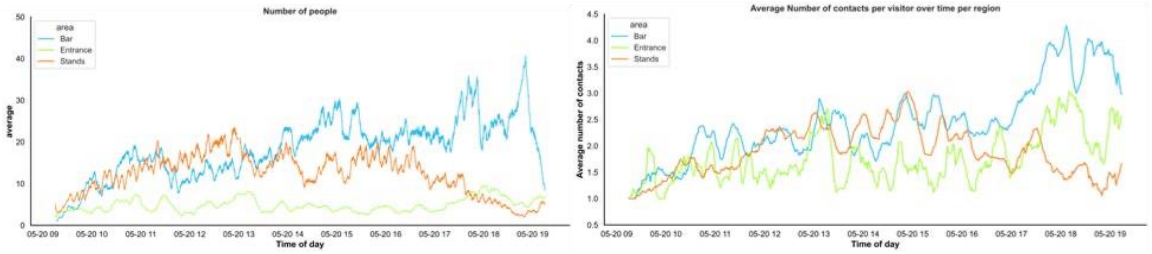


Visitors had an average of 8.1 unique contacts cumulatively longer than 15 minutes at a distance of >1.5m. In contrast, Exhibitors had an average of 10.3 such contacts. By contrast, visitors had an average of 2.2 contacts per hour and exhibitors 1.4.

Remarkably enough, exhibitors have more critical contacts (>15 min, <1.5 m) with each other than with visitors. This may be due to several exhibitors manning a stand.

Interactions	Visitor	Exhibitors
Visitor	5.9	3.6
Exhibitors	5.6	5.2

The graphs below show the number of people and average number of contacts <1.5m in various dynamic areas such as entrances, bars and stands.



The graph below shows the same for the different stand areas. No explanation was found for the deviations at stand 2.

The set-up for the comparison between 1-way and 2-way traffic was not implemented in the pilot.

Recommendation

6. Based on the contact results, we recommend making a distinction between risk levels.
    a. In the risk level Vigilant and Worrisome, Type VI events can take place with 100% occupancy.
    b. In the Severe risk level this reduces to 75% and in Very Severe to 50%.
    c. At risk level Very Severe without application of plenary sessions or shows
    d. At risk level Severe with additional measures at plenary sessions or shows compliant Type I events.

Air Quality

Air quality is crucial for indoor locations. For this we refer to the ventilation guidelines as drawn up by BBA Indoor Environment. The Delta variant has already been taken into account in these guidelines.

A minimum of 24 m3/hour (6.5 l/s) [3] must be ventilated per person, taking into account the intended maximum occupancy rate (maximum number of people present). If it concerns a relatively small space (< 1,100 people), additional minimum requirements apply depending on the type of event.

This standard is now specific for Corona.

Results

In the hall in the Jaarbeurs Utrecht, 48,000 m3/h of fresh air supply was measured (based on a 50% recirculation setting and 90% total capacity setting), with which the minimum guideline was met. It has also been calculated that, based on 2,000 planned visitors + employees and exhibitors, the guideline of 24 m3/hour per person has just been met. In reality, there were fewer visitors. (Appendix 3 – Fact Sheet)

Recommendation

To ensure that there is actually sufficient ventilation during an event, the following steps are recommended[3]:

7. Before the event, check whether the room has the correct ventilation facilities. Are there, for example, facilities for air supply and air extraction and is there sufficient flushing?
8. Adjust the number of visitors to the standard of 24m3 per person per hour, fresh air from risk level Worrying. In the risk level vigilant, the standard from the Building Decree applies with a minimum standard of 1,500 m3/hour for a passive (type I) event where visitors sit quietly or talk while standing. (Minimum relevant up to 63 visitors)
9. Before the event, check whether the ventilation system is in the correct settings.
10. During the event, check with CO2 measurements whether there is sufficient ventilation according to the method from chapter 3.

[3] See annex BBA Indoor Environment Report for references

Personal protection

Research questions

- What is the experience regarding the use of a face mask? (via Close app)
- Is the face mask worn if this is actively pointed out when entering the catering plaza?

Recommendation

11. Face masks are recommended to be worn continuously in the Severe and Very Severe risk levels
12. Based on the results, we recommend making disinfectants available at the entrance of the event and at various locations on the site. However, we would not make this mandatory in connection with the flow and the chance of increasing contact moments at, for example, the entrance of the event.

Cleaning and disinfection of surfaces and materials

No research has been done on this in this type of pilot.

Vulnerable groups

Vulnerable groups were excluded from participating in the type VI events.

Recommendation

13. Given the vaccination rate, we would not advise this for the regular events.

Rapid tests

Research questions

- Is the decentralized rapid test logistically applicable?
- Is it possible to carry this out on the day itself, whereby the number of travel movements and the travel distance is as limited as possible prior to the test result?
- How do visitors react to the test and a possible positive test result?

Result

Testing via 'Testen voor Toegang' (Testing for Access) worked well. There have been no reports of outages or delays. The check via the CoronaCheck app also functioned well.

Recommendation

14. The recommendation from the first phase also applies to these types of events.

Risk Analysis Model

Ultimately, the research of the Fieldlab Events pilots revolves around answering the main question: "How do we limit the residual risk that arises from events?"

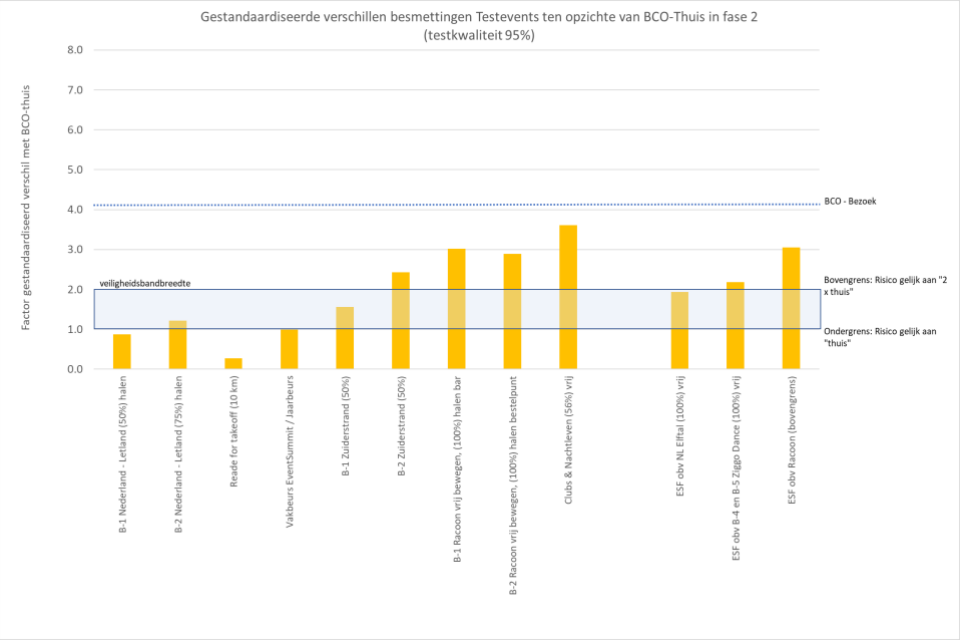
Impact of building blocks on risk

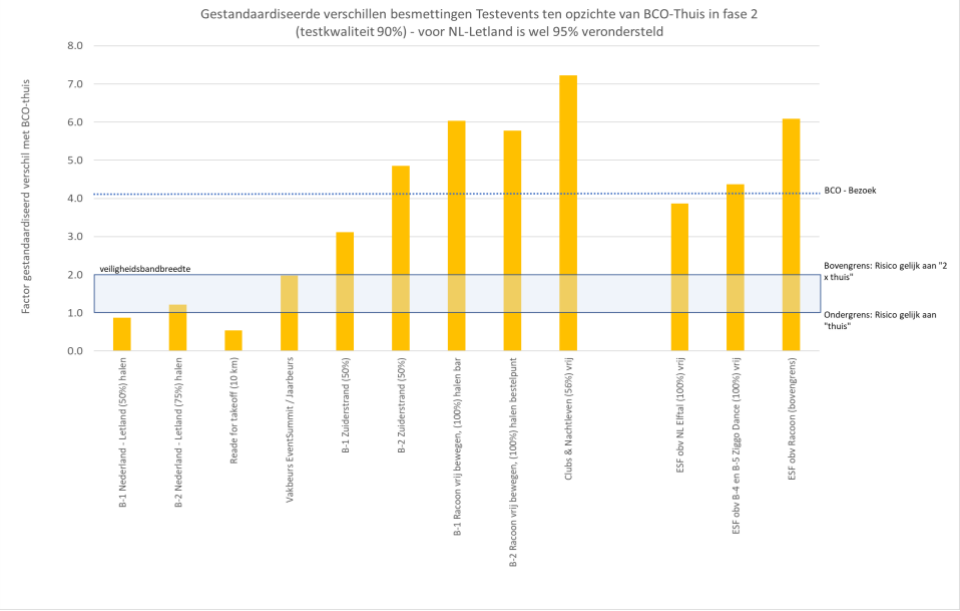
The detailed risk analysis of TU Delft can be found in appendix 2.[4]

Result

The risk of contamination (and consequent hospitalization or death) is low in this type of event. Based on the risk model, it is just as safe to participate in any of these events as it is to be at home with a test quality of 95% and within the safety bandwidth of 2x risk at home with a test quality of 90%.

Risk ratio of Type VI events





[4] See Appendix 2 – Risk model TU Delft

Recommendation

15. Based on the risk model, events are possible, also with the abandonment of generic measures, including 1.5 meters, at any risk level. We recommend using the measures from the building blocks included in the risk model for the organization of events. Pre-testing and intelligently organizing the event based on the location provides a sufficiently safe environment.

Recommendations

No and building block	Recommendation
1. Triage	It is advisable to include a rapid test close to home in the customer journey at high risk levels (worrying and higher), so that there is also a protective effect on the travel movements.
2. Triage	In the customer journey, the triage questions work as a reminder at about four hours of the event, to make a well-considered choice whether or not to travel. This should be part of the communication with the visitor.
3. Tracking	Due to legal restrictions (privacy) on the exchange of detailed personal data, for very detailed BCO in case of contamination, we advise to make good agreements with local GGD (and through them nationally) to support BCO.
4. Tracing	As standard, immediately after purchasing an admission ticket, a call to download the Coronamelder app, to simplify BCO.
5. Tracing	Establishing a protocol with the national GGD: a protocol to be discussed that includes asking about event attendance and including the subcategory to which the visitor belonged. Check for CT values for old infections. Agreement between event organizer and GGD to email visitors as support for BCO. The organizers of the events must have a good facility to be able to contact visitors at the request of the GGD for BCO.
6. Visitor dynamics	Based on the contact results, we recommend making a distinction between risk levels. a. In the risk level Vigilant and Worrisome, Type VI events can take place with 100% occupancy. b. In the Severe risk level this reduces to 75% and in Very Severe to 50%. c. At risk level Very Severe without application of plenary sessions or shows d. At risk level Severe with additional measures at plenary sessions or shows compliant Type I events.
7 and 9. Air quality	Ensure proper checks on the ventilation facilities prior to and during the event
8. Air quality	Adjust the number of visitors to the standard of 24m3 per person per hour, fresh air from risk level Worrisome. In the risk level Vigilant, the standard from the Building Decree applies with the minimum standard: At least 1,500 m3/hour at a passive (type I) event where visitors sit quietly or talk while standing.
10. Air quality	Take measurements of the air quality on the evening itself.
11. Personal protection	Face masks are recommended to be worn continuously in the Severe and Very Severe risk levels
12. Personal protection	Based on the results, we recommend making disinfectants available at the entrance of the event and at various locations on the site. However, in connection with the flow and the chance of increasing contact moments, we would not make this mandatory at the entrance of the event, for example.
13. Vulnerable groups	Given the vaccination rate, we would advise not to distinguish between vulnerable and non-vulnerable persons.
14. Rapid tests	Organize rapid tests in a decentralized manner. Testing a visitor as close to home as possible. This means that no unnecessary travel is made in the event of a possible contamination. In this way, the capacity can also be used more evenly, and this does not affect the logistics or visitor flows at the location of the event.
15. Risk model	Based on the risk model, events are possible, also with the abandonment of generic measures, including the 1.5 meters, at any risk level. We

	recommend using the measures from the building blocks included in the risk model for the organization of events. Pre-testing and intelligently organizing the event based on the location provide a sufficiently safe environment