

**To:** 5.1.2e [ 5.1.2e @erasmusmc.nl]  
**Cc:** 5.1.2e [ 5.1.2e @rivm.nl]; 5.1.2e [ 5.1.2e @rivm.nl]  
**From:** 5.1.2e  
**Sent:** Tue 6/23/2020 1:03:36 PM  
**Subject:** RE: Mailing met Ierland  
**Received:** Tue 6/23/2020 1:03:37 PM

Hoi 5.1.2e

Goed om te horen. Vanuit de LCI zijn 5.1.2e en ik daarbij betrokken. Graag worden alledrie bij de publicatie betrokken.

Groet,

5.1.2e

5.1.2e

5.1.2e profiel Infectieziektebestrijding <sup>KNMG</sup>

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**Centrum Infectieziektebestrijding (Cib)**  
**Landelijke Coördinatie Infectieziektebestrijding (LCI)**  
 Antonie van Leeuwenhoeklaan 9 | 3721 MA Bilthoven | 5.1.2e

M 5.1.2e  
 5.1.2e @rivm.nl

<http://rivm.nl>

Aanwezig: 5.1.2e

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**Van:** 5.1.2e < 5.1.2e @erasmusmc.nl >

**Verzonden:** maandag 22 juni 2020 15:31

**Aan:** 5.1.2e < 5.1.2e @rivm.nl >

**Onderwerp:** RE: Mailing met Ierland

Hoi 5.1.2e

Ik ben bezig om alle data van de gesequencete slachthuizen bij elkaar te brengen voor een publicatie. Wie kan ik daarbij betrekken vanuit het LCI?

Hartelijke groet!

5.1.2e

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**Van:** 5.1.2e < 5.1.2e @rivm.nl >

**Verzonden:** woensdag 27 mei 2020 20:28

**Aan:** 5.1.2e < 5.1.2e @erasmusmc.nl >

**Onderwerp:** RE: Mailing met Ierland

Hoi 5.1.2e

Ja goed om mee te lezen. We hebben nauw contact met de NVWA inderdaad, nu met 5.1.2e .  
 Wat betreft de omgevingsmonsters geven zij aan dat ze die in samenwerking met de Universiteit Utrecht kunnen doen inderdaad. En dat als er een verzoek komt zij erheen kunnen. Het heeft wel alleen zin om reservoirs te testen als er nog niet schoongemaakt is en luchtmonsters eigenlijk alleen als er nog bronnen van besmetting, oftewel werknemers, aanwezig zijn.  
 UU is in contact geweest met VION, maar er heeft uiteindelijk geen bemonstering plaats gevonden.  
 Volgende keer kunnen we dit dus vanuit LCI snel oppakken met UU en NVWA.

We hebben een ingang. Dat is mooi.

Groet 5.1.2e

5.1.2e

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 Antonie van Leeuwenhoeklaan 9 | 3721 MA Bilthoven | 5.1.2e

.....  
 T 5.1.2e  
 M 5.1.2e @rivm.nl  
<http://rivm.nl>

Aanwezig: 5.1.2e

Van: 5.1.2e <5.1.2e@erasmusmc.nl>

Verzonden: woensdag 27 mei 2020 17:35

Aan: 5.1.2e <5.1.2e@rivm.nl>

Onderwerp: RE: Mailing met Ierland

Hoi 5.1.2e

Ik bedoelde natuurlijk de NVWA

Gr 5.1.2e

Van: 5.1.2e

Verzonden: woensdag 27 mei 2020 17:32

Aan: 5.1.2e <5.1.2e@rivm.nl>

Onderwerp: RE: Mailing met Ierland

Hoi 5.1.2e

Heel erg bedankt hiervoor! Nuttige link ook naar dat paper.

Vraagje: hebben jullie als LCI ook contact met LCI hierover en zoja met wie?

Gr 5.1.2e

Van: 5.1.2e <5.1.2e@rivm.nl>

Verzonden: woensdag 27 mei 2020 13:59

Aan: 5.1.2e <5.1.2e@erasmusmc.nl>

Onderwerp: Mailing met Ierland

Beste 5.1.2e

Hieronder de mailwisseling via ons EWRS systeem. We mailen nu verder met Ierland hierover en houden ze op de hoogte van onze lopende clusteronderzoeken. Als je nog aanvullingen of opmerkingen hebt nav het lezen van deze mails, laat het me weten.

Groet 5.1.2e

Dear German, French and Dutch EWRS Colleagues,

We in Ireland are investigating a cluster of outbreaks in Meat Processing/Packing facilities that appear similar to those occurring in other EU countries. As of May 19, 2020, we have detected 865 cases of COVID-19 associated with 16 processing facilities across Ireland, representing about 6% of our total meat processing workforce. The earliest cases associated with meat processing facilities date from March 18, 2020; the first outbreak was declared on April 17 2002. Four-fifths of cases are male. The modal age category for cases is 35-44 years with a skew towards younger ages. Only about 1.5% of cases have required hospital admission. We continue to have cases detected in Ireland. A national Outbreak Control Team established to look into this issue has developed a number of work packages, first of which was provision of Interim Guidance in the Management of Outbreaks in Meat Factories (available at <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/outbreakmanagementguidance/outbreakcontrolinmeatfactories/Interim%20Guidance%20COVID-19%20Meat%20Factories.pdf>), based on a combination of the conclusions of the recent MMWR article, COVID-19 Among Workers in Meat and Poultry Processing Facilities — 19 States, April 2020 (available at <https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e3.htm>). Our initial investigations strongly suggest, that, as in the US, meat

plants would appear to possess a certain, particular set of features that facilitates internal transmission of COVID-19, probably resulting in these plants functioning - under certain circumstances - as seedbeds and amplification sites for COVID-19 infection, with the consequent risk of enhanced disease transmission into the local community (we are however, also looking at the contribution that importation of cases from outbreaks in a community setting might make to this burden of disease). Review of our clusters suggests that working, living, travel, and social arrangements may be important drivers in the spread of infection. The physical layout of workspaces, the logistics of work practices, and accommodation that facilitate the easy spread of infection are potential drivers of infection acquisition. We are planning research to investigate potential plant operational factors, workforce social factors and plant environmental factors that could facilitate disease transmission. We have made contact with the CDC Team who authored the MMWR article with a view to seeing if they were undertaking further research into their outbreaks. We are contacting you since you have reported similar outbreaks (although we feel certain that other MS must also be seeing such clusters too) and we wonder had you planned any investigation/research into your outbreaks in meat processing plants/abattoirs, and would you see benefit in linking with Ireland and other EU MS who are facing these issues?

Best wishes Ireland EWRS Team

Dear colleagues,

In the Netherlands we recently assessed two clusters of COVID-19 related to meat processing plants. Contact tracing and testing of co-workers in the same processing line revealed that a co worker was infected. The meat processing plants were visited and showed that they took adequate measures to avoid spreading of COVID-19. We concluded that there was no indication of spreading on the plant itself. In general there are a lot of migrant workers in the factories. Most likely the migrant workers were infected during transport in mini busses or in their housing as they were all living closely together in clustered group houses. In one meat plant has every worker been tested. The positive tests will be sequenced to see if they are linked within the factory, or to find out infection occurred outside the factory. At this moment we are in close contact with our German colleagues. We are interested in strategies in other member states, facing this kind of clusters. Thank very much in advanced.

Kind regards, 5.1.2e Officer on duty Dutch EWRS team

Dear colleagues,

Indeed, Germany has also registered a number of substantial COVID-19 outbreaks in the meat industry (<1000 infections in total according to media reports). Regrettably, we have had trouble clearly identifying the individual cases in the data and don't have detailed exposure data. We are aware of the MMWR article. In addition, the results of the Irish investigation would be very interesting for us. Measures around the affected plants are taken by local authorities and guidance on measures in the workplace are issued by the German occupational health administration rather than RKI. The cooperation with Germany that our Dutch colleagues mentioned is likely at the local or state level across the border because we have not yet been involved in this as RKI on the national level. Regarding your request for collaboration, please let us know further details or requirements for participation. We can inquire with affected local health departments whether they would agree themselves to participate in a joint investigation or allow RKI to participate on their behalf.

Regards, 5.1.2e on behalf of the German EWRS Team

Dear 5.1.2e

Many thanks for your valuable responses (I have created a new SE as I have included my email address in this message). We are planning to undertake a cautious, but quick and dirty assessment of our meat processing plant outbreaks. We in Ireland are especially fortunate with the quality, timeliness and comprehensiveness of the surveillance data gathered by our public health colleagues. Our initial piece of research is to determine - using retrospective cohort studies on all future outbreaks associated with meat processing facilities and similar to your work, 5.1.2e - whether the locus of transmission is truly within the meat processing facilities, or within common accommodation/other external common locations used by workers. Given that so many countries are reporting such outbreaks, the question must be; how likely it is that all these affected countries would have the same accommodation/external arrangements that would lead to external outbreaks which are then being imported into these meat processing plants? We tend towards the idea that outbreak transmission is most likely to be occurring within the plants - there are likely to be certain features that appear to allow these facilities to promote super-spreading events. As our belief is tending towards the locus of these outbreaks being within these plants, rather than within accommodation arrangements, the second arm of this study will be to investigate potential factors facilitating transmission and amplifying outbreak potential within plants. But as already said, we feel it necessary to examine the potential for transmission external to meat processing plants. Accordingly, the research thesis of our initial study - that the meat plant clusters could actually be manifestations of disease imported from plant staff housing/accommodation which promotes cross infection - is a necessary first step, to ensure we are not missing an important transmission locus. We intend to swab and question all meat plant workers as soon as an outbreak is identified within their meat plant. We will then compare cases with non-cases, to determine how they differ in risk factor profile with a view to determining if the locus of disease transmission is most likely to lie within, or external to the meat plant (and hopefully, enabling us to determine the relative contribution of each to the overall risk). Further, more long term research is being considered to investigate the fluid dynamic basis of droplet (and possibly aerosol)

transmission of SARS-CoV-2 within such plants. Can I suggest that we complete the questionnaires we intend to use in our initial study, and once completed, we can then share these (and our protocol) with you? We can also share our experience as well if you'd feel that would be useful. If you'd like to explore this in more detail, my email is [redacted] [redacted]@hse.ie. Best wishes

[redacted] Ireland EWRS Team

[redacted] 5.1.2e

[redacted] 5.1.2e

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**Landelijke Coördinatie Infectieziektebestrijding (LCI)**  
Antonie van Leeuwenhoeklaan 9 | 3721 MA Bilthoven | [redacted]

.....  
**T 030** [redacted] 5.1.2e  
**M 06 -** [redacted] 5.1.2e  
[redacted] 5.1.2e @rivm.nl  
<http://rivm.nl>

Aanwezig: [redacted] 5.1.2e

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