Dear Advisory Forum colleagues,

I am writing to seek your rapid feedback on the attached Threat Assessment Brief on COVID Reinfection. As I am sure you are aware, this is a topic of considerable attention at the moment, and ECDC has had several requests to provide an analysis of the evidence. It is apparent from a brief survey that we undertook as part of the preparatory work for this assessment that there are varying approaches to individuals who are exposed to COVID following a prior episode of infection. As such, the extremely limited evidence base on the topic, in terms of the number of documented cases (although that of itself may be considered the most important evidence), is problematic in terms of how the assessment might be seen in the context of existing national policies. Given the potential sensitivities, ECDC is seeking your opinions on the attached document, prior to its proposed publication on Monday of next week. In order to be able to assimilate any comments or proposed amendments, I would ask that you provide your feedback by the end of the day tomorrow (Thursday 17 September). While I would be pleased to have feedback on all parts of the document, I would direct your attention particularly to the section beginning on page 8, which I have pasted into this email for your convenience.

Kind regards,

Extract from Threat Assessment Brief on COVID Reinfection

Options for public health response

Considerations for clinical management, contact tracing, isolation and infection prevention and control

The possibility of reinfection implies that individuals that have been infected once cannot be definitively considered to be immune. Although so far confirmed reinfections appear to be very uncommon events, more evidence and longer follow-up time is required to better understand duration of immunity, transmissibility and the likelihood and implications of reinfection. Given what is known currently, clinical management, infection prevention/control and contact tracing considerations are not likely to differ for a second infection as compared to individuals infected for the first time. Please refer to ECDC guidance on infection prevention and control [40], discharge and end of isolation criteria [41] and contact tracing [42].

Considerations for PCR/antibody testing and risk management for individuals re-exposed to SARS-CoV-2 following a previous infection

ECDC performed a survey of Member States to identify current approaches for the management of previously confirmed cases who have been re-exposed to SARS-CoV-2. Five countries replied. Three countries responded that they manage potential reinfections in the same way as the first infection or that they do not have a specific policy for management of re-exposures. Two countries only test potential cases of re-exposure if a time period of at least two or three months, respectively, has elapsed since the first episode. One country recommends testing for re-exposure in previously positive individuals in cases of severe illness requiring hospitalisation. The countries holding policies to test only after a specific time period passes do not require quarantine of the re-exposed individuals during that time. One country recommends that previously positive individuals who are re-exposed after three months should be quarantined until PCR results are available; they should be
tested two days following the re-exposure and, if negative, be tested again after a further two days. If negative with two PCR tests, then the quarantine is lifted.

Due to the very limited number of reported cases of confirmed reinfection, it is not known what the risk of reinfection is among individuals who previously had COVID-19, however it cannot be ruled out [38]. Although there are no documented cases of onward transmission from a re-infected case, knowledge on this is also still evolving. Risk assessment, including relevant laboratory investigations, may be made for re-exposed cases, taking into account the overall immune status of a re-exposed individual, the results of PCR and antibody testing, and the level of contact that the individual has with vulnerable populations in order to assess the best method of managing and following them for potential disease development and risk of further transmission. While low level of exposure, and a negative PCR test, particularly in the context of a positive IgG test, may be considered indicators of lower risk of developing infection, decisions on risk management need to take into account that the evidence on the protective immunity and the correlates of antibody levels with viral clearance is currently limited. Nonetheless, the testing of individuals that had a previous infection for SARS-CoV-2, if they are again exposed to a COVID-19 case after their first episode of the disease, would not only inform individual case assessments but also improve the current limited evidence-base on the risks of re-infection.

The suggestions above are based on limited evidence which is expected to evolve. ECDC will continue to reassess the evidence and update the options for response for re-infected cases as additional evidence becomes available.