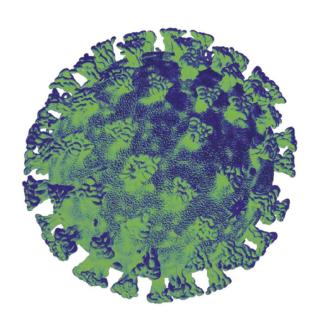


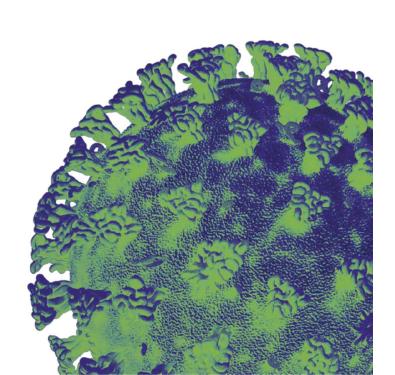
Technical Advisory Group

Consensus Statement

on Care Homes

15 May 2020





Technical Advisory Group - Consensus Statement

Testing for COVID-19 in Care Homes

15 May 2020

Statement

There is strong evidence to support testing of all residents and staff in a care home if there is a new outbreak of COVID-19, but the value of this testing will decrease over time from the point of the outbreak being identified. The process for testing during an outbreak should be covered in operational plans.

Once the initial outbreak in care homes is over, there is evidence for the value of regular, selective screening of care homes, and surveillance testing of care home staff.

There is evidence that there are outbreaks of COVID-19 that are not yet reported because the infected people are asymptomatic or presymptomatic. It would therefore be valuable to test in selected care homes that have not reported an outbreak, so that we can understand the prevalence of these cases.

It may be valuable to perform an environmental survey at the same time as a mass test for COVID-19 is carried out on the population of a care home.

There is some evidence that staff working in more than one care home at a time will increase the risk of infection.

There is strong evidence that mobile testing units should be brought to care homes, to prevent unnecessary mass transport of staff and residents.

Considerations

- 1. This advice concerns PCR testing¹, although antibody testing could be introduced when it becomes viable. This could be beneficial where a care home has more than one outbreak over time.
- External disease vectors Care homes are not closed systems and there is inherent risk of COVID-19 being introduced through points of entrance. In the current situation there are no family visits, so vectors can be assumed to be limited to incoming residents and staff. It is understood that the current NHS Wales protocol is to test all residents returning from hospital, and to transfer

¹ Also called antigen testing and diagnostic testing in the current press. In Wales, we are using quantitative real-time Polymerase Chain Reaction (Q-RTPCR) tests.

- them to the care home only if a negative result is returned. This would imply that the main external vectors for infection are the staff and new residents.
- 3. Internal infection vectors Care homes are likely to have a high degree of internal transfer of infection due to the mobility and unpredictability of the patients². Qualitative evidence shows that it is not always possible to isolate individual symptomatic cases without causing harm or distress.
 - Therefore, if an outbreak already exists in a care home, there is a need to assume that everyone has the virus and act accordingly, regardless of whether mass testing is applied. Contact transfer points inside a care home could be identified with environmental surveillance and testing, to show which surfaces or areas had high levels of viable coronavirus.
- 4. Current prevalence The likelihood of COVID-19 being present in every care home in Wales is greater than zero. Without a complete set of survey data there is no evidence of baseline prevalence. If some care homes that have not reported an outbreak have a single mass test, then the results will provide insight into the likely prevalence of the disease within the care home sector. This will enable the calculation of R_t in care homes in Wales, and will empower individual care homes to move into a prevention and monitoring pattern. If this is done in a reactive way the knowledge base around rates of staff transmission could be inferred relatively quickly, albeit with some potential uncertainty around regional variation.
- 5. Value of testing over time If an outbreak is identified, the isolation and first mass test of staff and residents will be most beneficial if it occurs within 24 hours of the report of the outbreak³. The longer it takes to complete a mass test and associated environmental testing, the less likely it is that the results can help to identify and isolate asymptomatic individuals.
- Testing should come to care homes, rather than the other way round.
 Residents of care homes are significantly more likely to suffer from being moved.⁴

² Cassell, Middleton, Nalabanda, et al. (2018) Scabies outbreaks in ten care homes for elderly people: a prospective study of clinical features, epidemiology, and treatment outcomes. Lancet Infect Dis 18;8. Kinyanjui, Middleton, Guteel, Cassell, Ross, House (2018) Scabies in Residential Care Homes: Modelling, inference and interventions for well-connected population sub-units. PLoS Comp Biol 14:3.

³ WHO recommendations on rapid testing for diagnosis 2005, Xingfei et al, Viral Load of SARS-COV-19 https://www.thelancet.com/pdfs/journals/laninf/PIIS1473-3099(20)30113-4.pdf,

⁴ Holder J, Jolley D. Forced relocation between nursing homes: Residents' health outcomes and potential moderators. *Reviews in Clinical Gerontology*, 2012; 22, 301-319. doi:10.1017/S0959259812000147