

**19<sup>th</sup> October 2020**

Deputy Mattie McGrath  
Dáil Éireann  
Kildare Street  
Dublin 2

**Re: PQ 28704/20**

**Question: “To ask the Minister for Health the number of cycles used in the PCT testing here for the detection of Covid-19; if he has concerns regarding the over sensitivity of these tests; the steps he is taking to introduce more rapid testing; and if he will make a statement on the matter”.**

Dear Deputy McGrath,

I refer to the above Parliamentary Question which has been referred by the Minister for Health to the Health Service Executive for direct response.

Currently in Ireland the approved testing methodology to detect COVID-19 in patients is called Polymerase chain reaction (PCR) testing. HIQA has published a rapid health technology assessment of alternative diagnostic testing methods for detecting Covid-19. According to this assessment, PCR testing is the most clinically-effective test available. It remains the ‘gold standard’ test for detecting and confirming COVID-19 cases.

SARS-CoV-2 PCR assays in Ireland are operated in accordance with the manufacturers' instructions, and the CE marking for the assay. It is the manufacturer that decides the optimal number of cycles for the assay, not the testing laboratory.

Higher Cycle threshold values typically indicate a lower amount of virus in the sample. However, the CT value alone does not indicate whether the virus load is increasing or decreasing, it does not indicate whether the individual is infectious or not, and it does not provide an indication of the specimen quality (i.e. how closely the specimen mirrors what is actually happening in the patient's respiratory tract).

The number of PCR cycles used in Ireland is decided by the manufacturer of the assay, so there is no single answer. The HSE uses a wide range of assays. As a general rule, most assays run for 40-45 cycles.

The HSE use rapid tests in key clinical settings, such as in our hospitals for emergency and surgical care. These are rapid PCR tests which give results in short timeframes, for example less than an hour. As part of the HSE's testing and tracing plan we are trying to increase the number of these available as there is significant international demand and supply challenges. These tests only work in very small numbers so are not appropriate for large scale community testing.

Rapid testing is in use but only in very specific clinical circumstances. Rapid testing is only available globally in very small quantities. As a result, we have to prioritise rapid tests for patients who need a test result in a very short space of time, for example if they require emergency or critical surgery. It is also noteworthy that some rapid tests have poor sensitivity and therefore are not appropriate for use in the public healthcare system.

I trust this information is of assistance to you.

Yours sincerely,



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**Niamh O'Beirne**  
**National Lead for Testing and Tracing**