



By email

request-704591-26e54029@whatdotheyknow.com

Our ref: 08/11/ld/1873

19 November 2020

Dear Kevin King,

Re: 1873 – FOI Information on RT-PCR assays used by PHE labs

Thank you for your emails dated 8 November 2020. In accordance with Section 1(1)(a) of the Freedom of Information Act 2000 (the Act), I can confirm that Public Health England (PHE) partly holds the information you have specified.

***1) Could you please give me detailed information of the RT-PCR assays that are being used by the PHE laboratories across the country?
In particular I would like to know the cycle threshold values that are being used for each laboratory where the RT-PCR assays are being conducted.***

PHE can confirm that it does not hold the information you have specified. Many different assays have been used in labs across the country during the course of the COVID-19 pandemic, and this information is not centrally held.

Please note that Ct values cannot be directly compared between assays of different types, as not all laboratories use the same assay, and some may use more than one.

Under Section 16 of the Act, public authorities have a duty to provide advice and assistance. Molecular diagnostic tests, such as real-time PCR, are the recognised diagnostic methods for individuals with a viral infection, including SARS-COV-2 (the cause of COVID-19 disease). They detect and amplify viral genetic material and are universally used as a diagnostic method. The limit of detection for each test will differ and will be detailed by the manufacturer; this will be validated by the laboratory using the test. The thresholds of each test in use are subjected to a standardised laboratory algorithm and this informs interpretation of positive or negative results. Detecting viral material by molecular tests does not indicate that the virus is fully intact and infectious, i.e. able to cause infection in other people.

***2) Can you confirm that all PHE laboratories and NHS laboratories that have been conducting RT-PCR testing have performed the type of calibration mentioned above to determine the Ct value above which the RT-PCR test can no longer detect any viral product?
If not can you tell me what the Ct values for each and every laboratory are and how they have been determined?***

PHE can confirm that it holds some of the information you have specified.

All PHE labs are required to perform limits of detection of any assay that they are performing. More information can be found here:

<https://www.gov.uk/government/publications/sars-cov-2-rna-testing-assurance-of-positive-results-during-periods-of-low-prevalence/assurance-of-sars-cov-2-rna-positive-results-during-periods-of-low-prevalence>

Under Section 16 of the Act, public authorities have a duty to provide advice and assistance. Accordingly, you may wish to contact NHS England for information about testing in NHS labs.

If you have any queries regarding the information that has been supplied to you, please refer your query to us in writing in the first instance. If you remain dissatisfied and would like to request an internal review, then please contact us at the address above or by emailing foi@phe.gov.uk.

Please note that you have the right to an independent review by the Information Commissioner's Office if a complaint cannot be resolved through the PHE complaints procedure. The Information Commissioner's Office can be contacted by writing to Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Yours sincerely,
FOI Team