## Concerns About the Use of PCR Tests in Healthy People

PCR test results in perfectly healthy, asymptomatic people are being used to justify unprecedented infringements on personal liberties. We have enormous concerns, including but not limited to:

## 1. A positive COVID-19 PCR test result does not mean a person is sick, or infectious, with a pandemic virus.

- This is because PCR tests detect a nucleic acid sequence. That is all. A PCR test cannot distinguish between dead virus bits and "live" viruses capable of infection.
- "Detection of viral RNA may not indicate the presence of infectious virus or that 2019-nCoV is the causative agent for clinical symptoms"[1]

## 2. "Issues" with PCR tests are numerous. A partial list:

- "There can be large-scale test kit contamination[2], as both the US and the UK (and several African countries) discovered during the early phase of the pandemic.
- "There can be testing site or lab contamination, which has led to countless false positive results[3], school closures, nursing home quarantines, canceled sports events, and more.
- "The PCR test can react to other coronaviruses. According to lab examinations, this happens in about 1% to 3% of cases[4] if only one target gene is tested, as is the case in many (but not all) labs and as the WHO itself has recommended[5] to avoid ambiguous positive/negative test results.
- "The PCR test can detect non-infectious virus fragments weeks after an active infection, or from an infection of a contact person, as the US CDC confirmed[6].

<sup>1</sup> https://www.fda.gov/media/134922/download

<sup>2 &</sup>lt;u>https://www.telegraph.co.uk/news/2020/03/30/uks-attempt-ramp-coronavirus-testing-hindered-key-components/</u>

<sup>3</sup> https://twitter.com/FrankfurtZack/status/1299762933073838082

<sup>4 &</sup>lt;u>https://www.instand-ev.de/System/rv-files/340 DE SARS-CoV-2 Genom April 2020</u> 20200502j.pdf - page=12

<sup>5 &</sup>lt;u>https://www.who.int/publications/i/item/laboratory-testing-for-2019-novel-</u> <u>coronavirus-in-suspected-human-cases-20200117</u>

<sup>6</sup> https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html

• "The PCR test can detect viable virus in quantities too small to be infectious"[7]

In January 2021, the WHO fully confirmed the above analysis: "WHO guidance 'Diagnostic testing for SARS-CoV-2' states that careful interpretation of weak positive results is needed. The cycle threshold (Ct) needed to detect virus is inversely proportional to the patient's viral load. Where test results do not correspond with the clinical presentation, a new specimen should be taken and retested using the same or different NAT technology. WHO reminds IVD users that disease prevalence alters the predictive value of test results; as disease prevalence decreases, the risk of false positive increases." Source: WHO Information Notice for IVD Users, updated 20 January 2021 - [8]

(Above from: Swiss Policy Research, "The Trouble With PCR Tests")

## 3. PCR positive results are very unreliable when prevalence is low.

This is well documented in the peer-reviewed, published literature and has been the direct experience of many infectious disease research and laboratory professionals.

"The high false discovery rate that results, when prevalence is low, from false positive rates typical of RT-PCR assays of RNA viruses raises questions about the usefulness of mass testing; and indicates that across a broad range of likely prevalences, positive test results are more likely to be wrong than are negative results, contrary to public health advice about SARS-CoV-2 testing... There are myriad clinical and case management implications. Failure to appreciate the potential frequency of false positives and the consequent unreliability of positive test results across a range of scenarios could unnecessarily remove critical workers from service, expose uninfected individuals to greater risk of infection, delay or impede appropriate medical treatment, lead to inappropriate treatment, degrade patient care, waste personal protective equipment, waste human resources in unnecessary contact tracing, hinder the development of clinical improvements, and weaken clinical trials. Measures to raise awareness of false positives, reduce their frequency, and mitigate their effects should be considered."[9]

<sup>7</sup> https://swprs.org/the-trouble-with-pcr-tests/

<sup>8</sup> https://www.who.int/news/item/20-01-2021-who-information-notice-for-ivd-users-2020-05

<sup>9</sup> Cohen, Andrew & Kessel, Bruce (2020). False positives in reverse transcription PCR testing for SARS-CoV-2. Link to pre-print article at:

https://www.medrxiv.org/content/10.1101/2020.04.26.20080911v3.full.pdf