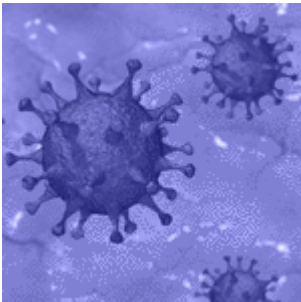


# Faecal shedding of SARS-CoV-2



Wu *et al* investigated the presence of SARS-CoV-2 RNA in respiratory and faecal samples among patients with confirmed COVID-19. Paired samples were collected from 74 patients. Of these, 33 had no SARS-CoV-2 RNA in their faecal samples, while their nasal swabs remained positive for an average of 15.4 days. In the other 41 patients, SARS-CoV-2 RNA was detected in respiratory samples for an average of 16.7 days and in faecal samples for an average of 27.9 days. Notably, viral RNA was shed for 11.2 days longer in faeces compared to respiratory samples. One patient had SARS-CoV-2 RNA in the faeces for 33 days after testing negative in respiratory swabs, while another shed viral RNA in the faeces for 47 days following onset of disease symptoms.

Although it remains unknown whether viruses shed in faeces are viable or infectious, environmental viability is believed to possibly lead to faecal-oral transmission in community settings. Studies have demonstrated SARS-CoV and MERS-CoV viability for >10 days when seeded into sewage water. If SARS-CoV2 faecal-oral transmission is possible, this would result in an increased spread of the virus, particularly in regions with poor sanitation. Fortunately, no case of such transmission has been reported.

Detection of SARS-CoV2 viral RNA has also been reported in sewage wastewater (Loda & de Roda Husman 2020). However, researchers did not report detection of viable SARS-CoV2.

These results indicate the potential utility of sewage for SARS-CoV2 surveillance in areas of limited testing.

### Referenced articles:

- Wu *et al.* 2020. [Prolonged presence of SARS-CoV-2 viral RNA in faecal samples](#). the Lancet: Gastroenterology and Hepatology
- Loda & de Roda Husman 2020. [SARS-CoV-2 in wastewater: potential health risk, but also data source](#). the Lancet: Gastroenterology and Hepatology
- Nature News Article: [How sewage could reveal true scale of coronavirus outbreak](#).
- Yeo *et al.*, 2020. [Enteric involvement of coronaviruses: is faecal-oral transmission of SARS-CoV-2 possible?](#) the Lancet: Gastroenterology and Hepatology
- Medama *et al.*, 2020. [Presence of SARS-Coronavirus-2 in sewage](#). medRxiv

*Article by: Kenneth Omollo and Cheleka AM Mpande*