

In light of the high infectious nature of SARS-CoV-2, TECHLAB reminds health care providers that fecal lactoferrin, a non-invasive biomarker of intestinal inflammation, can reduce the risk of exposure to SARS-CoV-2 compared to endoscopy. Screening with lactoferrin can also help identify which patients urgently need endoscopic examination and those who may be able to wait to improve patient and provider safety.

Summary: COVID-19 and Gastrointestinal Endoscopies: Current Insights and Emergent Strategies

Abhilash Periseti, Mahesh Gajendran, Umesha Boregowda, Pardeep Bansal, and Hemant Goyal. April 13, 2020. COVID-19 and gastrointestinal endoscopies: current insights and emergent strategies. <https://doi.org/10.1111/den.13693>

This article:

- describes the risk of COVID-19 transmission through GI shedding
- discusses the potential role of endoscopes as a vector for SARS-CoV-2 transmission
- details prevention strategies to mitigate risk

Endoscopy brings numerous health care workers including endoscopists, nursing staff, technicians, and anesthesia providers together in a high-risk environment where the procedure itself can cause splashing or aerosolization of potentially infectious particles. SARS-CoV-2 viral particles are known to be shed in feces in both symptomatic and asymptomatic individuals and fecal-oral transmission is possible. The risk of transmission by endoscopy is unknown, but could potentially pose a threat to other patients through cross-contamination of equipment or to health care providers exposed to gastrointestinal, respiratory and oropharyngeal secretions.

- With the related virus, SARS-CoV-1, active viral replication was observed in both small and large intestine biopsies obtained via colonoscopy, which could persist for more than ten weeks following symptom onset.
- Similar to SARS-CoV-1 and MERS-CoV, SARS-CoV-2 virus can be detected in stool samples of infected patients in up to 50% cases on day 1-7 irrespective of the presence of diarrhea.
- SARS-CoV-2 and MERS-CoV have both exhibited survival on inanimate objects and equipment, and like SARS-CoV-1, may be present in biopsy samples.

In response, major GI societies including the American Association of Study of Liver Diseases (AASLD), the American College of Gastroenterology (ACG), the American Gastroenterological Association (AGA), the American Society of Gastrointestinal Endoscopy (ASGE), and the European Society of Gastrointestinal Endoscopy (ESGE):

- have called for cancellation or rescheduling elective non-urgent procedures
- have recommended pre-screening of all individuals prior to endoscopy
- strongly encourage physicians to consider contacting the patient at least 24 hours prior to a procedure and follow up one to two weeks later to assess for development of symptoms

