



## **WEO Advice to Endoscopists Update 9 April 2020**

### **Introduction**

The WEO COVID-19 Response Taskforce endeavors to keep the endoscopy community updated as to advances and guidelines that they may find useful in their practices. This update includes additional options in the recommendations and an updated reference list of guidelines and papers.

COVID-19 disease is due to the SARS-CoV-2 novel coronavirus. It is highly infective and carries a case-fatality rate of 1-3%. Patients most at risk for adverse outcomes are the elderly and those with serious chronic diseases and immunosuppression. It is spread through contact and by respiratory droplets and aerosols. While fever and respiratory symptoms are the most common presenting features, most patients will have anorexia with 1/3 or more having diarrhea. Endoscopists need to be vigilant and take precautions.

### **Recommendations**

1. During the pandemic, avoid doing routine elective endoscopic procedures. If the procedure can be safely delayed without patient harm, it may be postponed.
2. At presentation the following patient information should be obtained:
  - a. Fever of more than 37.5 C
  - b. Travel history
  - c. Occupational exposure
  - d. Contact history
  - e. Clustering
3. Upper endoscopic procedures (EGD, ERCP, EUS) carry the highest risk of aerosols
4. Colonoscopy and sigmoidoscopy carry some risk of aerosols since the virus can be isolated from GI secretions and stool and may persist for an extended period.
5. Patients with or at high risk of COVID-19 should only undergo emergent or highly urgent endoscopic procedures such as for control of GI bleeding, foreign body or impacted food bolus removal, and ERCP for cholangitis.
6. For patients with or at high risk of COVID-19 undergoing endoscopic procedures:

- a. Use personal protective equipment (PPE):
    - i. Respirator mask (e.g., N95, FFP2/FFP3, CAPR, PAPR)
    - ii. Waterproof disposable gown
    - iii. Gloves, consider double gloving
    - iv. Protective eyewear (e.g., goggles, faceshield)
    - v. Disposable hairnet
    - vi. Shoe covers
  - b. Observe proper putting on (donning) and taking off (doffing) technique of PPE (see: <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)
  - c. Hand washing or disinfection prior to donning and after doffing PPE is mandatory
  - d. In resource restricted settings consider reuse of respirators until visibly soiled or no longer properly sealed and use of a surgical mask as an outer protective barrier over the N95 FFP2/FFP3.
  - e. Procedures at highest risk for aerosols should be performed in a negative pressure room if available
  - f. For procedures requiring endotracheal anesthesia
    - i. Intubation and extubation should be performed in a negative pressure room
    - ii. Endoscopic staff should not be in the room during intubation and extubation
    - iii. All providers in the room should wear full PPE including respirators even after intubation
  - g. The room must be thoroughly cleaned and disinfected using virucidal cleaning agents between procedures. Most standard cleaning agents will kill this virus.
  - h. Standard endoscope reprocessing is sufficient to kill the SARS-CoV-2 virus and should be performed according to manufacturer's instructions for use (IFU)
7. For asymptomatic and low risk patients (e.g. no history of exposure or travel to high risk area) standard PPE including surgical mask, eye protection, gown and gloves is recommended. The decision to use a respirator mask should be based on local availability of respirators, the potential for aerosol generation (e.g. endotracheal intubation) and COVID-19 prevalence recognizing that asymptomatic patients may shed virus.
  8. Use of pre-procedure COVID-19 testing for risk stratification may be considered.
  9. To conserve PPE and limit potential exposure, only essential personnel should be present in the endoscopy room.
  10. Resumption of elective endoscopic procedures following the pandemic should be guided by control of COVID-19 in the local community, clinical demand, and availability of personnel and supply resources.

WEO recommends endoscopists adhere to local advisories and institutional guidelines for infection control. These WEO recommendations are meant to provide guidance to endoscopists as they seek to optimize practice in their endoscopy centers as local conditions allow.

## References

### Guidelines

ESGE and ESGENA Position Statement on gastrointestinal endoscopy and the COVID-19 pandemic. <https://www.esge.com/esge-and-esgena-position-statement-on-gastrointestinal-endoscopy-and-the-covid-19-pandemic/>

SIED. Recomendaciones para el funcionamiento de las unidades de endoscopia digestive durante el brote de infeccion por CORONOVIRUS (COVID-19). <http://siedonline.org/recursos-sied-para-el-covid-19/>

Chiu WYC et al. Practice of endoscopy during COVID-19 pandemic: position statements of the Asian Pacific Society for Digestive Endoscopy (APSDE-COVID statements). Gut 2020 epub ahead of print. <http://dx.doi.org/10.1136/gutjnl-2020-321185>

AGA Institute Rapid Recommendations for Gastrointestinal Procedures During the COVID-19 Pandemic. <https://doi.org/10.1053/j.gastro.2020.03.072>

JOINT GASTROENTEROLOGY SOCIETY MESSAGE: COVID-19 Use of Personal Protective Equipment in GI Endoscopy. <https://www.asge.org/home/advanced-education-training/covid-19-asge-updates-for-members/joint-gastroenterology-society-message-covid-19-use-of-personal-protective-equipment-in-gi-endoscopy/>

Gastroenterology Professional Society Guidance on Endoscopic Procedures During the COVID-19 Pandemic.  
[https://webfiles.gi.org/links/media/Joint GI Society Guidance on Endoscopic Procedure During COVID19 FINAL impending 3312020.pdf](https://webfiles.gi.org/links/media/Joint_GI_Society_Guidance_on_Endoscopic_Procedure_During_COVID19_FINAL_impending_3312020.pdf)

Recommendations by the SEPD and AEG, both in general and on the operation of gastrointestinal endoscopy and gastroenterology units, concerning the current SARS-CoV-2 pandemic (March,18). Rev Esp Enferm Dig 2202. In press.  
<https://www.reed.es/Recomendaciones-generales-de-la-SEPD-y-la-AEG-y-sobre-el-funcionamiento-en-las-unidades-de-endoscopia-digestiva-y-gastroenterologia-con-motivo-de-la-pandemia-por-SARS-CoV-2-18-de-marzo4970>

### Papers

Zhang Y et al. Suggestions of infection prevention and control in digestive endoscopy during current 2019-nCoV pneumonia outbreak in Wuhan, Hubei Province, China.  
<http://www.worldendo.org/wp-content/uploads/2020/02/Suggestions-of-Infection->

[Prevention-and-Control-in-Digestive-Endoscopy-During-Current-2019-nCoV-Pneumonia-Outbreak-in-Wuhan-Hubei-Province-China.pdf](#)

Repici A et al. Coronovirus (COVID-19) outbreak: what the department of endoscopy should know. *Gastrointest Endosc* 2020.in press. DOI: <https://doi.org/10.1016/j.gie.2020.03.019>

Luo S et al. Don't overlook digestive symptoms in patients with 2019 novel coronavirus disease (COVID-19). *Clin Gastro Hepatol* 2020;in press. <https://doi.org/10.1016/j.cgh.2020.03.043>

Soetikno R et al. Considerations in performing endoscopy during the COVID-19 pandemic. *Gastrointest Endosc* 2020;in press. [https://els-jbs-prod-cdn.literatumonline.com/pb/assets/raw/Health%20Advance/journals/ymge/GIE-D-20-00499%20 Roy-1584643794760.pdf](https://els-jbs-prod-cdn.literatumonline.com/pb/assets/raw/Health%20Advance/journals/ymge/GIE-D-20-00499%20Roy-1584643794760.pdf)

Han C et al. Digestive symptoms in COVID-19 patients with mild disease severity: Clinical presentation, stool viral RNA testing and outcomes. *Am J Gastro* 2020 in press. [https://journals.lww.com/ajg/Documents/COVID19\\_Han\\_et\\_al\\_AJG\\_Preproof.pdf?utm\\_source=ACG+Master+List+UPDATED+%28March+2020%29&utm\\_campaign=a0c81fcb1-EMAIL\\_CAMPAIGN\\_2018\\_02\\_08\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_2f57a29454-a0c81fcb1-68410373](https://journals.lww.com/ajg/Documents/COVID19_Han_et_al_AJG_Preproof.pdf?utm_source=ACG+Master+List+UPDATED+%28March+2020%29&utm_campaign=a0c81fcb1-EMAIL_CAMPAIGN_2018_02_08_COPY_01&utm_medium=email&utm_term=0_2f57a29454-a0c81fcb1-68410373)

Carvalho A et al. SARS-CoV-2 Gastrointestinal infection causing hemorrhagic colitis: implications for detection and transmission of COVID-19 disease. *Am J Gastro*. 2020. in press. [https://journals.lww.com/ajg/Documents/COVID19\\_Carvalho\\_et\\_al\\_AJG\\_Preproof.pdf](https://journals.lww.com/ajg/Documents/COVID19_Carvalho_et_al_AJG_Preproof.pdf)

Xiao F et al. Evidence for gastrointestinal infection of SARS-CoV-2. *Gastroenterol*. 2020. In press. doi: <https://doi.org/10.1053/j.gastro.2020.02.055>.

Wong SH et al. Covid-19 and the digestive system. *J Gastroenterol Hepatol*. 2020 Mar 25. doi: 10.1111/jgh.15047. [Epub ahead of print]

Tian Y et al. Review Article: gastrointestinal features in COVID-19 and the possibility of faecal transmission. *Aliment Pharmacol Ther*. 2020 Mar 29. doi: 10.1111/apt.15731. [Epub ahead of print]

Jin X et al. Epidemiological, clinical and virological characteristics of 74 cases of coronavirus - infected disease 2019 (COVID-19) with gastrointestinal symptoms. *Gut*. 2020 Mar 24. pii: gutjnl-2020-320926. doi: 10.1136/gutjnl-2020-320926. [Epub ahead of print]

Roberge RJ. Effect of surgical masks worn concurrently over N95 filtering facepiece respirators: extended service life versus increased user burden. *J Public Health Manag Pract*. 2008;14:E19-26. doi:10.1097/01.PHH.0000311904.41691.f.d.

Roberge RJ, Coca A, Williams WJ, et al. Surgical mask placement over N95 filtering facepiece respirators: physiological effects on healthcare workers. *Respirology*. 2010;15:516-21. doi: 10.1111/j.1440-1843.2010.01713.x.

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