

COVID19 Safety Precautions

American Academy of Ophthalmology Guidelines

Questions you should ask to identify patients with possible exposure to SARS-CoV-2

- Does your patient have fever or respiratory symptoms?
- Has your patient or their family members traveled recently? Red flags include any international travel or domestic travel to communities with high numbers of infected patients (e.g., New York, New Jersey, California, Michigan, New Orleans).
- Has your patient been in the presence of someone with COVID-19 in the last 2 to 14 days?

In regions currently managing significant outbreaks of COVID-19, it is safest to assume that any patient could be infected with SARS-CoV-2, and to proceed accordingly. The CDC is urging health care providers who encounter patients meeting these criteria to **immediately** notify both infection control personnel at your health care facility and your [local](#) or [state](#) health department for further investigation of COVID-19.

Updated Recommended protocols when scheduling or seeing patients

- If the office setup permits, patients who come to an appointment should be asked *prior* to entering the waiting room about fever and respiratory illness and whether they or a family member have had contact with another person with confirmed COVID-19 in the past 2 to 14 days. If they answer yes to either question, they should be sent home and told to speak to their primary care physician.
- Keep the waiting room as empty as possible, advise seated patients to remain at least 6 feet from one another. As much as prudent, reduce the visits of the most vulnerable patients.
- The use of [commercially available slit-lamp barriers or breath shields](#) is encouraged, as they may provide a measure of added protection against the virus. These barriers do not, however, prevent contamination of equipment and surfaces on the patient's side of the barrier, which may then be touched by staff and other patients and lead to transmission. Homemade barriers may be more difficult to sterilize and could be a source of contamination.
- To further decrease the risk of viral spread, ophthalmologists should inform their patients that they will speak as little as possible during the slit-lamp examination, and request that the patient also refrain from talking.
- In regions with high COVID-19 prevalence, a surgical mask or cloth face covering for the patient, and a surgical mask and eye protection for the ophthalmologist are strongly encouraged.
- For any in-office procedures that require physical proximity to the patient (e.g., intravitreal injection, lateral tarsorrhaphy), regardless of geographic location of your practice, the Academy recommends the patient wear a surgical mask or a [cloth face covering](#) if surgical masks are in short supply, and that the surgeon wear a surgical mask and eye protection. In regions with high prevalence of COVID-19, an N95 mask for the surgeon can be considered when available. The CDC's recommendations on [N95 extended use and/or reuse](#) should be followed.
- The CMS and HHS have allowed for the expanded use of telehealth services during the COVID-19 public health crisis. For more information on telephone services, internet-based consultation or telemedicine exam, visit the Academy's [Coding for Phone Calls, Internet and Telehealth Consultations](#).

Interim guidance for triage of ophthalmology patients

Clinical Situation	Patient Management / Precautions
1. Routine ophthalmic issues and previously scheduled appointments	<ul style="list-style-type: none">• Routine problems should be deferred and previously scheduled appointments should be canceled.• Appointments should be rescheduled only upon clearance from public health authorities.• Refill all necessary medications.
2. Urgent ophthalmology appointment for a patient with no respiratory illness symptoms, no fever, and no COVID-19 risk factors	<ul style="list-style-type: none">• Standard precautions.*• Added precaution of not speaking during slit-lamp biomicroscopic examinations is appropriate.• In the setting of adequate PPE supplies, use of surgical mask and eye protection** for the clinician as well as surgical mask for the patient may reduce asymptomatic and presymptomatic transmission.
3. Urgent ophthalmic problem in a patient with respiratory illness symptoms, but no fever or other COVID-19 risk factor	<ul style="list-style-type: none">• The patient can be seen in the eye clinic.• The patient should be placed in an examination lane immediately with the door closed and placed in a surgical mask. The treating ophthalmologist and health care personnel require surgical masks at minimum.• Gown, gloves, surgical mask and eye protection are recommended for the clinician.† An N95 mask should be worn if a procedure is planned that will result in aerosolized virus.• The examining room must be disinfected after examination.
4. Urgent ophthalmic problem in a patient who is at high risk for COVID-19	<ul style="list-style-type: none">• The patient is best sent to the ER or other hospital-based facility equipped to evaluate for, and manage, COVID-19.• If the patient has an urgent eye problem based on screening questions, the facility should be one that is equipped to provide eye care in the hospital setting.• If SARS-CoV-2 infection is confirmed, CDC (or hospital) guidelines for care of suspected COVID-19 patients should be followed for health care facility preparation and infection control.• Eye care is best provided in the hospital setting. Transmission precautions‡ for treating ophthalmologists

include wearing a surgical mask, gown, gloves and eye protection (face shield or goggles, if available).

5. Urgent ophthalmic problem in a patient with documented COVID-19 (or person under investigation [PUI])

- The patient should remain in the hospital setting if possible.
- Determine whether the eye problem is urgent based on screening questions, and if so, evaluation and management should be in the hospital setting.
- If the patient is not hospitalized at the time of referral, the patient is best referred to the ER or other hospital-based facility equipped to manage both COVID-19 and eye care.
- CDC or hospital guidelines should be followed for care of COVID-19 patients.
- Transmission precautions[†] for treating ophthalmologists include wearing an N95 mask, gown, gloves and eye protection (face shield or goggles, as above).

* **Standard (Universal) Precautions:** Minimum infection prevention precautions that apply to all patient care, regardless of suspected or confirmed infection status of patient, in any health care setting (e.g., hand hygiene, cough etiquette, use of PPE, cleaning and disinfecting environmental surfaces). See [CDC: Standard Precautions](#).

** Supply permitting, tight-fitting [goggles may be preferable to face shields](#) for eye protection.

[†] Currently, there are worldwide shortages of personal protective equipment (PPE), which also warrant consideration. Excessive use of PPE may deplete the supply of critical equipment required for patients with COVID-19 as the epidemic expands. Use of PPE should be considered on an institutional and case-by-case basis; universal usage for all patient encounters is appropriate in regions with particularly high COVID-19 prevalence. Surgical masks reduce asymptomatic transmission *by the person wearing the mask*. N95 masks reduce infection *of the person wearing the mask*. Note that although the FDA now permits importation of Chinese-made N95 masks as an alternative to those made in the United States, recent reports caution that [some masks may not meet U.S. quality standards](#).

‡ **Transmission Precautions:** Second tier of basic infection control, used in addition to Standard Precautions when patients have diseases that can spread through contact, droplet or airborne routes, requiring specific precautions based on the circumstances of a case. Transmission precautions are required for cases of suspected COVID-19. See [CDC: Transmission-Based Precautions](#).

Environmental cleaning and disinfection recommendations

Rooms and instruments should be thoroughly disinfected after each patient encounter. Wear disposable gloves when cleaning and disinfecting surfaces, and discard the gloves after use. Slit lamps, including controls and [accompanying breath shields](#), should be disinfected, particularly wherever patients put their hands and face. The [current CDC recommendations for disinfectants](#) specific to COVID-19 include:

- Diluted household bleach (5 tablespoons bleach per gallon of water)
- Alcohol solutions with at least 70% alcohol.
- Common [EPA-registered household disinfectants](#) currently recommended for use against SARS-CoV-2 include Clorox brand products (e.g., disinfecting wipes, multi-surface cleaner + bleach, clean up cleaner + bleach), Lysol brand products (e.g., professional disinfectant spray, clean and fresh multi-surface cleaner, disinfectant max cover mist), Purell professional surface disinfectant wipes and more. The EPA offers [a full list of antimicrobial products](#) expected to be effective against COVID-19 based on data for similar viruses.

Tonometer tip cleaning

The virus causing COVID-19 is an enveloped virus, unlike adenoviruses that are much more resistant to alcohol. If a tonometer tip is cleaned with alcohol and allowed to dry in room air, 70% alcohol solutions should be effective at disinfecting tonometer tips from SARS-CoV-2. However, alcohol will not effectively sterilize the tip against adenoviruses. Use single-use, disposable tonometer tips if available. Tips cleaned with [diluted bleach remain a safe and acceptable practice](#).

New Multidose eye drops

For diagnostic eye drops required for ophthalmic examinations, multidose eye drop containers should be kept in cabinets or other closed spaces away from anywhere that could become contaminated during a patient encounter. As should always be the case, care must be taken not to touch the eyelashes or ocular surface with the tip of the eye drop bottle, and the examiner's hands should be disinfected immediately after touching the patient's face.

Source: American Academy of Ophthalmology guidelines for <https://www.aao.org/headline/alert-important-coronavirus-context>

COVID-19: Preliminary Clinical Guidelines for Ophthalmology Practices

- If feasible, a standardized patient screening protocol, comprising a concise but comprehensive review of constitutional signs and symptoms of COVID-19 including fever, dry or productive cough, fatigue, shortness of breath, myalgia, dizziness, confusion, headache, sore throat, anorexia, hemoptysis, rhinorrhea, chest pain, diarrhea, nausea and vomiting, anosmia, presence of conjunctivitis [3, 4, 20, 21, 28, 31], recent travel, and contact with sick individuals should be accomplished over the phone prior to the scheduled patient visit. Patients should also be specifically queried about recent positive, negative, or pending COVID19 test results obtained for themselves and close proximity contacts.
- The ocular chief complaint should also be gathered remotely by phone or electronic records and subjected to the chief provider's clinical judgment to determine visit urgency.
- Reduce unnecessary visits with telehealth? Pre-screening to assist in triaging.
- If tele-ophthalmology or phone-based consultation is not appropriate for a given scenario, in-person visits should be carried out at extended intervals, perhaps of 1 to 1.5 hours, to avoid patient overlap.
- Establish greater efficiencies to avoid excessive exposure (minimize paperwork, collect info by phone prior to visit, avoid redundant test, etc.).
- Visible signage should also make patients aware of appropriate social distancing strategies, such as the maintenance of 6 feet spacing between persons.
- If facemasks are required of patients, they should be greeted at the entrance door and provided with the disposable facemask (unless they have their own).
- Reduce the number of seats in the waiting area.
- The waiting area should be reserved for low-risk patients. Keep a few seats available in a less trafficked area for elderly and immunocompromised patients to bypass the waiting area.
- Reduce the number of personnel by cross-training (some employees may have to learn new tasks so the practice can operate with fewer people).
- Space the diagnostic devices and computer monitors at least 6 feet from one another.
- Body temperature of personnel and the checking for symptoms related to infection should be assessed every day.
- To the best of the clinic's abilities, patients should be brought directly into exam or procedural rooms that are as highly spaced as possible, and properly sanitized between patients.
- The clinical environment, including instruments such as occluders, prisms, trial frames, trial lenses, and gonioscopes should be disinfected properly based on the official recommendations.
- A disposable applanation tonometer head is preferred. Although 70% alcohol seems to be sufficient for disinfection of the tonometer, it has not been shown effective against adenoviruses.
- For IOP measurements, consider performing non-contact tonometry wherever possible.
- Although of questionable efficacy, it has been suggested that plastic breath shields be placed between the slit lamp examiner and subject.

- Washing hands with soap and water before entering the examination room is an important practice.
- The surfaces of cell phones and keyboards are among the most contaminated areas and should be regularly decontaminated.
- Instructing patients on proper hand washing, using brochures, posters, etc., is recommended.
- All equipment should be sanitized between each patient's use by appropriately trained staff.
- It is very important to clean the floor, appliances, and areas that the patient is in contact with (such as a slit-lamp handle and chin rest). After each examination, the equipment used, especially the patient's contact point, should be disinfected by trained staff.
- One person should regularly monitor the implementation of these protocols, acting as the COVID-19 Quality Control Officer.
- Gloves should be replaced after each examination.

Source: <http://mehdijournal.com/index.php/mehdiophthalmol/article/view/806/348>