

Best practice for prevention of droplet or contact transmission of infectious agents in Ophthalmology clinics:

Infection Control measures in Ophthalmology Clinics

- Effectively disinfect multi-use equipment
- Suspend non-contact tonometry due to aerosolization of ocular secretions (instead use a tonopen, iCare tonometry, disposable single use tips or Goldmann applanation tips that are high level disinfected with a 10% bleach solution in between patients)
- Install breath shields on slit lamps
- Practice frequent hand hygiene
- Wear personal protective equipment (PPE) appropriate to the level of interaction with the patient
- Practice respiratory hygiene/cough etiquette, avoid touching face and eyes, practice social distancing
- Use gloves whenever coming in contact with a patient's eyelids or conjunctiva

Screen Patients:

- In the last month, have you been in contact with someone who was confirmed or suspected to have Coronavirus/COVID 19?
- Do you have any of the following symptoms?

<input type="checkbox"/> None of these	<input type="checkbox"/> Unable to assess	<input type="checkbox"/> Abdominal Pain	<input type="checkbox"/> Bruising or bleeding
<input checked="" type="checkbox"/> Cough	<input type="checkbox"/> Diarrhea	<input checked="" type="checkbox"/> Fever	<input type="checkbox"/> Joint Pain
<input type="checkbox"/> Muscle Pain	<input type="checkbox"/> Rash	<input type="checkbox"/> Red Eye	<input type="checkbox"/> Severe headache
<input checked="" type="checkbox"/> Shortness of breath	<input type="checkbox"/> Vomiting	<input type="checkbox"/> Weakness	
- Have you travelled internationally in the last month? Where?

**Recommended Protocol for Suspect or Confirmed COVID-19 Patient
Use CONTACT and DROPLET PRECAUTIONS with Eye Protection**

If patient responds positive for the above screening questions:

1. Ask the patient to put on a **procedure mask (EARL LOOP YELLOW MASK)**
2. Room the patient immediately in an exam room and **close the exam room door**
3. **Place the AMBULATORY CONTACT and DROPLET PRECAUTIONS sign on the exam room door**
4. **Notify the provider AND the clinic manager**
5. **Required PPE (Personal Protective Equipment) for anyone who enters the exam room to see the patient.** Be sure to use proper donning and doffing technique - CDC guide here <https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf>
 - a. Procedure or surgical mask
 - b. Eye protection – Goggles or Face shield (eye glasses do not count)
 - c. Isolation Gown – select correct size
 - d. Gloves – select correct size
6. **PPE Disposal** – Ok to dispose in regular trash (use correct doffing technique)



7. **Eye Protection Cleaning-** The goggles can be wiped down with either EPA-registered disinfectant or with the 70% alcohol Easy Screen wipes after each patient use and can be reused between staff members. Discard if cracked or damaged. The plastic shield of the face shield can also be disinfected between uses; but can be reused only by the same health care worker during one shift due to non-cleanable foam. Discard if they become cracked or damaged.
8. **Room Cleaning - After Patient Leaves -** clean and disinfect surfaces and patient care equipment with an EPA-registered disinfectant (use gloves). If there is blood, vomit, active diarrhea, use bleach wipes. If there is a possibility of getting blood or other bodily fluids on clothing, use a gown. See exam room cleaning job aid below.

EXAM ROOM CLEANING JOB AID – After seeing a suspect or confirmed COVID-19 patient

Major Step – “What”	Key Points – “How”	Reasons – “Why”
EPA-registered disinfectant – be aware of contact time (Use a bleach wipe - for blood and other bodily fluids.)	<ul style="list-style-type: none"> • Put on appropriate PPE as needed per the transmission-based precautions sign on the exam room door. If there is no sign, gloves would be the minimum amount of PPE needed. • Always clean in an organized fashion. Staff should clean in a top to bottom, left to right, clean to dirty method. • Apply enough force to the surface to remove debris. Wipes should be switched when changing surfaces to avoid cross-contamination. 	Ensure Staff and Patient Safety
Exam chair	<ul style="list-style-type: none"> • Perform Hand hygiene and don new gloves • Wipe down exam chair seat and back thoroughly 	Ensure patient safety
Computer	<ul style="list-style-type: none"> • Wipe keyboard • Wipe mouse • Wipe monitor (with 70% alcohol Easy Screen wipes) • Arms – ensure dust free 	Ensure patient & staff safety
Phone	<ul style="list-style-type: none"> • Wipe phone • Wipe receiver 	Ensure patient & staff safety
Stool	<ul style="list-style-type: none"> • Wipe stool and height control handle 	Ensure staff safety
Slit Lamp	<ul style="list-style-type: none"> • Wipe down slit lamp, breath shield, and controls (alcohol prep pads or 70% alcohol Easy Screen wipes are approved for use) 	Ensure patient & staff safety
Sink	<ul style="list-style-type: none"> • Wipe around top of sink • Wipe sink handles • Wipe countertop if applies • Check under sink for garbage 	Ensure patient & staff safety
Door Handles/Light Switch	<ul style="list-style-type: none"> • Wipe light switch • Wipe door handles – inside and out when leaving room • Doff gloves and perform hand hygiene 	Ensure patient & staff safety

9. **High level disinfection of multi-use devices** (consider using single use devices when feasible)



After every patient use, process using device instructions for use. Basic steps are outlined below.

- Immerse in a 10% bleach (5,000 – 6,000 ppm sodium hypochlorite) disinfection solution for 10 mins
- Rinse tips and lenses in a 10 minute running water rinse
- Air dry applanation tips and lenses overnight
- Package and store processed devices in plastic bags (food grade plastic bags OK, does not have to be sterile plastic bags)

Please Note: Batching and processing at the end of the day will be the most efficient.

RESOURCES/REFERENCES

EPA website for EPA-registered disinfectants that have qualified under EPA’s emerging viral pathogens program for use against SARS-CoV-2.

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

OHA (Oregon Health Authority) Emerging Respiratory Infections

<https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/DISEASESAZ/Pages/emerging-respiratory-infections.aspx>

CDC Coronavirus Information Page

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

AAO Coronavirus alerts

<https://www.aao.org/headline/alert-important-coronavirus-context>

WHO – 5 moments of hand hygiene

<https://www.who.int/gpsc/5may/outpatient-care.pdf?ua=1>

WHO – How to hand rub, How to Hand Wash

<https://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf>

CDC donning and doffing guide here

<https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf>