

# PREVENT

## EPIDEMIC KERATOCONJUNCTIVITIS (EKC)

**EKC is caused by adenoviruses and is highly contagious. Clean and disinfect right away to prevent and control outbreaks in eye clinics.**

- 1 Use an EPA-registered disinfectant effective at killing adenoviruses.\***  
Adenoviruses are often resistant to many disinfectants and can survive on surfaces and equipment for extended periods of time.
- 2 Ensure that disinfectants are compatible with the surfaces and equipment, and approved by the manufacturer.**
- 3 Put on personal protective equipment, such as disposable gloves and protective eyewear.**

### Surfaces

Clean and disinfect surfaces in the exam and waiting rooms, office, storage, and other areas in the clinic. Pay close attention to frequently touched surfaces, such as counter tops and doorknobs.

-  Clean the surface thoroughly to remove dust or dirt before applying disinfectants.
-  Use an EPA-registered disinfectant on surfaces that is effective at killing adenoviruses,\* such as a bleach-based solution (2,000–5,000 ppm chlorine or 10 to 25 tablespoons of bleach per gallon of water).
-  Ensure the disinfectants remain on all surfaces for the recommended contact time. Apply wet and allow to dry. For example, bleach-based solutions should remain on all surfaces for at least one minute.

### RESOURCES

- Guide to Infection Prevention for Outpatient Settings [www.cdc.gov/hai/settings/outpatient/outpatient-care-guidelines.html](http://www.cdc.gov/hai/settings/outpatient/outpatient-care-guidelines.html)
- Disinfection of Healthcare Equipment [www.cdc.gov/infectioncontrol/guidelines/disinfection/healthcare-equipment.html](http://www.cdc.gov/infectioncontrol/guidelines/disinfection/healthcare-equipment.html)
- Recommendations and Disinfection and Sterilization in Healthcare Facilities [www.cdc.gov/infectioncontrol/guidelines/disinfection/recommendations.html](http://www.cdc.gov/infectioncontrol/guidelines/disinfection/recommendations.html)
- Adenovirus [www.cdc.gov/adenovirus/index.html](http://www.cdc.gov/adenovirus/index.html)

### Equipment

Clean and disinfect medical instruments and ophthalmological equipment in the clinic.

-  For example, wipe clean and disinfect tonometer tips for 5-10 minutes with either 5,000 ppm chlorine or 70% ethyl alcohol<sup>†</sup> (ensure it is compatible with the instruments and approved by the manufacturer). After disinfection, rinse the tonometer thoroughly in water and air dry before use.

## ABOUT EKC

**EKC is caused by adenoviruses and is highly contagious. It causes severe inflammation of the conjunctiva and cornea, and can result in vision loss. It can spread by direct contact with an infected person, and has been associated with equipment used during eye exams.**

\*Disinfectants effective against norovirus should also be effective against adenoviruses. See EPA List G for these disinfectants at [www.epa.gov/pesticide-registration/list-g-epas-registered-antimicrobial-products-effective-against-norovirus](http://www.epa.gov/pesticide-registration/list-g-epas-registered-antimicrobial-products-effective-against-norovirus)

<sup>†</sup>Note: Recent data suggest that 70% isopropyl alcohol is not effective against adenovirus.



**Centers for Disease Control and Prevention**  
National Center for Immunization and Respiratory Diseases