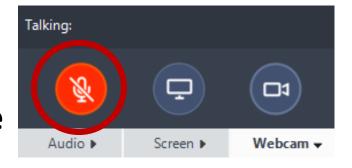
Infection Control in the Office in the Era of Covid-19

Ben Kruskal, MD
NEQCA Medical Director

Please Mute



No Webcams





State Phase 1 Reopening

Agenda

- Hand hygiene
- Transmission-based precautions
 - PPE (Personal Protective Equipment)
 - Factors affecting transmission
- Cleaning, disinfection, sterilization



State Phase 1 Reopening

- Requirements apply to ALL health care providers which are not hospitals or community health centers (incl. individual practices), even those who have continued to see patients straight through
- Delivering as much care as possible via telehealth
 - State gives suggested list of things possibly requiring in-person visits, but there is latitude for clinical judgement
- Must have written policies in place and named senior level compliance officer
 - PPE and essential supplies
 - Workforce Safety
 - Patient Safety
 - Infection Control
- Written attestation to the above by the compliance officer displayed in the practice and available to DPH if requested

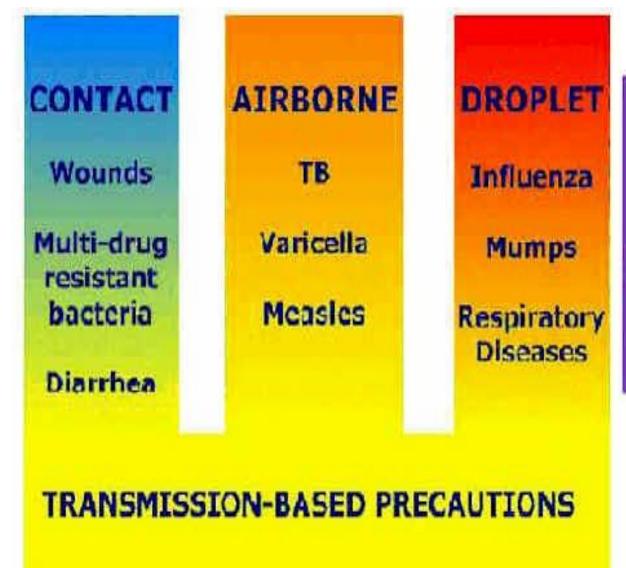
Hand Hygiene: soap and water vs hand sanitizer

- Generally equally good if done well
- Easier/faster to do hand sanitizer well
- HOWEVER, hand sanitizer does not clean, only disinfects
 - Disinfection doesn't work well on dirty things
- Soap and water cleans AND disinfects
- Two common diarrhea germs for which soap and water is better
 - Norovirus
 - C. diff









STANDARD PRECAUTIONS

Blood, all body fluids, secretions, excretions, nonintact skin, mucous membranes

Since patients can transmit HIV and other blood-borne pathogens without anyone being aware, ALL patients are treated with appropriate precautions



Transmission Based Precautions

Contact Precautions

- Hand Hygiene
- Gown
- Gloves

Droplet Precautions

- Hand Hygiene
- Mask

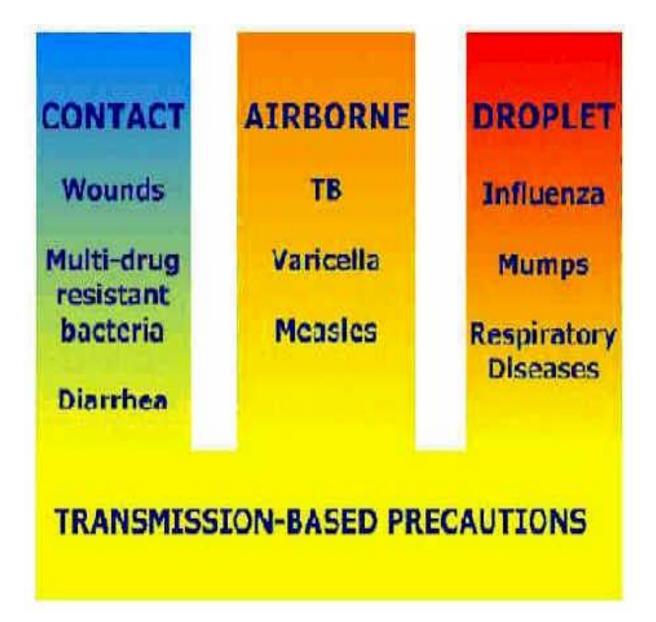
Airborne Precautions

- Hand Hygiene
- Negative pressure room
- N-95 Respirator mask

https://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html

Transmission Based Precautions By Dr. Rakesh Prasad Sah Assistant Professor, Microbiology MGM Institute of Health Sciences, Navi Mumbai, India





STANDARD PRECAUTIONS

Blood, all body fluids, secretions, excretions, nonintact skin, mucous membranes

Universal droplet precautions

Since patients can transmit Covid-19 without anyone being aware, ALL patients are treated with appropriate precautions



Medical Masks

- Simple facemask (Surgical mask, procedure mask)
 - Highly effective against droplet spread





- N95 respirator
- Highly effective against airborne (droplet nuclei) spread
 - Requires one-time fitting/fit-testing/training



Droplet precautions

Surgical mask

Gloves

Gown only needed for splash/splatter/direct torso-to-torso contact

• Enhanced droplet protection for splash/splatter: + Eye protection

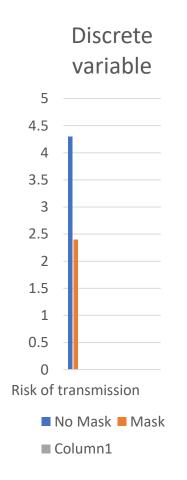


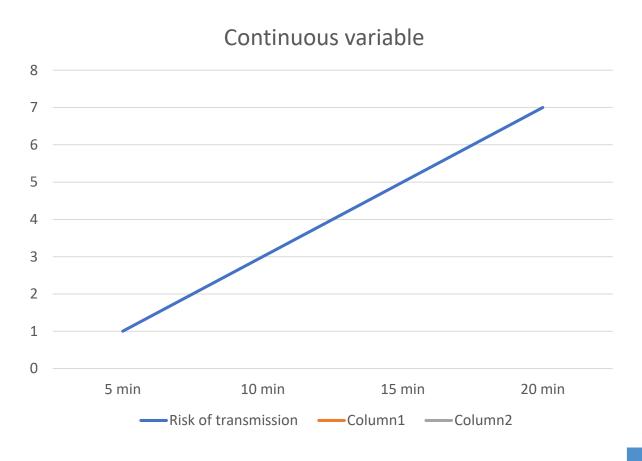
Factors affecting likelihood face to face transmission

- Discrete variable effects
 - Environment
 - Masking
 - Activity: cough, sneeze>singing>loud talking, laughing> talking
- Continuous variable effects
 - Distance
 - Time



Discrete vs continuous variables







Cleaning/disinfection/sterilization

- Is contact a major mechanism of transmission?
 - Varies among different respiratory viruses: RSV>influenza
 - Not clear how big a role it plays for SARS-CoV-2/Covid-19
- Cleaning = removing stuff
- Disinfection = killing some or most germs
- Sterilization = killing all germs

• Disinfection & sterilization don't work well on dirty surfaces



Disinfection and sterilization

- Sterilization: most commonly by wet (steam) or dry heat
- Disinfectants have a variety of active ingredients
 - Alcohol (isopropanol or ethanol)
 - Quats (e.g. benzalkonium, Lysol)
 - Hydrogen peroxide
 - Bleach (sodium hypochlorite)



Disinfection and SARS-CoV-2/Covid-19

- Very sensitive
 - Killed by soaps/detergents, most cleansing agents
 - Killed by heat
 - Killed by any common disinfectant
 - EPA has a list of >40 products effective against this virus



Questions?

To Ask A Question

- Please use the "chat" feature to submit your question
- A moderator will then pose your question(s) to the presenters

