



► **NOW WHAT? NAVIGATING K-12 REOPENING
A COLLABORATIVE PLANNING PROCESS**

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COOPERATIVE
STRATEGIES
ASSESS • PLAN • FUND • BUILD

▶ SUMMER 2020 INTERVIEW SERIES | AUGUST 13

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EXPERIENCE

- Certified Industrial Hygienist
- 8 years with the North Carolina Occupational Safety and Health (OSHA Compliance Officer)
- 26 years with the NC Division of Public Health
- Providing consultative services, to individuals, organizations, state agencies and others about indoor environmental quality
- Part of a working group of State Indoor Air Quality Officials organized and sponsored by the Environmental Law Institute and EPA to share best practices for 10 years

▶ HEALTHY BUILDING PRINCIPLES

NATIONAL CENTER FOR HEALTHY HOMES PRINCIPLES OF HEALTHY HOMES [OR BUILDINGS]

- Dry
- Clean
- Well ventilated (thermal control, filtration, local exhaust, and directional air flow)
- Well Maintained (good repair)
- Pest free
- Contaminant Free
- Safe

▶ CLEANING & DISINFECTING

KNOW THE DIFFERENCE

- Separate activities although many products are labelled as cleaner and disinfectants
- Read labels and follow label instructions especially for
 - Dwell time
 - What kind material is being disinfected. Most disinfectants are not suitable for porous surfaces
 - Does product need to be rinsed from surfaces
 - Keep out of reach of children
- Do not mix products



Cleaning

- Removal of dirt and impurities (including germs)
- Soap or detergent
- Does not kill germs, but removes them to the degree cleaned



Sanitizing

- Reduces germs on surfaces to levels that are safe



Disinfecting

- Kills germs

Source: Washington State Department of Health. Updated June 16, 2020.



▶ CLEANING & DISINFECTING

CLEANING COVID

- You cannot sanitize or disinfect if the surface is dirty; clean first
- “Sanitizers and disinfectants must be EPA registered anti-microbial pesticides. If they are not EPA registered, they are not an appropriate product. For COVID-19, choose a disinfectant approved by the Environmental Protection Agency (EPA) and [registered for use against the SARS-CoV-2 virus](#)
 - *See attached excel sheet*

Source: Washington State Department of Health. Updated June 16, 2020.

► CLEANING & DISINFECTING

CLEANING HANDS

“Provide plain fragrance-free/dye-free liquid/foaming soap. Fragrances irritate about a third of people. Do not use “antimicrobial” soaps. They are not effective against COVID-19, are not necessary, and are not good for human health or the environment.”



Source: Washington State Department of Health. Updated June 16, 2020.

▶ CLEANING & DISINFECTING

YOU CAN DISINFECT TOO MUCH

- Partner with custodial staff, they cannot clean or disinfect cluttered surfaces
- Remember that disinfectants contain hazardous ingredients and are regulated by EPA as antimicrobial pesticides – overuse might add chemical contaminants to the environment (see 7/30 [presentation](#) with Phoebe Beierle from the USGBC)
- Ask if disinfecting is and provides clear benefits or is required by law rule or code
- Cleaning removes contamination from surfaces and needs to be done more frequently than disinfection. In addition, soaps and detergents can inactivate the lipid membrane that envelopes viruses like the Corona Virus
- Good cleaning practices using soaps and microfiber cloths can remove 99% of surface bacteria

▶ VENTILATION

MAKE SURE YOUR SYSTEM IS WORKING AS DESIGNED

- Importance of understanding what systems you have and that systems are in good safe working order (see [presentation](#) from Josh Chism at Colorado Springs D11 last week)
- Do not make changes without thorough evaluation of consequences like improved filtration, increasing air exchange rate, or modification of operating times
- Understand air flow patterns, try not to locate people downwind or each other



COMMON FACILITY
CONDITION NEEDS
IMPACTING INDOOR AIR
QUALITY

► DRAINAGE CONCERNS



► DRAINAGE CONCERNS



► DRAINAGE NEAR HVAC UNITS



▶ EVIDENCE OF MOLD



▶ EVIDENCE OF MOLD



▶ HVAC CONDITION



▶ HVAC CONDITION



▶ HVAC CONDITION & TEMPORARY BUILDINGS



► CLUTTER & VENTILATION



► CLUTTER & VENTILATION

