WELCOME to

Science & Practices to Keep Workers Safe and Businesses Productive

as the COVID-19 Pandemic Changes

Session will start in less than 15 minutes

Please type your name, company, and email into chat box for attendance.
Facility Hygiene: Cleaning & Facility Preparedness

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Introduction & Learning Objectives

- **What is Cleaning?**
  - What we See and What we Don’t See
  - What’s the Difference? Sanitization Versus Disinfection

- **What Chemicals are which & what should I use?**
  - Safety First!!!
  - What is dwell time?
  - Know your Chemicals: DIY Cleaners, Consumer Cleaners & Industrial Cleaners

- **How Do I Clean What & How Often?**
  - High Touch Points, Public Areas & Work Areas
  - Surfaces
  - Materials

- **How do I Re-Open for Business?**
  - Cleaning Considerations
  - Air Handling Systems
  - Plumbing Considerations
What is Cleaning?

- Cleaning is the process of removing contamination from a surface or material.
- The Cleaning process should be done in a **methodical way**:  
  - Clockwise or Counter Clockwise  
  - Highest to Lowest  
  - Cleanest to Dirties  
  - Change Cleaning Clothes Often!

**Cleaning should be complete before sanitizing or disinfecting surfaces.**
What You See
& What you Don’t See

- Microorganisms are smaller than what the human eye can see and They are EVERYWHERE!
- Not All Microorganisms are Bad!
- Many Microorganisms and some spores can live for several months on undisturbed surfaces.
- Many Surfaces and Materials can appear to be clean but can be many different Microorganisms present.
- Staining or surface wear are not necessarily dirty.
What’s the Difference?
Sanitization Versus Disinfection

Sanitization
- Primarily Used in Food Preparation and Service Areas to reduce the growth of micro-organisms.
- Places where food will come in direct contact with a surface, like a cutting board or deli prep counter.
- Chemicals should be Food safe.

Disinfection
- Primarily used on everyday surfaces to kill micro-organisms that may be present.
- Chemicals used are meant to break down biological agents on a surface, such as micro-organisms and pathogens.
- These Chemicals are registered as pesticides with the EPA.
What Chemicals are Which? Good, Better & Best

Disinfecting Chemicals

1. “Do It Yourself Cleaners”

2. Consumer Disinfectants & Cleaners

3. Industrial Disinfectants

** Check the EPA N-List of Registered Disinfectants for Use against SARS-CoV-2 or contact the Product Manufacturer.
Safety First!!!

Chemical Safety

- Many Chemicals can be harmful when they come in direct contact with your body.
- Always read the product label and its Safety Data Sheet before using a Chemical it will provide:
  - Product Warning information
  - Compatibility with other Chemicals
  - Special PPE Requirements
  - Chemical Ingredients & Toxicity
- **NEVER** Mix different chemicals!

Personal Protective Equipment (PPE)

- **Wear Gloves** when using cleaning and disinfecting chemicals.
- Do Hand Hygiene before putting gloves on and after taking them off.
- **Wear Eye Protection** if there is a concern of chemical or fluid splashes.
- Consider having an eye wash station or eye rinse available for immediate First Aid.
What is Dwell Time?

- Dwell Time is the time a chemical needs to remain wet on a surface to be effective in disinfecting against known Pathogens.
- The EPA in conjunction with the CDC have created the “N List” database of disinfecting products.
- The “N List” is specific to Sars-Cov-2, but is not an all inclusive list of effective products.
- It includes Dwell Time information and in the chemical’s concentration requirements to be effective.

** Check the EPA N-List of Registered Disinfectants for Use against SARS-CoV-2 or contact the Product Manufacturer.
“Do It Yourself “Cleaners”

- Keep Safety Considerations in Mind... Some Chemicals or products do not mix well.

- Natural Cleaners can be somewhat effective in removing soiling or contamination but not killing microorganisms.

- Some natural items do have cleaning properties but may not be approved for use by the FDA or EPA.
Consumer Disinfectants & Cleaning Products

- Check the Product Label for Dwell Time (Contact Time) information and Safety Warnings (many are a skin and eye irritant)
- Watch for chemicals that are not rated as disinfectants.
- Check to see if the Product needs to be diluted (such as Bleach)
- Are you using right product for the right task?

** Check the EPA N-List of Registered Disinfectants for Use against SARS-CoV-2 or contact the Product Manufacturer.
Industrial Disinfectants

- Generally come in a concentrated form and need to be diluted before use.
- Some products require special storage or infrastructure needs, like a water dilution dispenser.
- Talk with a Manufacturing Sales Representative before buying or using a product.
- Also think about what you are trying to disinfect. Is your cleaning product the right chemical?

** Check the EPA N-List of Registered Disinfectants for Use against SARS-CoV-2 or contact the Product Manufacturer.
Alternative Disinfection Processes

- Costly- $1,500 to $20,000 per unit
  - Misting Machines
    - Many are Electro-static Machines
    - Can be used to treat Furniture
  - UV Light Disinfection
    - UV-C specific
    - Harmful for Humans
- Fogging or Misting Systems
  - Hydrogen Peroxide Vapor System
  - High Level Disinfections Process
How do you Clean What & How Often?

- High Touch Surfaces and Areas
  - Public Spaces, such as Waiting Rooms or Seating Areas.
  - Work Spaces
  - Restrooms
  - Break Rooms
- High Touch Points should be cleaned with higher frequency.
- After every touch is not always feasible,
- Increased Hand Hygiene between Contact with Surfaces and Items.

*** Wearing Gloves regularly DOES NOT help keep surfaces clean but can lead to cross contamination between multiple surfaces.
Surfaces and Materials: The Same but Different

Surfaces

- Hard Surfaces or Non-Porous Surfaces, like tile floors, walls, countertops, desks, & tables.
  - Follow Disinfection process and dwell time specifications of your chemicals.
- Porous surfaces, like exposed wood or fabric items are difficult to disinfect.
  - Carpets and furniture can be sprayed with disinfectant let air dry.
  - BEWARE of Bleach on fabric!
- Be Careful of Electronics! They may need to be cleaned differently.
Surfaces and Materials: The Same but Different

Materials

- Linen, Curtains & other fabrics (such as sewn masks)
  - Launder Regularly
  - More frequently
- Books, Paper Periodicals:
  - TIME is the best disinfectant!
  - American Library Association recommends to segregate Items for 24 hours before returning them to the shelf
  - Wipe Down outer covers if possible
- Delicate or Historical Items:
  - Be Careful! They could be Fragile.
  - NCPTT Resource: Disinfecting Cultural Resources (See Link On Resources Page)
How Do I Re-Open?
Take time to Open the Right Way...

GUIDANCE FOR CLEANING & DISINFECTING
PUBLIC SPACES, WORKPLACES, BUSINESSES, SCHOOLS, AND HOMES

1. DEVELOP YOUR PLAN
   DETERMINE WHAT NEEDS TO BE CLEANED. Areas unoccupied for 7 or more days need only routine cleaning. Maintain existing cleaning practices for outdoor areas.
   DETERMINE HOW AREAS WILL BE DISINFECTED. Consider the type of surface and how often the surface is touched. Prioritize disinfecting frequently touched surfaces.
   CONSIDER THE RESOURCES AND EQUIPMENT NEEDED. Keep in mind the availability of cleaning products and personal protective equipment (PPE) appropriate for cleaners and disinfectants.

   Follow guidance from state, tribal, local, and territorial authorities.

2. IMPLEMENT
   CLEAN VISIBLY DIRTY SURFACES WITH SOAP AND WATER prior to disinfection.
   USE THE APPROPRIATE CLEANING OR DISINFECTANT PRODUCT. Use an EPA-approved disinfectant against COVID-19, and read the label to make sure it meets your needs.
   ALWAYS FOLLOW THE DIRECTIONS ON THE LABEL. The label will include safety information and application instructions. Keep disinfectants out of the reach of children.

3. MAINTAIN AND REVISER
   CONTINUE ROUTINE CLEANING AND DISINFECTION. Continue or revise your plan based upon appropriate disinfectant and PPE availability. Dirty surfaces should be cleaned with soap and water prior to disinfection. Routinely disinfect frequently touched surfaces at least daily.
   MAINTAIN SAFE PRACTICES such as frequent handwashing, using cloth face coverings, and staying home if you are sick.
   CONTINUE PRACTICES THAT REDUCE THE POTENTIAL FOR EXPOSURE. Maintain social distancing, staying six feet away from others. Reduce sharing of common spaces and frequently touched objects.

For more information, please visit CORONAVIRUS.GOV

Dartmouth-Hitchcock
How Do I Re-Open?

Cleaning Considerations

- Things to Look for: Mold & Dust.
- Who has moved in since you moved out? Pest Management
- Is the Refrigerator clean?
- If it stays, it needs to be cleaned!
How do I Re-Open?

Air System Considerations

- Before you turn it on:
  - Clean Air Handling Systems, including window A/Cs
  - Increase Air Circulation
  - Open Windows to allow Fresh air to circulate in.

- Change or Clean the Air filters

- Inspect for mold in your system

- Questions: Call your local HVAC service provider
How Do I Re-Open?

Plumbing Considerations

- Flush your Water System
  - Refills Sink and Toilet Traps
  - Clears Stagnant Water from Pipes
  - Watch for leaks or weeping joints
- Hot Water Tanks
  - Drain and Refill to Prevent Legionella
  - Is the Thermostat set to 120deg.?
- Consider having a plumber visit to check Pipes, Seals and Joints.
Stay Safe, So You Can Stay Open!
Resource Links

EPA N-List: Registered Disinfectants for Use against SARS-CoV-2:
https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

CDC Guide to Disinfecting Building Facilities:

CDC Reopening Guidance for Cleaning and Disinfecting Public Spaces,

American Library Association Pandemic Preparedness Resources:
http://www.ala.org/alcts/preservationweek/resources/pandemic
http://www.ala.org/tools/atoz/pandemic-preparedness

NCPTT COVID19 Basics: Disinfecting Cultural Resources:
https://www.ncptt.nps.gov/blog/covid-19-basics-disinfecting-cultural-resources/

New England Journal of Medicine: Aerosol and Surface Stability of SARS-CoV-2:

National Restaurant Association Coronavirus Information and Resources:
https://restaurant.org/covid19#food-safety

CDC Reopening Guidance for Building Water Systems: