



DECLUTTERING, DEEP CLEANING, & DISINFECTING

Part I: Introduction

A comprehensive and implementable “Decluttering, Deep Cleaning, and Surface Disinfection/Sanitizing Program” with specific and detailed written protocols and procedures jointly developed by PFT working in close collaboration with the School District of Philadelphia, state and local officials, and all stakeholders including community partners, educators, and parents is an essential component of any effort to reopen our public schools.

The Decluttering, Deep Cleaning, and Surface Disinfection/Sanitizing Program is only one part of a comprehensive District “Infection Control Plan” (ICP) that must include clear, implementable protocols, practices and procedures for the steps to take in protecting the health, safety, and welfare of all school students and staff from the risks and hazards associated with exposure to, and illness from, the Covid-19 virus.

A comprehensive and detailed cleaning program includes at least the following major elements:

- Detailed identification, listing, and square foot measurements of all instructional and other school building spaces requiring cleaning and disinfecting/sanitizing for all buildings.
- Determination and assignment of adequate personnel resources, numbers and schedules of cleaners/custodial workers and proper and sufficient cleaning supplies, equipment, and materials as necessary to ensure the level of required cleaning is conducted before school is “re-occupied” for the 2020/21 SY.
- Ensure sufficient numbers of, and accessibility to, personal hygiene, hand-washing and sanitizing stations, equipment and supplies are readily available and properly maintained so that frequent hand washing/sanitizing can be effectively done.
- Assessment and necessary upgrades to heating, ventilation, and air conditioning [HVAC] systems and repair and maintenance of windows to ensure maximum

operability and the provision of adequate amounts of fresh air is provided to building spaces.

- Specific COVID-19 related training and education for cleaning and custodial personnel.
- A communication plan by the District, jointly developed in collaboration with the PFT and other stakeholders, that includes providing ongoing information and notification to all stakeholders.
- Joint and collaborative development and implementation with PFT and other public stakeholders, of comprehensive best cleaning and disinfection practices and procedures to be used to ensure that the health, safety, and welfare of all school staff, students, and other occupants are fully protected.
- Provisions for adequate and specified PPE to include, but not be limited to, cloth face coverings/masks and/or face shields, gloves, “gowns” or work uniforms.

The terms “Cleaning,” “Sanitizing,” and “Disinfecting” are sometimes used interchangeably, although there are differences that have been identified and described by the CDC to help better understand each of the terms:

- **Cleaning removes germs**, dirt, and impurities from surfaces or objects. Cleaning works by using soap (and/or detergents) and water to physically remove germs from surfaces. This is why using clean cloths and other supplies/equipment is needed to avoid spreading contamination around from surface to surface. This process does not necessarily kill germs, but by removing them, it lowers their numbers and reduces the risk of spreading infection.
- **Disinfecting kills germs on surfaces or objects**. Disinfecting uses chemicals to kill germs. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.
- **Sanitizing lowers the number of germs** on surfaces or objects to a safe level as judged by public health standards or requirements to lower the risk of spreading infection. Sanitizing is accomplished by cleaning and/or disinfecting.

***** Please note that cleaning of all porous and non-porous surfaces is always a necessary first step before disinfection activities are performed.***

Part II: General Considerations/Working Assumptions & Background Information

1. Decluttering of many spaces will be required prior to cleaning and sanitizing/disinfecting activities, particularly since schools were closed in a manner that did not permit the organized packing of supplies and materials. This process will need to involve PFT and school staff in the planning and implementation of decluttering.
2. Rigorous cleaning and related actions will need to be conducted prior to the return to school as well as throughout the school year.
3. Dedicated custodial/cleaning staff will be needed and specifically assigned for: [a] day time cleaning (throughout the day while schools are occupied for response to spills, cleaning of high touch and other surfaces) as well as [b] for daily deep cleaning and disinfection after all students and staff are out of the building.
4. Visibly dirty hard/non-porous as well as porous surfaces should be cleaned prior to disinfecting.
5. Cleaning adequacy approaches and guidelines should be jointly developed by PFT and District and cleaning verification should also be jointly conducted.
6. Authoritative and recognized cleaning standards that define cleaning benchmarks, levels, and degree of cleanliness need to be relied upon for standard development and cleaning implementation.
 - a. ISSA/APPA Level 2 Cleaning should be the minimum standard for all schools [especially for Covid-19 related cleaning] = 20,000 SF per cleaner [maximum].
 - b. The level above is for 8 hours of cleaning conducted **only after** rooms/schools are unoccupied [not for cleaning during the day which is also required].
7. Additional cleaning and custodial personnel and other related resources will be needed in order to accomplish effective and necessary day-time cleaning as well as after the end of school day deep cleaning and disinfecting [specified in the District's draft cleaning plan].
8. Cleaning/custodial personnel will need to wear PPE [as specified in the District's draft cleaning plan].
9. Specific and detailed cleaning standards and guidelines will need to be jointly

developed and approved with stakeholder input and participation.

Part III: Decluttering, Deep Cleaning, & Disinfecting/Sanitizing Recommendations

A. Start dates and scheduling issues for decluttering, deep cleaning, and disinfection

1. District-wide and school specific start dates and schedules for decluttering, cleaning, and disinfection.
 - a. Start date and schedules should be immediately provided.
 - b. Decluttering, deep cleaning, and disinfection activities must start as soon as possible in order to ensure safe and timely school re-occupancy.
2. District plans, including time frames and approaches necessary to perform effective cleaning with special reference to those schools in which construction, renovation, modernization, and/or environmental remediation work is occurring.
3. SDP must work directly with educational and administrative staff to properly identify, label, box, and store all educational materials, supplies, and equipment for decluttering prior to any cleaning or disinfection work being performed.
 - a. This should be accomplished by having school educational staff return to buildings to identify and mark supplies, materials and equipment to guide efforts prior to cleaning being conducted.
 - b. School staff could be brought into schools over the course of 5-10 days in “grade-level shifts.”
 - c. School staff would spend approximately 1-2 hours in their rooms and would be asked to wear face covering/shields and maintain physical distance while in the school.
4. Provide the exact numbers of total cleaning personnel employed District-wide and the numbers currently available and assigned to each school prior to, and during occupancy in order to assess cleaning resource adequacy.
 - a. According to District-provided data there is about 26 million square feet [MSF] of gross total space and at least about 22 MSF of instructional “cleanable”

space.

- b. As per cleaning standards/guidelines and benchmarks [from APPA, ISSA and other authorities] the District would need at least 1100 cleaners per day in school, after all students and staff have left the building, to effectively clean existing spaces at the 20,000 SF per cleaner/custodian standard.
 - c. Required cleaning levels are based on 20,000 SF/day per cleaner [this is equivalent to 2,500 SF per hour per cleaner] during periods of non-occupancy.
5. Provide a detailed description of schedule/hours for on-site cleaning to be conducted prior to occupancy – this is necessary for evaluation and assessment purposes.
 6. Provide a detailed description of schedule/hours for on-site cleaning to be conducted during occupancy – this is necessary for evaluation and assessment purposes. During school occupancy cleaning requires 2 “shifts”:
 - a. Cleaning schedule/hours **throughout** the school day.
 - b. Cleaning/schedule/hours **after** the school day.
 7. Provide details about how cleaning staffing levels will be maintained on a daily basis in schools to ensure adequate cleaning takes place.
 8. Cleaning evaluation and “check-off” practices and procedures should be jointly developed to ensure effectiveness of daily and routine cleaning.

B. Identify all spaces in all schools to include details describing use, category, and type of space as well as square footage and “high touch” surfaces.

1. Use and provide floor plans, architectural drawings and other similar space representations and measurements to identify all locations to be decluttered, cleaned, and disinfected. Specific space/area square footage measurements must be provided.
2. A detailed school/room level assessment is needed and must be performed to identify the specific decluttering needs, cleaning, and disinfection requirements for all instructional spaces. Decluttering needs to occur prior to cleaning and disinfecting.

3. Develop a process for effectively storing and labeling educational materials and supplies. This should be done jointly with school educational staff [School-Based Task Force Working Groups].
4. The District should develop and define a comprehensive and specific set of cleaning and disinfection protocols, procedures, and expectations (to cover “after school/before opening” and “during school” activities) to include, but not be limited to:
 - a. At minimum, cleaners should be provided with and should wear masks/face shields, gloves and protective clothing whenever there is a possibility of coronavirus being present on surfaces.
 - b. Clean and disinfect surfaces from “cleanest” to “dirtiest” to help further limit spread of contamination.
 - c. Sanitize/disinfect surfaces only after cleaning has been conducted [emptying trash, vacuuming/sweeping, wiping surfaces, etc.].
 - d. Surface cleaning should be done using microfiber products because of their increased absorbency [consider using “smart towel” products].
 - e. It is preferable **not** to use mops and buckets for cleaning.
 - f. Educational spaces should be cleaned and disinfected throughout the day on a regularly established schedule to include, but not be limited to:
 - i. Whenever classrooms “change” [i.e. students leave],
 - ii. High touch surfaces [defined below in more detail].
5. Follow existing guidelines, standards and recommendations from the CDC [“Guidance for Cleaning, & Disinfecting”] and other authoritative sources to at least include:
 - a. Determining and listing the types of surfaces to be cleaned [porous and non-porous] and perform cleaning, HEPA-vacuuming, etc., prior to disinfection.
 - b. Identifying the types of products necessary for cleaning and disinfecting the various types of surfaces.

- c. Identifying “high-touch” surfaces to ensure frequent cleaning is conducted. Frequency of cleaning should occur at least 2x-3x during the occupied school day. High touch surfaces include, but are not limited to, the following:
 - i. Tables, desks, and chairs,
 - ii. Door knobs and handles, handrails, light switches, phones, and keyboards,
 - iii. Countertops, computer touch screens, and shared objects,
 - iv. Faucets, drinking fountains, sinks, and toilets,
 - v. Playground equipment.
 - d. Use and follow EPA guidelines and recommendations for disinfecting materials and products to be used on porous and non-porous surfaces.
6. Prior to disinfecting clean non-porous surfaces with detergent/water or other solution to remove dirt.
 7. Prior to disinfecting porous surfaces use damp-wiping and HEPA-vacuuming to remove dirt.
 8. Wherever practical remove “soft” porous materials from spaces [e.g. carpets, stuffed animals, etc.].
 9. Use microfiber “smart towel” cleaning approaches to the extent possible.
 10. Using mops to clean floors is not recommended. However, if mop and bucket cleaning is to be used:
 - a. “Flat” head mops instead of “spaghetti” string mops are preferred.
 - b. Dirty water and clean water must be fully separated.
 - c. Mop heads must be kept as clean as possible.
 - d. Consider using a “one room/one mop” policy.
 11. Explore the feasibility, and availability, of using more automated “spray and vac” (no-touch) cleaning systems already being used in many school districts, colleges, and universities. Electrostatic disinfection sprayer/mister systems are advisable [price range \$1500-\$4500 per unit]. These systems apply cleaning solutions to surfaces and then pressure rinse the same areas followed by vacuuming up moisture and dirt and will improve cleaning efficiency and effectiveness while protecting workers.

12. Fogging of all school areas/surfaces should be performed following all cleaning activities and prior to the start of the 2020/2021 SY (as per District draft cleaning plan).
13. All custodial, cleaning, and building engineering personnel should be equipped with proper and adequate amounts and types of PPE (face coverings, gloves, and protective clothing)
14. Cleaning staff will be needed throughout the school day for periodic, high touch, and specialized/responsive cleaning. In addition, cleaning staff will need to be assigned to perform after-school cleaning and sanitizing activities on a daily basis.
15. After school hours cleaning is a critical component of ensuring healthful, safe, and sanitary conditions especially, but not exclusively, related to Covid-19 concerns.
16. Additional hand sanitizing stations should be installed and maintained throughout occupied buildings and the District should implement practices to ensure the adequacy of hand sanitizer supplies and equipment. After the end of the school day, cleaning needs are highlighted by the fact that:
 - a. Food will be served/eaten in classrooms; throughout the school day.
 - b. The cleaning of floors, desks, chairs, and other school surfaces can only be effectively conducted after all students and staff have left the building.
 - c. Fogging/spraying of “all classrooms, bathrooms, office spaces hallways, elevators [if applicable], foyers and vestibules prior to leaving” (as per District plan draft). requires cleaning of these surfaces before sanitizing activities are performed.
17. Replace lavatory fixtures with sensor technologies, where possible, to reduce cleaning load and potential surface contamination.
18. Based on current SDP data and information we have estimated that the SDP would need to employ/hire 200-500 additional cleaning personnel to be “fully staffed” [at the accepted benchmark cleaning levels of 20,000 SF per cleaner in an 8 hour period after students and staff have left the building spaces] in order to perform effective cleaning sufficient to ensure the protection of occupant health, safety, and welfare.
 - a. Staff estimates are based on data provided by the District about current cleaning staff numbers and accounting for school size information.
 - b. Additional cleaning capacity [*above the 200-500 cleaners recommended*] will likely be required in order to address emergency and predictable needs including, but not limited to:

- i. Substitution for people who are injured or ill or for any other reasons where staff may not be able to be on site at the scheduled hours,
- ii. Where specific school conditions may warrant more aggressive cleaning on an emergency and/or semi-routine basis.

19. Specific measures defining what will be done in the event cleaning/custodial personnel are absent from work must be provided. Options include employing Rapid Response Team (RRT)/substitute cleaners; utilizing overtime hours; and/or restricting spaces from use.

20. Specific measures defining what will be done in the event school areas/rooms are unable to be adequately cleaned before the start of the next day must be defined and provided.

21. Additional factors which should be implemented as part of a long-range plan to further reduce airborne coronavirus load include but are not limited to:

- a. Describing and detailing the numbers and operational status of all potentially openable windows throughout the district by school and room. Adjusting/repairing windows to ensure they are fully operable, to the extent possible, in order to increase fresh air delivery and to allow for increased natural ventilation for dilution as per CDC and other authoritative guidelines and recommendations
- b. Describing and detailing the current operational status and presence of mechanical heating, ventilation, and air conditioning systems in District buildings. Provide a list of schools and specific areas within schools that have an operational HVAC system.
- c. Evaluate/explore potential upgrades to existing heating, ventilation, and air conditioning [HVAC] systems and components to lower microbial contamination by:
 - i. Increasing outside air intake and the provision of fresh air into occupied spaces to facilitate lower viral loads by dilution. This approach only works if additional room air changes and upgraded exhaust ventilation is provided.

- ii. Consider increasing humidity [add humidification] to about 50%.
- iii. Increasing filter changes and type[s] of filtration used.
- iv. Explore/evaluate new technologies such as “Bipolar Ionization” that might be able to be integrated into some existing HVAC systems and should be included into newly installed and/or upgraded HVAC systems.
- v. Specifically ensure that all bathroom exhaust ventilation systems are fully operational and working as required to ensure proper dilution ventilation and air changes in all bathroom spaces.

Part IV: Specific Requirements & Recommendations for Decluttering

1. Detailed school/room level assessments of space use and dimensions for all instructional spaces are required to identify decluttering needs, cleaning, and disinfection requirements. (B1-B3, p. 5)
2. District-wide and school specific start dates and schedules for decluttering, cleaning, and disinfection must be immediately provided. Dedicated schedules and timing details must be provided for schools in which significant environmental remediation and ongoing construction, renovation, and modernization activities are occurring. (A1-A2, p. 4)
3. The District must immediately undertake planning efforts sufficient to properly identify, label, box, and store all equipment, materials, and supplies for decluttering prior to any cleaning or disinfection work being performed. (A3, p. 4)
4. The District must provide a count of the exact total number of school district cleaners and the total amount of cleanable square footage in all schools. (A4, pp. 4-5)
5. The District must provide a detailed description of schedule/hours and the exact numbers of cleaning personnel required for each school: [a] for cleaning to be conducted prior to students and staff reoccupying schools; [b] for cleaning to be conducted during the school day; and [c] for the eight (8) hours of necessary cleaning to be conducted after school hours. (A4, pp. 4-5)
6. The District must provide a detailed approach describing a daily process for cleaning evaluation, and verification. (A8, p. 5)
7. The District should develop and define a comprehensive and specific set of cleaning

and disinfection protocols, procedures, and expectations. (B4-B15, pp. 5-8)

8. In addition to the 20,000 SF maximum cleaning area per District cleaner, in order to cover for emergency and substitute staffing needs based on School District data, the PFT estimates that an additional 200 cleaners are required. (B18-B20, pp. 8-9)
9. The District must identify current levels of hand washing and hand sanitizing capacity in order to develop and communicate to the entire school community a hand washing and hand sanitizing protocol. (B16-B17, p. 8)
10. The District must conduct a detailed assessment and list current operational status at the room and school level for heating and air conditioning ventilation [as recommended by CDC and included in the District's Maintenance planning document]. (B21 p. 9)
11. The District must conduct a detailed assessment and list current operational status at the room and school level for windows for all occupied buildings and spaces. Inoperable windows should be repaired to ensure as much fresh air circulation as possible is provided to occupied schools [as recommended by CDC and included in the District's Maintenance planning document]. (B21 p. 9)