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AIRCRAFT DISINFECTION AND CLEANING PROCEDURES

On Jan. 30, 2020, the World Health Organization (WHO) declared that the outbreak of **Coronavirus Disease 2019 (COVID-19)** constitutes a Public Health Emergency of International Concern (PHEIC), and on March 11, 2020, WHO characterized the outbreak of COVID-19 as a pandemic.

FAA and CDC recommend that air carriers and crewmembers take precautions to avoid exposure to COVID-19. These precautions can be found in [SAFO 20003](#). CDC has also provided recommendations for aircraft operators to clean and disinfect aircraft.

CDC AIRCRAFT CLEANING RECOMMENDATIONS

If no symptomatic passengers were identified during or immediately after the flight:

- Follow routine operating procedures for cleaning aircraft, managing solid waste, and wearing personal protective equipment (PPE)

If symptomatic passenger(s) are identified during or immediately after the flight, routine cleaning procedures should be followed, and enhanced cleaning procedures should also be used as follows:

- Clean porous (soft) surfaces (e.g., cloth seats, cloth seat belts) at the seat of the symptomatic passenger(s) and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions.
 - Clean porous (soft) surfaces (e.g. seat covers and carpet) by removing visible contamination if present and using appropriate cleaners that are compatible with aircraft surfaces and components in accordance with the manufacturer's instructions. For items that can be laundered, use the warm setting and dry items completely on high heat.
- Clean non-porous (hard) surfaces (e.g., leather or vinyl seats) at the seat of the symptomatic passenger(s) and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions, including: armrests, plastic and metal parts of the seats and seatbacks, tray tables, seat belt latches, light and air controls, cabin crew call button, overhead compartment handles, adjacent walls, bulkheads, windows and window shades, and individual video monitors.
 - Clean non-porous (hard) surfaces with disinfectant products with EPA-approved emerging viral pathogens claims that are expected to be effective against the virus that causes COVID-19 (SARS-CoV-2) and ensure these products are compatible with aircraft surfaces and components. All products should be used according to label instructions (e.g., concentration, application method and contact time, PPE).
- Clean lavatories used by the symptomatic passenger(s), including: door handle, locking device, toilet seat, faucet, washbasin, adjacent walls, and counter.
- Properly dispose of any items that cannot be cleaned (e.g., pillows, passenger safety placards, and other similar items as described below).

RECOMMENDED PPE DURING ENHANCED CLEANING

- Disposable gloves that are recommended by the manufacturer of the disinfectant should be worn.
- Disposable gowns should be worn while cleaning the cabin and lavatories.
- If splashing is possible, eye protection, such as a faceshield or goggles and facemask may be required according to the manufacturer's label.

GENERAL RECOMMENDATIONS DURING THE ENHANCED CLEANING PROCESS:

- Ground and cleaning crews should not board the plane until all travelers have disembarked.
- Ventilation systems should be kept running while cleaning crews are working aboard the airplane.
- If visible contamination (e.g., a body substance such as blood or body fluids) is present, routine cleaning procedures should be followed based on blood or body substance spill management according to , 29 CFR 1910.1030.OSHA's Bloodborne Pathogen Standard, [29 CFR 1910.1030](#).
- Operators should ensure workers are trained on the hazards of the cleaning chemicals used in the workplace in accordance with OSHA's Hazard Communication Standard, [29 CFR 1910.1200](#).
- Operators should train ground and cleaning crews on and require that crew members demonstrate an understanding of when to use PPE, what PPE is necessary, how to properly don (put on), use, and doff (take off) PPE.
- After removing PPE, cleaning staff should immediately clean hands with soap and water for at least 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.

- Cleaning staff should immediately report breaches in PPE (e.g., tear in gloves) or any potential exposures (e.g., contact with blood or body fluids without wearing appropriate PPE) to their supervisor.
- Cleaning staff should dispose of PPE and other disposable items used in cleaning following the airline's routine procedures.
- Ground crews assigned to wastewater management operations should follow routine procedures.
- Employers should educate workers to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms.
 - Cleaning staff should immediately notify their supervisor if they develop symptoms of COVID-19.

The following recommendations have been developed with NBAA members and professional aircraft detailers:

RECOMMENDED PRODUCTS

The products listed here are some options, but not the only options, that have been tested and proven safe for use on aircraft interiors. Additional disinfectants for use against COVID-19 can be found on the EPA's website [<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>]. However, these products require testing on interior surfaces prior to full use.

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| • Disposable medical grade gloves | • Sontara aerospace wipes | • Perrone Leather Cleaner & Condition |
| • Safety glasses or goggles | • Celeste Sani-Cide Disinfectant | • SDC3A/PURE Hard Surface |
| • N95 respirator mask | • Celeste Sani-Cide EX3 | • BioAssured (MaQuat 60) |
| • Microfiber towels | • Celeste Sani-Cide FSC | |
| • Terry cloth towels | • HaloMist | |

INTERIOR DISINFECTION PROCEDURES

It is recommended that the following procedures are carried out by trained personnel. All manufacturer guidelines and instructions should be followed.

Ensure all crew and passengers have exited the aircraft. Adorn all personal protective equipment.

Use new microfiber and towel products when transitioning between sections of the aircraft. Do not transfer use from one area to another. Replace gloves, respirators and all towel products when moving to a different aircraft.

Galley & Kitchen Areas

1. Aircraft galley and food prep areas should receive disinfection with Sani-Cide FSC. After 30 seconds of contact time, surfaces can be wiped clean with a new microfiber cloth. Surfaces are now ready for use.
2. Trash bins should be emptied, and all garbage removed from aircraft.
3. Mirrors, glass and screens should be cleaned with Sani-Cide EX3.

Cabin Area

1. Working in small areas, spray hard surfaces with Sani-Cide Disinfectant or EX3 and allow a contact time of 5 minutes prior to wiping clean with a microfiber cloth. Following disinfection, surfaces can be cleaned with an interior product to provide a final finish.
2. Spray and wipe leather surfaces with EX3. Follow by cleaning with Perrone Leather Cleaner/Conditioner.
3. Upholstery and carpet should be lightly misted with EX3 and allowed to air dry.

Lavatory Area

1. Spray toilet area with EX3 or Disinfectant and allow the full contact time. Using Sontara wipes or a similar cloth product, wipe all areas clean. Immediately dispose of cloths and gloves into a dedicated trash bin outside of the aircraft.
2. Using new gloves, spray remaining hard surfaces in lav area and wipe clean with a microfiber cloth.

Flight Deck & Cockpit Area

Due to the delicate nature of instruments, screens and components found in the cockpit area, it is recommended to use approved procedures and products in accordance with OEM guidance.



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ABOUT NBAA

Founded in 1947 and based in Washington, DC, the National Business Aviation Association (NBAA) is the leading organization for companies that rely on general aviation aircraft to help make their businesses more efficient, productive and successful. Contact NBAA at 800-FYI-NBAA or info@nbaa.org. Not a member? Join today by visiting nbaa.org/join.