

PVHH Guidelines for Volunteers Working Inside

APPROVED BY BOARD OF DIRECTORS 12/15/20

PURPOSE: This document seeks to provide a framework by which PVHH volunteers can resume working inside as safely as possible while the Covid pandemic persists. It is intended to describe and encourage safe practices, and to describe ventilation strategies that will minimize the risk of coronavirus transmission. Reference is made to the Guidelines for Working Outdoors, approved by the PVHH Board on May 25, 2020. In accordance with a modification approved in August 2020, work within the walls is still considered outdoors when all windows and doors are opened widely, and sheetrock has not been installed on interior walls. This Guideline addresses the situation that obtains once floors are divided by interior sheetrock.

BACKGROUND: The pandemic puts everyone at risk of contracting a potentially deadly disease. Current evidence suggests that transmission occurs primarily via exhaled droplets, by two mechanisms:

1. Airborne droplets are inhaled. Large droplets remain aloft for only a few minutes, and do not disperse in the air. In contrast, microdroplets float for several hours; fortunately, even small air currents effectively sweep these away.
2. Droplets land on surfaces, are picked up by someone's hands, and transmitted to nose, mouth, or eyes

Increasingly, surface and contact transmission is considered to be a relatively unimportant transmission route, easily addressed with good hygiene in general, especially frequent hand washing. Concern, and disease control, should focus on infectious droplets. Face masks block most if not all large droplets, and probably diminish the number of microdroplets that are released into the air. They also provide partial protection for the person wearing the mask by acting as filters of inhaled air. Thus, maintaining distance, the use of masks, and being outside minimize transmission risk effectively. The keys to safe indoor activity are masks, adequate ventilation, and avoiding large numbers of people in small spaces.

Unfortunately, no firm data can provide us the exact combination of how many people, how large a room, and how much ventilation provides sufficient safety (references below). Thus, the Safety Committee recommends the use of large capacity exhaust blowers to ventilate each floor of houses, with provision for small spaces that lack windows.

PRECAUTIONS: Remain unchanged from the May 25, 2020 Guidelines. Briefly, all volunteers should ensure their own health before arriving on the job site.

REQUIRED PRACTICES: All those in the May 25, 2020 Guidelines remain in effect. Until the Northampton Board of Health relaxes their standards, we must adhere to those they require. A few additional measures are added to address the safety of working indoors.

Each floor of a house under construction will be equipped with an exhaust fan and incorporated ductwork that provides for 5 air exchanges per hour or more. The blower and ducts should be tightly coupled to a window to ensure that all the air is blown directly outside. All other windows in that room should be closed. Place the exhaust blower on the floor, and open the upper portion of each window in all the other rooms.

Since closets and other small spaces have no direct outside air source, these should be ventilated with portable fans whenever someone is working in them. Whenever possible, only one person at a time should work in a space lacking a window. If it's necessary for two or more people to work in such an area, this work should be accomplished as quickly as possible. The space should then be ventilated for 15 minutes with a portable fan with nobody working there.

There is some concern that construction dust might become a transmission vehicle for viral particles. For that reason, it is best that clean up be accomplished with a shop vac that is fitted with a HEPA filter whenever possible. The use of brooms to sweep up dust is discouraged. Brooms should only be used for waste too small to pick up by hand, yet too large for the shop vac.

When contractors are working inside, PVHH volunteers will not work inside the house. Brief (less than 5 minutes) interactions for the purpose of coordinating or inspecting work will be permitted. After a subcontractor works inside the house, volunteers should wait 12 hours before working inside OR run ventilation for at least one hour and wipe down high touch surfaces with disinfectant before working inside.

REFERENCES:

For a good perspective on the risks of airborne transmission under various conditions:

<https://www.businessinsider.com/6-foot-distancing-rule-is-outdated-oxford-mit-new-system-2020-8>

For the CDC recommendations on what constitutes adequate air exchange:

<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html>

For an ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) discussion of some technical points about ventilating buildings: <https://www.ashrae.org/technical-resources/resources>