

# **BSC: Safe Work Practices**

# BSC Class II Performance



# BCS Exhaust Thimble Connection



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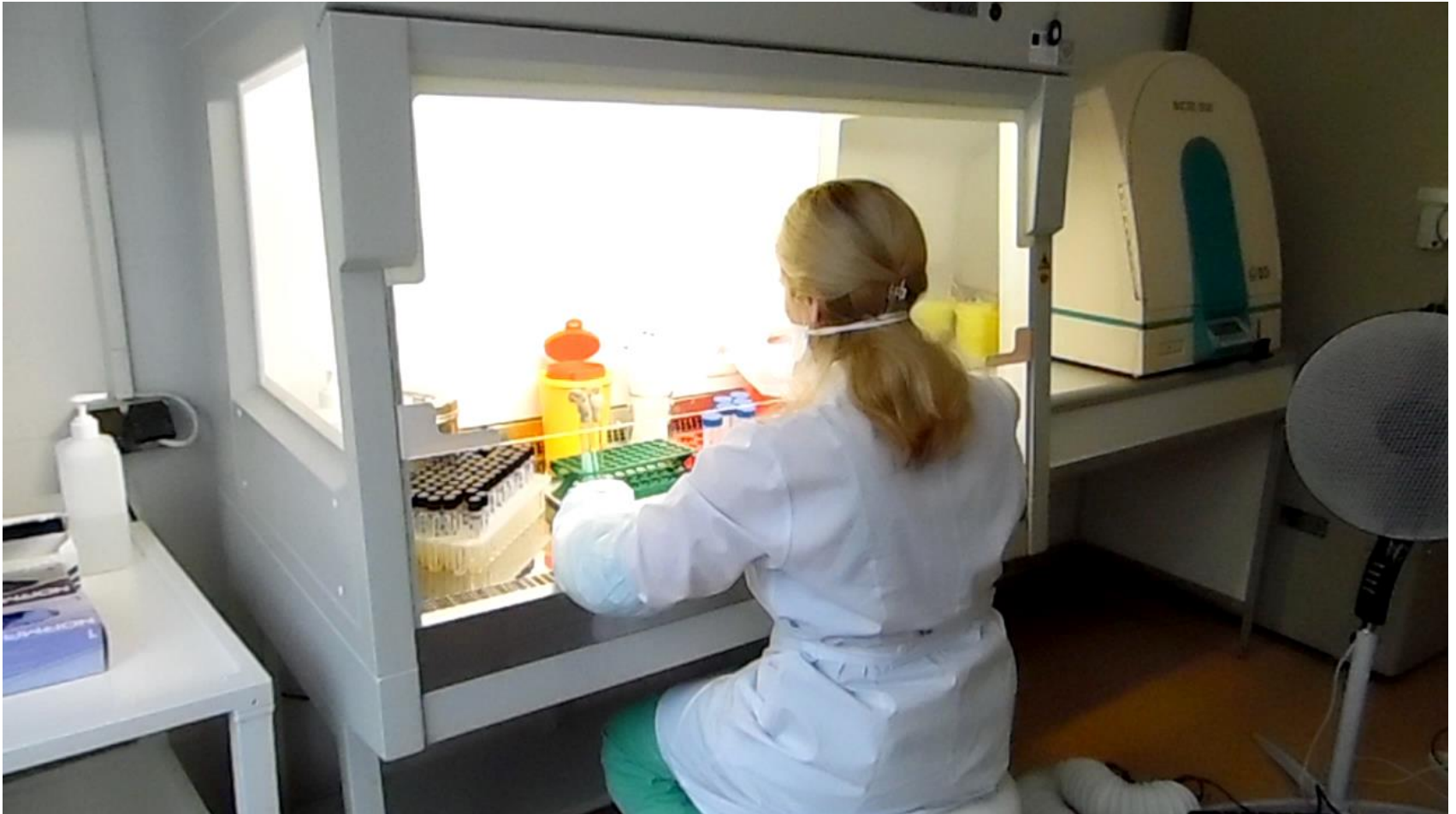
# Before Work is Started (1)

- Prepare a checklist of materials necessary for the activity.
- Remove all unnecessary equipment and supplies from the cabinet, as clutter alters air flow. Check that air grilles are clear.
- Turn on blower before using the BSC to remove particles in the cabinet. Wait at least five minutes.
- Wipe down surface of cabinet interior with appropriate disinfectant. Allow disinfectant enough time to inactivate microorganisms of concern.
- Place only needed supplies and equipment in the BSC before beginning work to minimize the number of arm-movement disruptions across the air barrier of the cabinet. Only items required for the immediate work should be placed in the BSC.

# Before Work is Started (2)

- Place decontaminating solution inside the cabinet to facilitate quick clean-up of spills. Do not hang disinfectant bottle on outside grille of the BSC.
- Wipe the exterior of supplies with appropriate disinfectant, particularly containers removed from a water bath. Segregate items that will remain clean from the ones that may become contaminated.
- Wear appropriate personal protective equipment for the work being done.
- Adjust stool height so that your neck and face are above the sash opening. Do not rest arms on grilles.

# What is wrong?

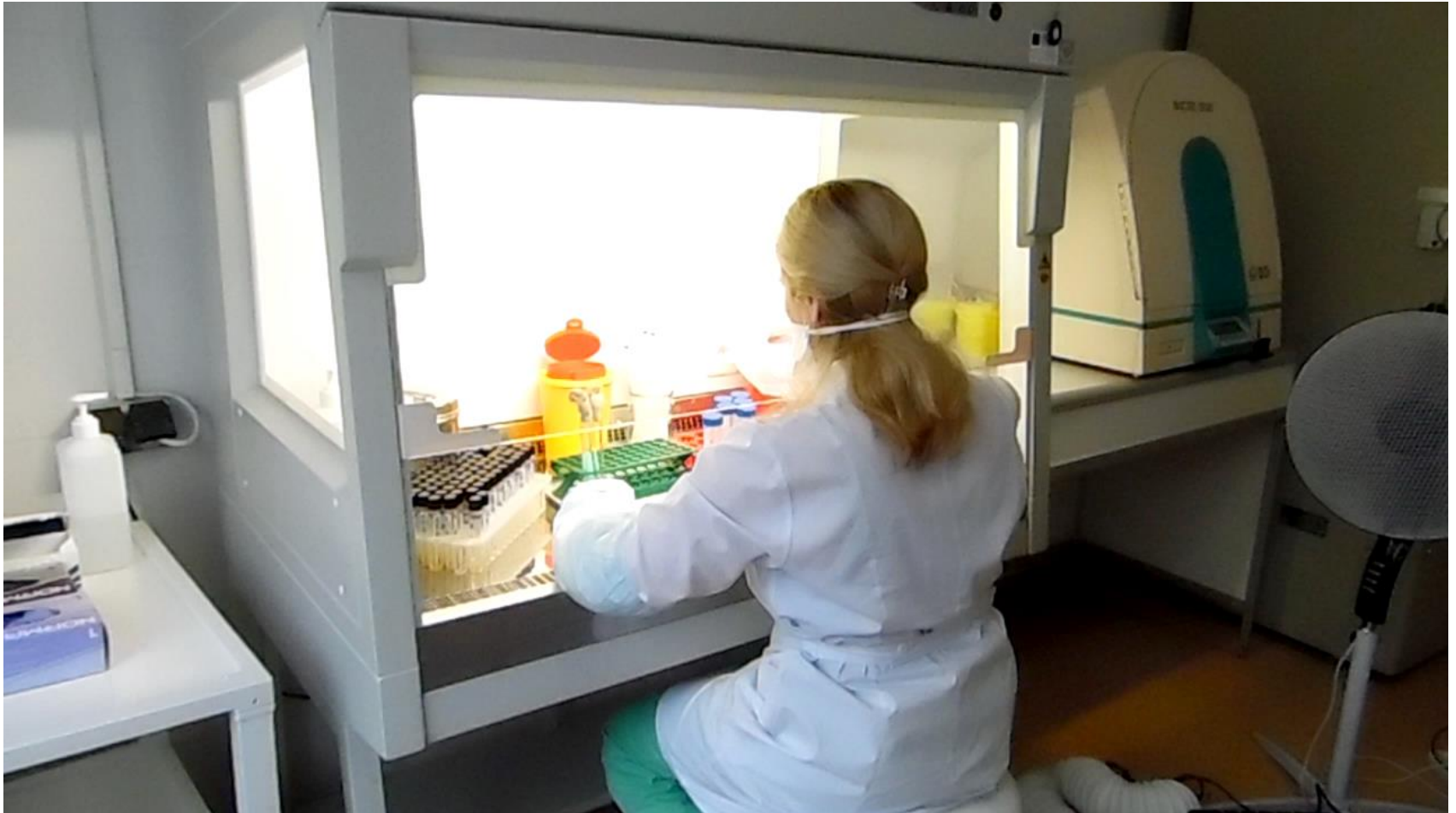


# What is wrong (1)?

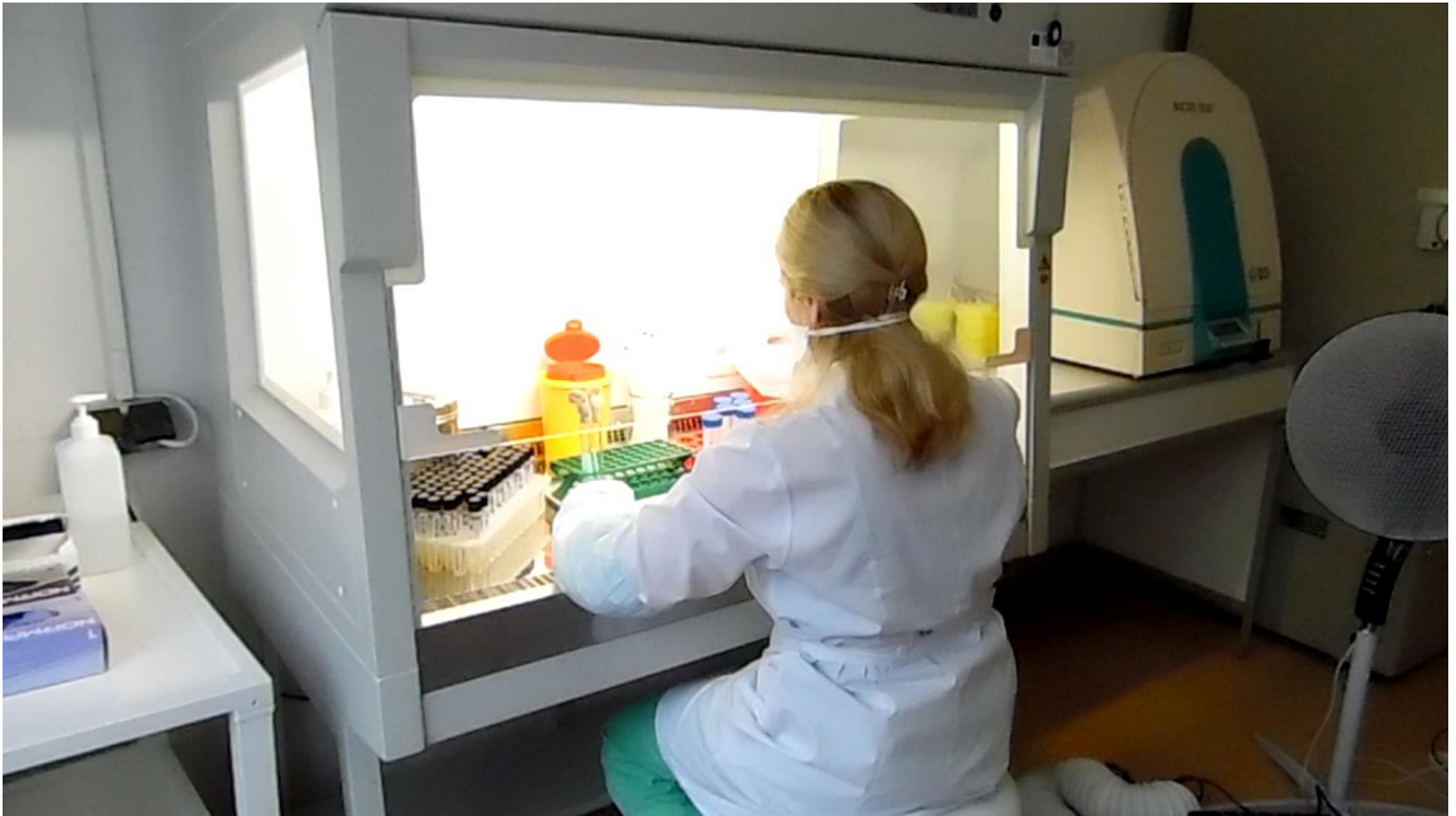
- Arm/elbow on the grille
- Crowded work area
- “Stuff” blocking grille in the back
- Tray blocking part of front grille
- Workflow poor . . . “clean” and “dirty” not separated
- Cooling fan blowing across opening to BSC
- Open flame (alcohol) in BSC
- And more!



# What is wrong (1)?



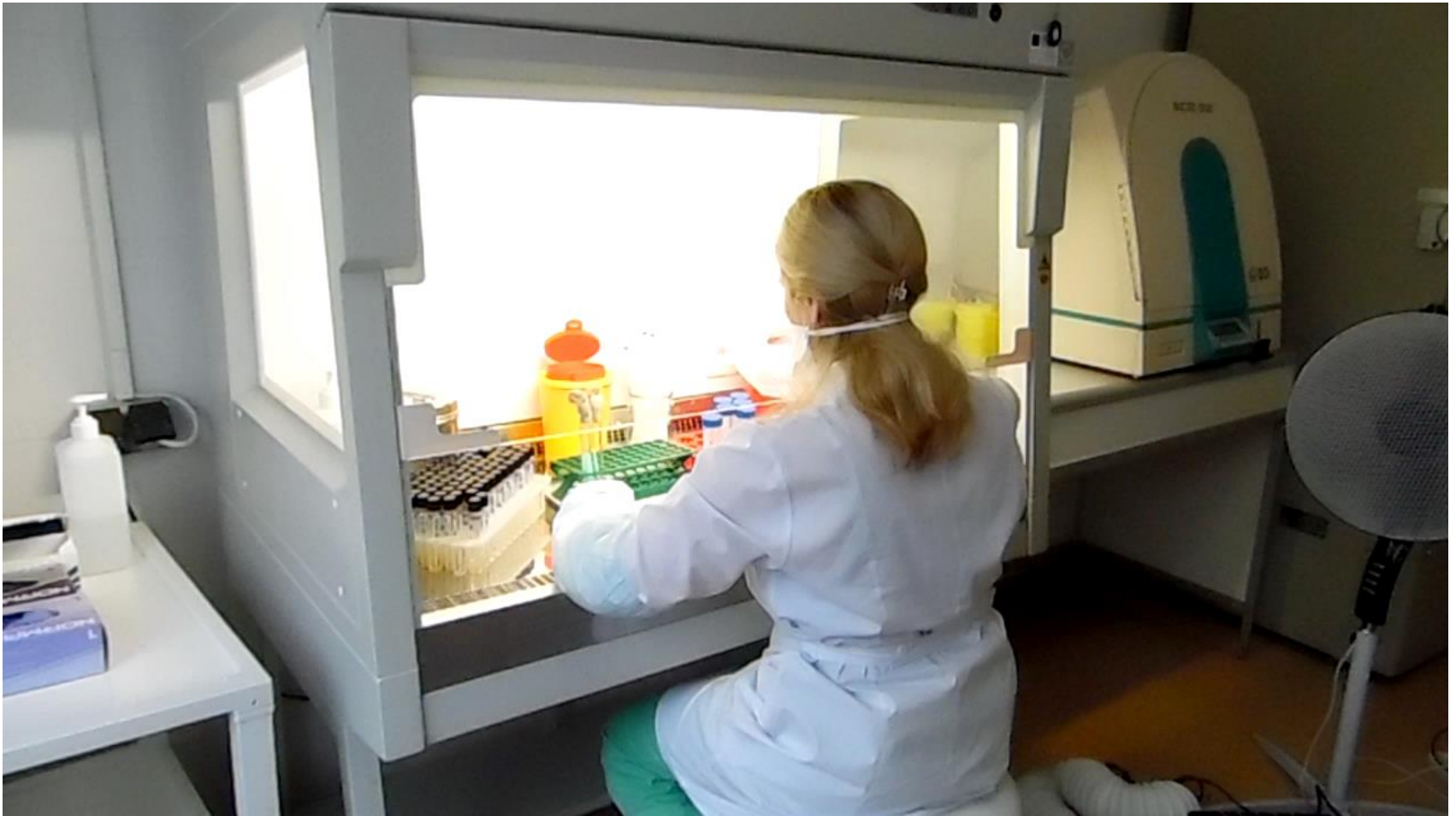
# What is wrong (2)?



# What is wrong (2)?

- Arm/elbow still on the grille
- Other lab worker handing supplies without PPE
- Supplies coming into BSC not disinfected
- Supplies going out of BSC not disinfected
- Putting trash in sharps container
- Blocking rear grille even more!
- Respirator not worn properly
- Other lab staff walking too close to the BSC
- And more!

# What is wrong (2)?



# While Working in the BSC (1)

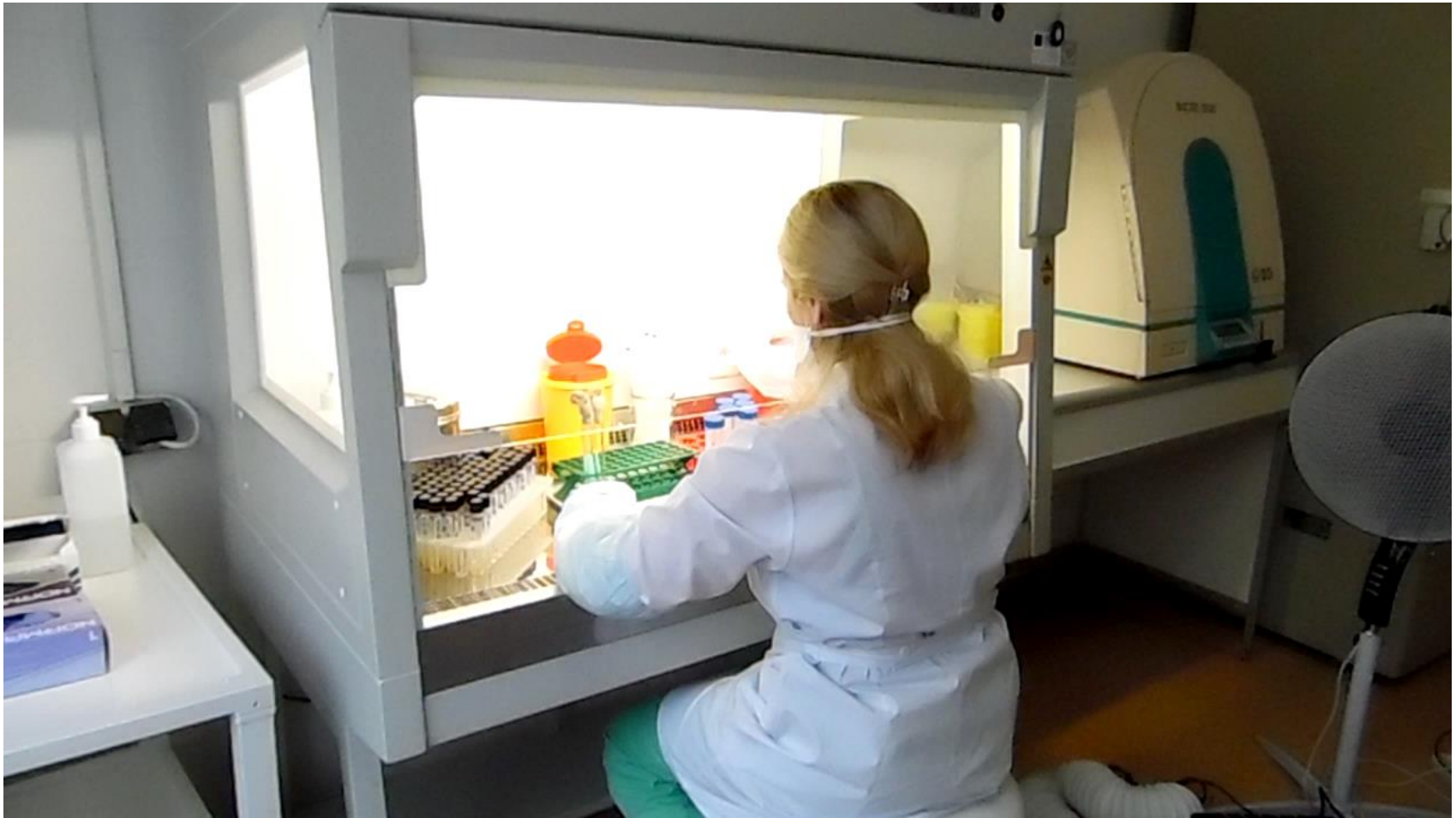
- In order to prevent air disturbances that can breach the air barrier, never have more than one person at a time use a cabinet.
- Delay manipulation of materials for approximately one minute after placing the hands/arms inside the cabinet. Do not rest arms on the front grille. Raising arms slightly will lessen disruption of air flow.
- Work as far back in the cabinet as practical — at least 10 cm inside the front grille edge.
- Move arms slowly and limit arm movement in and out of cabinet.

# While Working in the BSC (2)

- As a general rule of thumb, the workflow should be from "clean to contaminated or dirty (e.g., from left to right)". Working in the BSC eliminates the need to flame bottlenecks when pouring liquid.
- Do not hang bottles of disinfectant from the front grille. The disinfectant bottle should be kept inside the BSC until all items have been disinfected and removed.



# One more time! What is wrong?



# After Work is Complete

- Wipe down the surfaces of all containers and equipment with an appropriate disinfectant and remove from the cabinet.
- Leave blower on for several minutes with no activity so that any airborne contaminants will be purged from the work area.
- Wipe down the cabinet interior with disinfectant.
- Remove gloves and wash hands.



Questions? Comments?