

Staff Huddle: Environmental Controls-Using infection control actions to keep germs from being breathed in-Week #1

- You can understand the risk by identifying the pathways and how germs are being spread.
- Germs live in the respiratory system and spread through droplets in the air from talking, breathing, coughing, and sneezing.
- As germs go through the air, they are spread and can land on objects like tables, and bed rails where germs can be touched with our hands. Through touch, our hands can then spread the germs to other surfaces, including devices that are used on or in clients.
- Germs also live in dust and dirt and can be swept up into the air where germs can be breathed in.
- Germs can also spread through the air, enter the respiratory system, and cause infection. Actions taken to reduce germs from getting into the air can prevent germs from being breathed in.



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Many things that we do in health care (like oral care and nebulizer treatments) increase the risk of putting respiratory droplets and germs into air.

Reduce germ spread from respiratory droplets by:

- **Clean your hands** with alcohol-based hand sanitizer or soap and water to prevent the spread of germs by touch.
- **Use source control.** PPE can be used for source control. PPE can help prevent the spread of your germs to clients and co-workers. PPE can also protect you when clients are on isolation precautions. Source control can also be as simple as putting on a mask if you have a cough.
- **Perform** respiratory etiquette. ^{1,2,5}
 - Clean your hands with alcohol-based hand sanitizer or by washing with soap and water to effectively stop the spread of germs. Hands are the main way germs are spread.⁹
 - Cover your mouth and nose with a tissue when coughing or sneezing.
 - Dispose of used tissue in the nearest waste receptacle.



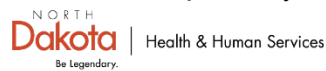
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- Properly maintained ventilation systems remove particles or contaminants from the air that should not be inhaled, such as viruses and other germs.⁶
- **The purpose of HVAC (Heating, Ventilation, and Air Conditioning)/Ventilation systems is:**⁴

- Heating or cooling of spaces.
- Adjusting relative humidity of air.
- Establishing directional airflow or pressurization relationships between spaces.
- Filtering and diluting recirculated air.
- Flushing contaminants in the air from enclosed spaces.
- **The HVAC system also has an infection control role.**

What is an HVAC System's role in infection control?⁴

- Provides continuous airflow through spaces to dilute contaminant levels (air change).
- Filtration of air to remove contaminants.
- Exhausting air as appropriate to remove contaminants, preferably at their source.
- Balances or creates air pressure changes from space to space. For example, the hall into the room. "This directional airflow keeps contaminants out of the positive space and inside the negative space."⁴ For example, this works well for rooms when needed to isolate someone and for keeping contaminants in the dirty laundry area.



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Additional steps to help prevent the spread of airborne contaminants including viruses and germs through the air^{1,4,6}

- **Report** any concerns of any blocked building interior or exterior vents to your supervisor. **Do not block** any vents or air intakes.
- **Proper general cleaning:** change bags and filters in vacuums, clean fans on any equipment (like floor cleaners), cleaning air vents and return vents in rooms. Follow your facility's cleaning policies and procedures.
- **Wear proper PPE** for the situation per isolation/CDC recommendations; ask your supervisor or the nurse if have any questions.
- **Keep doors** to rooms **closed** as per isolation precautions.
- **Keep windows closed** so air system can work properly.

If we can identify the pathway and how germs are being spread, the use of the proper infection control actions can reduce the spread of germs through the air pathway. ^{1,2}



References:

1. [Infection Control Basics | Infection Control | CDC](#)
2. <https://www.cdc.gov/infection-control/projectfirstline/index.html>

3. [Infection Control in Health Care: An Overview | Project Firstline | CDC](#)
4. [Ventilation Quick Guides | ASHE](#)
5. [Germs can live in the respiratory system](#)
6. <https://www.cdc.gov/infectioncontrol/projectfirstline/index.html>
7. [Healthcare Providers | Hand Hygiene | CDC](#)
8. [Infection Control Guidance: Respiratory Viruses | Project Firstline | CDC](#)
9. <https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/respiratory-virus-prevention.html>

Other Resources:

1. [Guidelines for environmental infection control in health-care facilities; recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee \(HICPAC\)](#)
2. [Infection Control in Health Care: An Overview | Project Firstline | CDC](#)
3. [Infection Control Basics | Infection Control | CDC](#)
4. [ASHE Ventilation e-Learning Course | ASHE](#)