



# Update on Best Practices for Ventilation of Isolation Areas to Minimize Airborne Infectious Disease Transmission

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California Department of Public Health (CDPH)  
Center for Health Care Quality  
Skilled Nursing Facilities Infection Prevention Call

## Frequently Asked Questions

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[https://www.hsag.com/globalassets/covid-19/cdph\\_faqsipwebinars.pdf](https://www.hsag.com/globalassets/covid-19/cdph_faqsipwebinars.pdf)

Do nursing homes need to transfer residents with COVID-19 if they do not have a true airborne infection isolation room (AIIR)\*?

## Cal/OSHA Aerosol Transmissible Diseases (ATD) regulation (Title 8, [§5199. ATD](#))

- Requires isolation of patients having airborne infectious diseases in AIIRs.
- Lists diseases requiring airborne infection isolation (All) [§5199. Appendix A](#),
- Requires transfer to an AIIR either in the facility or in another facility within 5 hours of identification.
- Where transfer is not available, §5199(e)(5)(B)2 requires that there be documentation by the employer at the end of the 5-hour period, and at least every 24 hours thereafter.
- **However, there is a novel pathogen exception...**

\*A true AIIR is an AIIR defined by ASHRAE 170

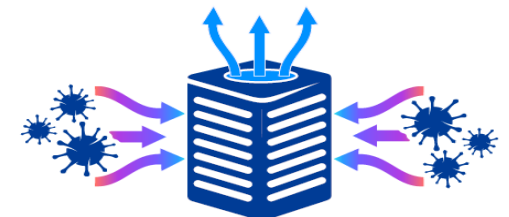
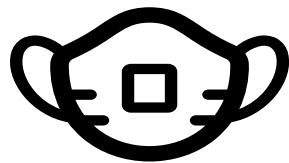
# Cal/OSHA Aerosol Transmissible Diseases (ATD) Regulation (8CCR 5199) Novel Pathogen Exception:

SARS-CoV-2 is considered a novel pathogen under the standard.

For novel and unknown pathogens, facilities must place residents in an AIR, **unless doing so is not feasible.**

“When it is not feasible to provide All rooms or areas... the employer shall provide **other effective control measures** to reduce the risk of transmission to employees, which shall include the use of respiratory protection...”

Decisions about whether it's safe and/or feasible to transfer a patient or isolate on site should be made with the LHO.



# Did Cal/OSHA Define “Other Effective Control Measures”?

- **No.**
- Cal/OSHA does not specifically define “other effective control measures”
  - Effective control measures are **in addition** to providing respiratory protection that must be worn inside the isolation room/area.
- The novel pathogen exception in the Cal/OSHA standard is a **performance standard**, not a specification standard.
  - Flexible
  - Enforceable
- The facility must demonstrate that the measures implemented are effective.



**Today, in  
2023, what will  
Cal/OSHA cite  
a skilled  
nursing facility  
for?**

Specific to the novel pathogen exception, Cal/OSHA would evaluate the employer's respiratory protection program, the written procedures/methods for providing effective control measures, their implementation, and then make a determination on effectiveness. (§5199(d)(5)(B))

Examples of recent citations:

- The employer did not implement a respiratory protection program for staff that enter an isolation room/area.
- The employer housed cases or suspected cases of COVID-19, an airborne infectious disease caused by the novel pathogen SARs-CoV-2, without meeting the conditions of either exception to section §5199(e)(5)(B).

# CDPH Best Practices for Ventilation of Isolation Areas



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**GAVIN NEWSOM**  
*Governor*

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**TO:** Skilled Nursing Facilities, Long-Term Care Facilities, Hospices, Drug Treatment Facilities, and Homeless Shelters

**SUBJECT:** Best Practices for Ventilation of Isolation Areas to Reduce COVID-19 Transmission Risk in Skilled Nursing Facilities, Long-Term Care Facilities, Hospices, Drug Treatment Facilities, and Homeless Shelters

# Are portable air cleaners mandatory in isolation rooms/areas?

**No. But they can be an effective control measure.**

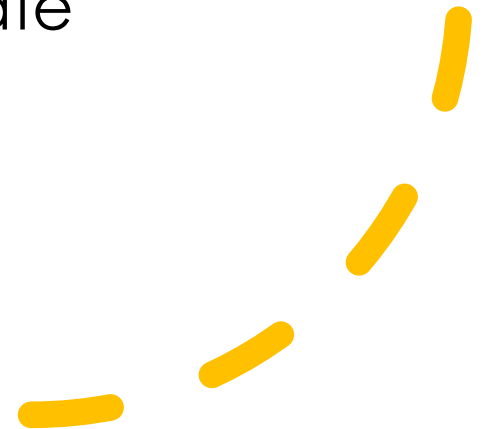
- **CDPH recommends** portable air cleaners (PACs) if the facility is not able to achieve a minimum of 6 air changes per hour using their HVAC system. Using a HEPA-filtered PAC is the easiest way remove virus from the air and protect staff, other residents, and visitors.



# Are portable air cleaners mandatory in isolation rooms/areas?

## **The Cal/OSHA ATD regulation does not specify:**

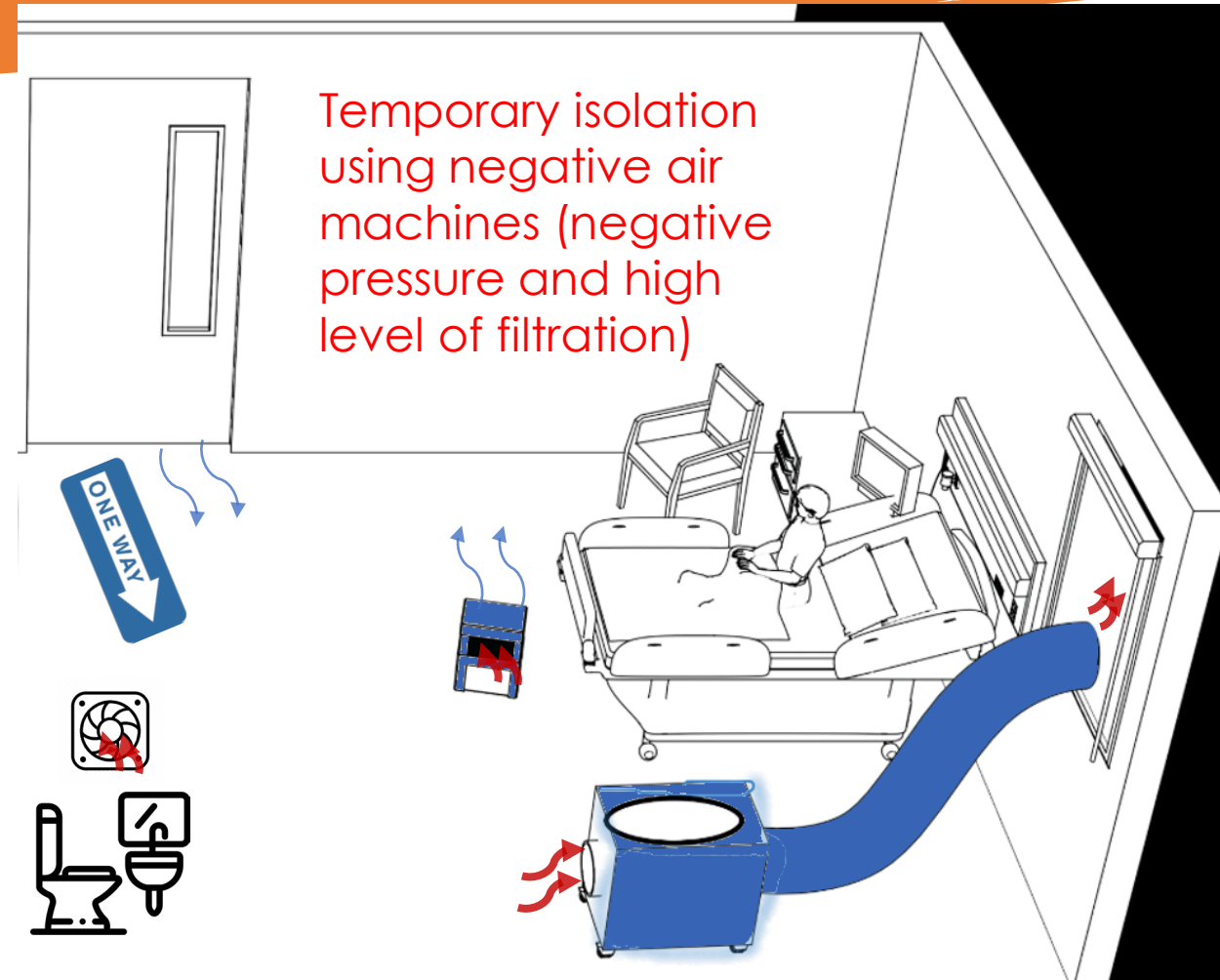
- Type of air filtration, how air is exhausted, or the number of air changes per hour within an isolation room or area.
- Employers can use the CDPH guidance, consensus standards (i.e., ASHRAE 170), or published literature to demonstrate effectiveness.



# What is the CDPH Best Practice Guidance for Temporary Isolation?

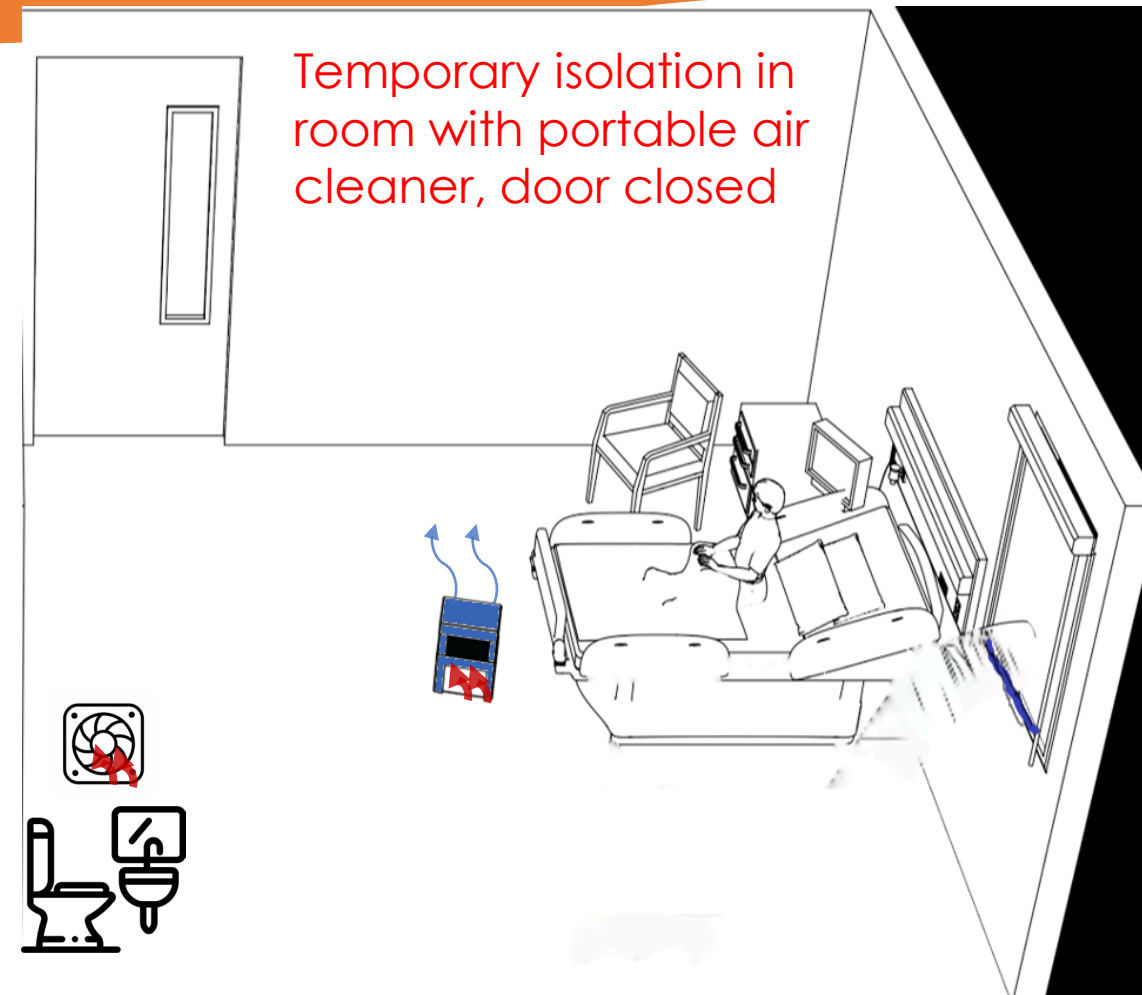
Consult with experienced professionals to:

- Create negative pressure inside the room by installing a negative air machine
- Continuously provide the room with minimum of six air changes per hour.
- Exhaust air from rooms directly to the outdoors.
- Prevent recirculation of isolation room air to other sections of the facility.



# What are the CDPH Best Practice Recommendations? (Easiest-to-implement)

- Care for Covid-19 positive residents in a single-person room
- Keep doors to isolation rooms closed
- Increase filtration in the room by using **portable air cleaners**
- Run the bathroom exhaust fan



# HEPA-filtered Portable Air Cleaners



**Portable Air Cleaner with HEPA air filter & exhaust option for negative pressure**



**Negative air machine ducted out the window**

How can a provider demonstrate that the control measures they implement are effective?

Maintain an Infection Prevention Plan with **written procedures/methods** for providing effective control measures. (§5199(d)(2)(G))

- Describe your ventilation and filtration methods (see CDPH Best Practices).
- Test the direction of airflow (inward). Use a tissue or non-toxic smoke

# Checking negative airflow



**Checking negative pressure with a tissue**

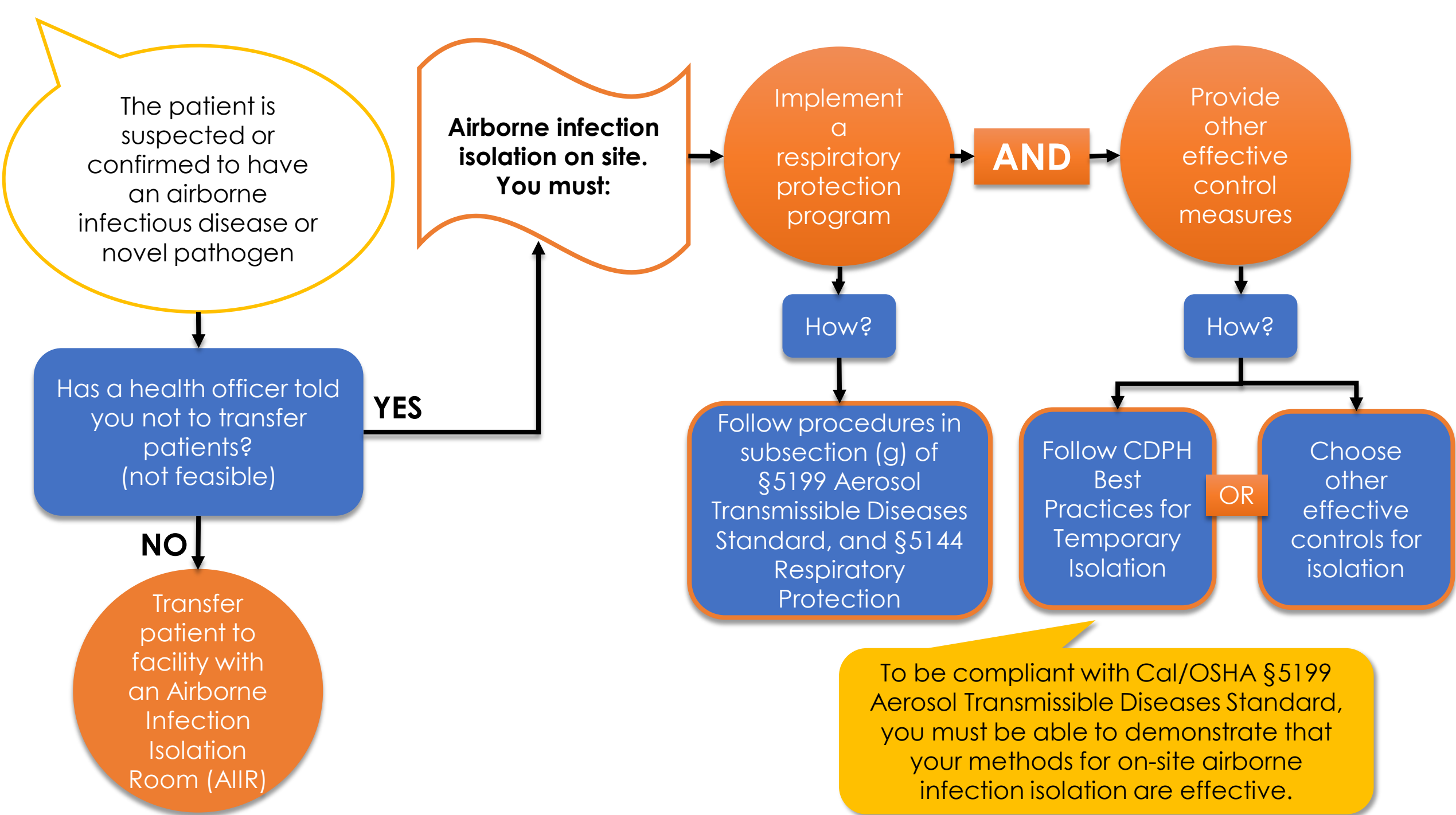


**Non-toxic smoke following airflow into the room**

# Are AIIRs required for High Hazard Procedures?

Yes. The exception to providing AIIRs for COVID-19 patients does not apply to high hazard procedures.

- High-hazard procedures must be done in AIIRs, and staff must wear powered air purifying respirators (PAPRs).
- N95s are not sufficient for high-hazard procedures.
- The only exception to using an AIIR for high-hazard procedures is where an AIIR is not available and the delay of a procedure would be detrimental to the health of the patient.



The patient is suspected or confirmed to have an airborne infectious disease or novel pathogen

**Airborne infection isolation on site. You must:**

Implement a respiratory protection program

**AND**

Provide other effective control measures

Has a health officer told you not to transfer patients? (not feasible)

**YES**

**NO**  
Transfer patient to facility with an Airborne Infection Isolation Room (AIIR)

How?

Follow procedures in subsection (g) of §5199 Aerosol Transmissible Diseases Standard, and §5144 Respiratory Protection

How?

Follow CDPH Best Practices for Temporary Isolation

**OR**

Choose other effective controls for isolation

To be compliant with Cal/OSHA §5199 Aerosol Transmissible Diseases Standard, you must be able to demonstrate that your methods for on-site airborne infection isolation are effective.