Spray polyurethane foam insulation

Identify controls

- Read the safety data sheet (SDS) for spray foam insulation to understand the hazards and how to protect yourself.
- Enclose the spray areas and allow only those workers with proper protection to enter.
- If possible, schedule all other types of work at least 30 minutes after spraying has stopped to allow the foam to cure.
- Ventilate the area using an air mover and introduce fresh air into the space by using an air blower.
- If you spray polyurethane foam insulation, you should wear a full facepiece supplied-air respirator with breathing air taken from a clean area.
- The helper and other tradespeople who must work in the restricted area should wear a full facepiece air-purifying respirator equipped with a combination organic vapour/N100 filter cartridge. Check with the manufacturer to see how often the cartridge should be changed.
- Before using a respirator, you must be fit tested and trained to correctly use and maintain it.
- Avoid skin contact by using rubber gloves and coveralls when spraying.
- Wash your hands and face before eating, drinking, and smoking and after you’re finished working with insulation.
- Secure and cover containers of liquid isocyanates to prevent evaporation.

Explain dangers

You are at risk if you work with freshly applied polyurethane foam insulation or work near someone who does.

Spray polyurethane foam insulation can contain isocyanates, which are chemicals that can cause a severe allergic reaction and lead to breathing difficulties (i.e., asthma attack).

It may take time to develop the allergy (weeks or years). But once you have become allergic, just one drop of isocyanate can trigger an asthma attack.

Other health hazards associated with isocyanates include
- Irritation to the skin, eyes, nose, throat, and lungs
- Coughing, chest pain, and fluid in lungs
- Difficulty breathing.

Demonstrate

Get an SDS for spray foam polyurethane insulation and review its ingredients and its recommended exposure controls/personal protection requirements with your crew.

Review your company’s rules and procedures on respirators.