

CO₂ Exposure in Potato Barns

Fortunately, a worker exposed to high levels of carbon dioxide (CO₂) in a potato building suffered no permanent injuries.

Fresh potatoes naturally produce carbon dioxide, which extends the commercial life of potatoes. On average, potatoes produce 5 mg/hour of CO₂ gas. This level is safe when the potatoes are stored in an adequately ventilated building, but quickly becomes dangerous when the ventilation systems are not working. New, airtight storage facilities pose an even greater risk because they have no exposure to air. Depending on the size of the potato building and the amount of potatoes, the environment can become immediately dangerous and even deadly within a day.

Recommended Preventive Action

- No one should enter a potato building without ensuring that the ventilation system is fully operational.
- Workers who routinely visit these storage facilities must wear a CO₂ gas monitor that provides an audible alarm should the levels become dangerous.
- Growers must post a sign forbidding entrance and indicating this environment is hazardous. They are also strongly encouraged to install a CO₂ and an oxygen (O₂) sensor into the computer systems in their potato buildings to monitor the gas levels.

