

WorkSafe Bulletin

The dangers of cross bores when directional drilling

Horizontal directional drilling can result in unintended intersections with existing utilities. This is commonly known as a "cross bore." Cross bores can be a serious threat to the safety of workers and the public if a gas line in a cross bore is inadvertently broken.

What is horizontal directional drilling?

Horizontal directional drilling is a trenchless installation technique commonly used to install underground utilities, such as gas and electrical lines. This installation method is useful because it minimizes disruption to the surface and to traffic.

What are the dangers?

When directional drilling, it's possible to inadvertently and unknowingly drill through an existing utility, creating a cross bore. If a gas line intersects a sanitary or storm sewer, the cross bore may go undetected until debris builds up around the line, causing a blockage in the sewer. Clearing the blockage by flushing the sewer line or using a power auger could damage the gas line and cause gas to leak into nearby connected buildings.

The gas concentration in the air can quickly reach the explosive range. Sparks from electric motors and switches or pilot lights can ignite the gas-air mixture, possibly causing an explosion that could destroy an entire building and result in serious injury or death.



How to proceed safely

Before excavating or drilling with powered tools or equipment, accurately locate all underground utilities in the area. Never use pointed tools to verify the location of underground utilities. You should contact BC One Call for information.

When excavating or drilling near an underground utility service, follow the requirements of the owner of the utility service.