# The Silent Dangers of Confined Space Fatality File



## Four workers die in confined space of barge.

A 342-foot barge was undergoing maintenance in New Westminster. Workers were carrying out a variety of repairs on the barge, including repairs to manhole covers that access void compartments in the hull. The compartments are considered “confined spaces.” A supervisor went missing and another worker located him in the bottom of a compartment within the hull. Three other workers, one by one, entered the compartment to rescue their colleagues and lost consciousness. Ultimately four workers died from oxygen deprivation, and one suffered injuries. A firefighter was also injured in a rescue attempt.

**Conclusions**

**Findings as to causes.**

- A marine service worker entered a confined space in the hull of a barge. Other workers entered in a rescue attempt. Four workers died of oxygen-deficiency, and another worker and a firefighter were injured.

**Findings as to underlying factors.**

- Westminster Marine Services did not have a confined space program. Workers entered a confined space without pre-entry air testing being conducted, without mechanical ventilation of the void space, without a standby person being designated, and without a rescue plan in place. When the manhole covers were removed, access to the barge compartments was not restricted or controlled.
- There was no written procedure for checking the well-being of workers working alone or in isolation.
- The occupational health and safety program did not contain specific procedures for workers to follow in situations likely to be encountered, including confined spaces.
- During a rescue attempt, the marine service workers and the first firefighter entered the confined space before a hazard assessment or air testing could be conducted and before back-up and rescue were in place.