High Sewage Nitrogen Levels Kill Worker

MIDDLETOWN, Ohio (AP) — A city maintenance worker was exposed to high levels of nitrogen when he lost consciousness and fell about 30 feet into a manhole above a sewer line, according to tests taken as part of an investigation into the man's death.

Air in the sewer line was composed of 92 percent nitrogen, authorities said. Normal air breathed by humans is 78 percent nitrogen.

Authorities have not determined the source of the nitrogen but have closed off the manhole and say there is no public risk.

Maintenance worker Jabin Lakes, 31, opened the manhole cover as part of a routine inspection May 7. Three firefighters who tried to rescue Lakes also were overcome by something in the air and taken to hospitals.

A coroner's report indicated that Lakes did not die from the fall, but may have died from a lack of oxygen.

City Manager Judy Gilleland said Lakes' death is consistent with nitrogen asphyxiation, though toxicology reports are pending.

Such high levels of nitrogen would quickly lead to asphyxiation, said Dr. Paul Jennewine, Medical Director for the Middletown Health Department.

In just two or three breaths, or about 15 seconds, the person would become disoriented, he said. Within just a few minutes, brain function, breathing and heart action would stop.

Tests to determine the source of the nitrogen began Friday and were to continue throughout the weekend in this city about 25 miles north of Cincinnati.

Nearby companies such as AK Steel Corp. and Air Products and Chemicals Inc. were cooperating, said city law director Les Landen.

Nitrogen gas is commonly used in numerous steelmaking, said AK Steel spokesman Alan McCoy. The gas is delivered via three pipes routed under and above ground in various places, he said.

Lakes, the father of two daughters, was buried Thursday.

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