

## **Hog factories bring illness to workers and neighbors from the Iowa Environment Quarterly (Summer 2001)**

The smell of Iowa's large hog confinement operations is not very neighborly. And there is growing evidence that air pollutants are making people sick.

Air pollutants from hog facilities include around 160 volatile compounds, including hydrogen sulfide and ammonia, as well as organic dust and endotoxins.

All of these pollutants are a serious risk for workers, but hydrogen sulfide is particularly dangerous.

The OSHA standard for workers is 10 parts per million (ppm) of hydrogen sulfide for an eight-hour day. Concerns are vomiting, nausea, and diarrhea. At high levels (greater than 500 ppm), death can occur. In fact, OSHA catalogued 22 hydrogen sulfide deaths in manure pits in the United States between 1980 and 1989.

Nearby neighbors also are at risk. Neighbors are exposed 24 hours a day, seven days a week. Neighbors include more vulnerable populations, such as children and the elderly. To protect these individuals, the Agency for Toxic Substances and Disease Registry recommends a guideline of .07 ppm.

Several studies, including surveys in North Carolina and Iowa, have found that people living near hog factories suffer from increased respiratory problems, headaches, diarrhea, and other problems.