



Iowa Department of Public Health – Assistance for Drinking Water Supplies

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Overview

- Grants to Counties Program
- Hazardous Waste Site Health Assessment Program
- Nitrates and Nitrites



Grants to Counties

- Provides grants to county health (sanitarians) from monies obtained from pesticide/fertilizer taxes
- Eligible Costs:
 - Private water well training expenses
 - Equipment related to sampling
 - Advertising and promotion of program
 - Water well tests (at minimum nitrates, nitrites, and total coliform bacteria)
 - Abandonment and plugging of private wells and cisterns
 - Well reconstruction (private wells)
- Last year the amount available per county was: \$16,979



Grants to Counties (Cont.)

- Contracts are renewed at July 1 every year
- Currently 98 counties participate in the Grants to Counties program
- For more information contact Carmily Stone at (515) 281-0921



Hazardous Waste Site Health Assessment

- Program funded by the Agency of Toxic Substances and Disease Registry (part of CDC)
- Complete evaluation of exposures to chemicals and substances associated with a specific site and potential risks to public health
- Three types of services
 - Health Assessments
 - Evaluation of all exposures at a particular site
 - Health Consultations
 - Answer a particular question or single route of exposure
 - Health Education and Promotion
 - Community outreach, fact sheets, physician education



Hazardous Waste Site Health Assessment Projects

- Superfund National Priority List (NPL) Sites
- Abandoned or uncontrolled contaminated sites
- Brownfield Sites
- Spill sites or sites caused by disasters
- Sites impacting private or public drinking water supplies
- Sites where the public has expressed health concerns or need accurate health information



Hazardous Waste Site Health Assessment Program Web Site

- Can provide a health consultation on the exposure to any chemicals detected in a water supply
- Web address:
http://www.idph.state.ia.us/eh/hazardous_waste.asp
- Information on the web site includes a summary of program and listing of recently complete assessment and consultations, and fact sheets



Nitrate and Nitrite

- One source of nitrate (NO_3) and nitrite (NO_2) are nitrogen-based fertilizers. The main source of nitrites is food (processed or preserved meats).
- Nitrates are relatively non-toxic. When swallowed, they are converted to nitrites that can react with hemoglobin in the blood, oxidizing its divalent iron to the trivalent form and creating methemoglobin.
- Methemoglobin cannot bind oxygen, which decreases the capacity of the blood to transport oxygen from the lungs to body tissues.
- The higher pH of infants will convert more nitrate to nitrites putting infants at greater risk for methemoglobinemia.
- Nitrate at or lower than 10 mg/l and nitrite at or lower than 1 mg/l pose no risk to infants.

