Frequently Asked Questions About **Selenium**

What is selenium?

- Selenium is a naturally occurring element found in rocks, soil, water, plants and animals.
- A small amount of selenium is necessary for human health and is a normal part of a healthy diet.
- Selenium is also present in the environment from mining operations and industrial activity such as the production of paints and metalworking.

How are people exposed to selenium?

- Eating food or taking supplements containing selenium. Selenium is found in meat, eggs, fish, poultry, nuts and grains.
- Drinking water containing selenium.
- Breathing dust or eating dirt containing selenium near industrial sites, mining sites or coal-burning power plants.
- Breathing or touching selenium during work. Workplaces that commonly involve selenium include metal industries, selenium-recovery processes, paint manufacturing plants and special trades.

How can selenium harm people's health?

Most people will be exposed to small amounts of selenium during their lifetime because it is commonly found in the environment and part of a healthy diet. Selenium is usually not harmful, but high amounts can increase the risk of health effects, including:

- Respiratory tract irritation, bronchitis and difficulty breathing when large amounts are breathed in.
- Stomach pain, nausea, vomiting, diarrhea and a disease called selenosis. These are due to large amounts of selenium consumed in water or overuse of supplements containing selenium.
    - The major signs of selenosis are garlic odor on breath, hair loss, nail brittleness, fatigue, irritability and mild nerve damage.

How can people reduce their exposure to selenium?

- Find out if there is selenium in private drinking water by having private drinking water wells tested for selenium.
    - Michiganders can find more information on testing and maintaining their private well at bit.ly/CareforMiWell, by calling MDHHS at 800-648-6942 or contacting their local health department.
- Learn more about the results from selenium testing of drinking water that comes from public water supplies.

- For reports on public water supplies, check the United States Environmental Protection Agency's Consumer Confidence Reports (CCRs) at epa.gov/ccr or contact your local water utility.

- Follow Eat Safe Fish guidelines for sport-caught and store-bought fish and wild game. Guidelines are available at Michigan.gov/eatsafefish.
- Thoroughly clean produce and peel the outer skin from root vegetables (e.g., carrots, beets, turnips) to remove dirt.
- Do not take more dietary supplements than recommended on the product label or by a doctor.
- When working at a job with the potential for selenium exposure:
  - Practice good personal hygiene by washing hands often, especially before eating or drinking, and by showering after working.
  - Use personal protective equipment (PPE) as directed.
  - Do not eat, drink, smoke or vape in the workplace.

Questions?

Call 1-800-648-6942 or visit Michigan.gov/DEHBio and click on "MiChEM" to view additional resources.