What is beryllium?

Beryllium is a naturally occurring element that is lighter than aluminum and stronger than steel. It is refined for use in many applications including electronics, nuclear power, aerospace and metals manufacturing. Beryllium is classified as a human carcinogen by the World Health Organization’s International Agency for Research on Cancer (IARC). As with any toxic substance, workers and the public must be informed about protections to prevent harmful exposures. If you believe there is exposure to beryllium in your workplace, contact the United Steelworkers Health, Safety and Environment Department for further assistance.

What is Chronic Beryllium Disease (CBD)?

CBD, or berylliosis, is an allergic reaction to beryllium that mostly affects the lungs and causes inflammation and scarring of lung tissue, making it harder to get oxygen into the bloodstream. CBD can occur after a few months of exposure or can take as long as 30 years to develop.

What is beryllium sensitization?

Beryllium sensitization is an immune system response, or allergic reaction, that happens to some people after exposure to beryllium dust or fumes. It has no symptoms, and must be diagnosed with a blood test. In order to develop CBD, you must first become sensitized to beryllium.

What are the symptoms of CBD?

Some of the symptoms of CBD include cough, shortness of breath, fatigue, weight loss and night sweats. You should ask your doctor about CBD and beryllium toxicity if you were exposed to beryllium and have any of these symptoms for more than three months. You may also want to be tested for CBD if you were exposed and have:

- Enlarged lymph nodes seen on a chest x-ray or CT scan
- Scarring on both lungs on a chest x-ray or CT scan, called “chronic bilateral pulmonary infiltrates”
- Lung or skin biopsy reports of granulomatous inflammation
- Prior diagnosis of chronic skin or pulmonary sarcoidosis

Are there medications to treat CBD?

Steroids or other medications that suppress the immune system may slow the progression of CBD, but there is no cure. Many of these medications can contribute to other conditions including infection, high blood pressure, diabetes, osteoporosis, glaucoma, cataracts, insomnia, gastroesophageal reflux disorder and weight gain. The best way to protect workers’ health is to prevent hazardous exposures in the first place. The USW is currently pushing for a strong, more protective OSHA beryllium standard. For more information, please refer to the USW fact sheet on beryllium.