Chronic Beryllium Disease

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, 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 substances, much care is needed to protect workers and the public. If you believe there is exposure to beryllium in your workplace, contact the USW HSE Department for further assistance.

What is Chronic Beryllium Disease (CBD)?
CBD is an allergic reaction to beryllium that mostly affects the lungs causing an inflammation and scarring of lung tissue, which makes it harder to get oxygen into the bloodstream. CBD can only be caused by the dust and fumes when beryllium is refined from its original form found in rocks and soil. CBD can occur after a few months or can take as long as 30 years to develop.

What are the symptoms of CBD?
Some of the symptoms include cough, shortness of breath, fatigue, weight loss and night sweats. You should ask your doctor about CBS and beryllium toxicity if you were exposed to beryllium and have any of these symptoms for more than 3 months.

You may also want to be tested for CBD if you were exposed and have:
1. Enlarged lymph nodes seen on a chest x-ray or CT scan;
2. Scarring on both lungs on a chest x-ray or CT scan, called “chronic bilateral pulmonary infiltrates;”
3. Lung or skin biopsy reports of granulomatous inflammation; or
4. Prior diagnosis of chronic skin or pulmonary sarcoidosis.

Are there medications to treat CBD?
Immunosuppressive medications can stop the progress of the disease in most cases. However, these medications may contribute to other conditions including infection, anxiety and depression, hypertension, diabetes, osteoporosis, glaucoma, cataracts, insomnia, gastroesophageal reflux disorder and weight gain.

Are there other illnesses associated with CBD?
If you have already been diagnosed with CBD, you may be at risk for and want to talk to your doctor about cor pulmonale, pulmonary hypertension, respiratory failure, beryllium dermatitis/skin nodules, anxiety and depression.

This factsheet was based on information from the US Department of Energy Office of Health, Safety and Security. For more information: http://www.hss.doe.gov/HealthSafety/fwsp/advocacy/cbd