



# Roof Bolter Operator

**U.S. Department of Labor**  
**Mine Safety and Health Administration**    **Health Hazard Information Sheet HH-43**

Breathing mine air containing harmful levels of respirable coal mine dust causes coal workers' pneumoconiosis (CWP) and other lung diseases, collectively known as "black lung." We know that roof bolting machine operators often work downwind of continuous mining machines, the major dust generation source on continuous mining sections, and are often exposed to more toxic quartz-containing dust produced by their own machines when drilling, bolting, or cleaning the dust box. We also know that if these dusts are not adequately controlled, roof bolter operators can be exposed to excessive dust levels, putting them at risk of developing black lung.

MSHA has developed this guide to assist miners and mine operators in using all available tools to effectively control respirable coal mine dust levels to **END** black lung. **Act NOW!**

## **Roof bolter operators should ALWAYS:**

- Know and understand the dust control provisions of the mine's approved ventilation plan applicable to your mining section.
- Make sure that a complete on-shift examination of respirable dust controls has been conducted before production begins or continues.
- Examine the entire bolter dry dust collector system to ensure it is being maintained as approved and functioning properly. When checking the canister filter, carefully remove and inspect it. **DO NOT** attempt to clean it by dislodging caked dust from the filter media. Check for:
  - Proper vacuum pressure at drill head chuck
  - System vacuum leaks (smoke tubes can be used to locate leaks)
  - Broken or missing dust box door latches and warped and bent doors
  - Missing or leaking door gaskets
  - Condition, proper fit and seal of the filter element. Filters should be replaced, not cleaned and reused.

- Dust in the exhaust side of the collection system – filter sealing surface and through muffler.
- Properly installed sock on pre-cleaner (if equipped with one)
- Correct any deficiencies in the dry dust collection system before production begins or continues when “hot seating.”
- Maintain proper ventilation where the roof bolter is working as specified in the approved mine ventilation plan (if applicable).
- Maintain drill bits in good condition by checking frequently and changing bits when worn.
- Position yourself upwind and out of active roadways when emptying the dust box. Be careful not to get dust on your clothing.
- Avoid working downwind of the continuous mining machine and other dust generating equipment as much as possible.
- Leave idle equipment when it is parked downwind of the continuous mining machine.
- Check the operator bimonthly dust sampling results posted on the mine bulletin board.
- Request and use a properly fitted NIOSH-approved respirator when sampling results indicate the presence of excessive dust levels in your work location. (**Remember**, MSHA does NOT accept respirators as a primary means of dust control.)
- Participate in your mine’s free, confidential chest X-ray program, whose schedule is posted on the mine bulletin board, or from the visiting NIOSH X-ray van.

**--Remember--**  
**Black lung is NOT curable, but it is preventable!**

If you have questions about coal mine health matters, please contact your local MSHA office or see the MSHA website at [www.msha.gov](http://www.msha.gov).