



Highwall Drill Operator

**U.S. Department of Labor
Mine Safety and Health Administration**

Health Hazard Information Sheet HH-45

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." Mobile surface equipment such as highwall drills present unique problems in controlling exposure to respirable dust given their function and the number of miners working in and around the drill site. Surface drills may operate in locations exposed to haulage road dust and downwind of other dust generating equipment like bulldozers, trucks, and front-end loaders. Drill operators often drill into high quartz-containing overburden, presenting a significant health risk to those exposed since quartz dust, which can cause silicosis, is far more toxic to the lungs than coal dust alone. It should be noted that some of the most severe cases of silicosis have been observed in highwall drill operators.

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!**

Highwall drill operators should ALWAYS:

- Check to make sure the dust controls that the highwall drill you will be operating is equipped with are fully functional and operating as required.
- Examine the dry dust collection system completely, the most common type of dust control being used on drilling machines, to ensure it is being maintained and functioning properly. Report damaged, worn, or defective components immediately. Check for:
 - Proper contact of the drill deck shroud enclosure with the ground
 - Damaged duct work and holes which cause air leaks
 - Condition of the rubber drill deck bushing required for maintaining a good stem seal with the drill table
 - Missing or defective dust collector discharge dump shroud that ensures the dust from the collector is dumped close to the ground and not dispersed in the air

- Damaged or missing components
 - Dust coming from the collector's exhaust.
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- Check wet drilling systems for water leakage and adequate water delivery. **Never** drill dry.
 - Keep environmental cabs clean inside. Examine and maintain window and door glass and seals; and heating, ventilation, and air conditioning (HVAC) systems as specified by the manufacturer.
 - Clean or replace air conditioning and recirculation/pressurization filters as recommended by the manufacturer.
 - Keep cab doors and windows closed when drilling. Also, clean off boots when entering the cab to prevent the cab floor from becoming soiled and contaminating the air in the cab.
 - Use good housekeeping practices to clean environmental cabs. **Never** use compressed air or dry sweeping.
 - Position yourself out-of-the-dust when possible. Highwall drill operators and helpers should be upwind and clear of dust clouds.
 - 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.)

--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.