

## NSW mining and extractives industry

### Introduction to health monitoring

As outlined in [Safe Work Australia: Health monitoring for exposure to hazardous chemicals](#), health monitoring means monitoring a worker to identify changes in their health status due to exposure to certain substances. Health monitoring must be supervised by a registered medical practitioner with experience in health monitoring. There are different health monitoring techniques used to assess exposure and their health impacts, including:

- worker interviews
- medical examination
- biological effect monitoring.

### Legislative obligations

A person conducting a business or undertaking (PCBU) has an obligation to provide health monitoring for a worker if:

1. a worker is exposed to hazardous chemicals referred to in Schedule 14, table 14.1 of the Work Health and Safety Regulation 2017 (WHS Regs 2017) and there is a significant risk to their health or
2. there is a significant risk that a worker is exposed or will be exposed to a hazardous chemical not referred to in Schedule 14 and there is either a:
  - valid technique to detect the health effects or
  - valid way of determining biological exposure and it is uncertain whether the exposure has exceeded the biological exposure standard.

### Crystalline silica

Crystalline silica is an example of a chemical listed in Schedule 14 that may be present in mining and extractive work places. Refer to [www.legislation.nsw.gov.au/~view/regulation/2017/404/sch14](http://www.legislation.nsw.gov.au/~view/regulation/2017/404/sch14) for the full list of hazardous chemicals where health monitoring is required.

## Coal dust

Coal is an example of a chemical not included in Schedule 14 where health monitoring is required as there is a significant risk to worker health and x-ray and spirometry are valid techniques to detect the effect of exposure.

## Asbestos

Health monitoring is also required for exposure to asbestos if, as a result of asbestos-related work, a worker is at risk of exposure when carrying out that work.

## Health monitoring requirements for common hazardous chemicals in mining

Hazardous chemicals	Health monitoring requirements
<b>Crystalline silica and coal dust</b>	<ul style="list-style-type: none"><li>→ demographic, medical and occupational history</li><li>→ records of personal exposure</li><li>→ completion of standardised respiratory questionnaire</li><li>→ standardised respiratory function tests, for example forced expiratory volume (FEV), forced vital capacity (FVC), and FEV/FVC</li><li>→ chest x-ray full size PA (posterior anterior) view</li></ul>
<b>Lead (inorganic)</b>	<ul style="list-style-type: none"><li>→ demographic, medical and occupational history</li><li>→ physical examination</li><li>→ biological monitoring</li></ul>
<b>Asbestos</b>	<ul style="list-style-type: none"><li>→ demographic, medical and occupational history</li><li>→ records of personal exposure</li><li>→ physical examination</li></ul>
<b>Benzene (diesel)</b>	<ul style="list-style-type: none"><li>→ demographic, medical and occupational history</li><li>→ records of personal exposure</li><li>→ physical examination</li><li>→ biological monitoring</li></ul>

*Note: These are the most common health hazards found in mines but depending on the type of operation, other health hazards may be present.*

## Reporting health monitoring results

A copy of health monitoring results must be provided to the worker. If a health impact has been detected a copy of this report must be provided to any other PCBUs who may have a duty and the regulator.

The following information must be included in the report:

- Advice on test results that indicate the worker may have contracted a disease, injury or illness as a result of carrying out work with the chemical.
- A recommendation that remedial measures be taken in relation to whether the worker can continue to carry out work with the hazardous chemical that triggered the requirement for health monitoring.
- For lead risk work, test results that indicate the worker has reached a blood level at or above the relevant removal level.

The health monitoring, reports must be identified as a record in relation to that worker and must not include other information that is not connected to the health monitoring.