

Protecting workers from exposure to respirable crystalline silica

Guide to safe bench top fabrication and installation

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Protecting workers from exposure to respirable crystalline silica - guide to safe bench top fabrication and installation

Research in Australia and overseas has found that workers fabricating bench tops from stone can be exposed to levels of respirable crystalline silica (RCS) which are hazardous to their health. The effective control of occupational exposure can be achieved by the application of a range of known isolation, dust suppression, dust extraction, respiratory protection and housekeeping control options.

This guide outlines how to control exposure to airborne RCS dust in stone bench top fabrication and the health effects of breathing RCS dust.

Introduction

Stone benchtops are made from engineered stone. The crystalline silica content in stone bench tops can vary widely depending on the type of stone used.

Engineered stone bench tops can contain up to 95 per cent crystalline silica whereas a natural stone such as granite may contain from 20 to 60 per cent.

Crystalline silica commonly occurs in nature as the mineral quartz, and is found in granite, sandstone, quartzite, various other rocks, and sand.

Workers may be exposed to crystalline silica when cutting, grinding, sanding and polishing, or during the installation of stone bench tops. Exposure to very small particles of crystalline silica, called the 'respirable fraction' can lead to a range of respiratory diseases.

Generally workers have a higher risk of exposure to RCS during fabrication rather than installation of the stone benchtop due to less cuts and fabrication taking place.

Where no cutting, grinding, sanding or polishing of the benchtop occurs during installation then no RCS should be released.

Similarly, stone bench tops which are already installed in your home or workplace do not represent a risk to health unless they are cut, ground, sanded or polished.

Exposure to very small particles of crystalline silica (called respirable) can lead to a range of respiratory diseases.

Silicosis is a serious and irreversible lung disease that causes permanent disability and early death. Silica dust particles become trapped in lung tissue, causing inflammation and scarring, and reducing the lungs' ability to take in oxygen. Symptoms of silicosis can include shortness of breath, cough and fatigue. Silicosis can result from exposure to RCS over many years, but very high short-term exposures can cause it to develop rapidly.

Workers exposed to RCS are also at increased risk for chronic obstructive pulmonary disease (COPD), kidney disease and lung cancer.

Workplace Health and Safety Queensland (WHSQ) assessed worker exposure to respirable crystalline silica at ten stone bench top fabrication workplaces using personal exposure monitoring between November 2017 and May 2018. Workers reported previously fabricating stone bench tops without dust controls or adequate respiratory protection. Results of monitoring identified that RCS was not adequately controlled even when wet methods of fabrication were used. It was noted that applying water to rotating tools causes RCS contaminated water mist to be generated.

The stone bench top industry

Suppliers and distributors supply raw stone slabs, either natural (mostly granite) or engineered stone, to fabrication businesses. Workers cut, grind or polish stone as part of the

fabrication and installation of bench tops. Stone slabs are cut to size by a variety of methods, from the basic, using a grinder with a stone cutting wheel, through to bridge saws or sophisticated CNC routers or water jet cutters. Sink, stove or tap holes may either be cut at the factory or onsite during installation. Some bench tops require joinery of stone. This is completed by cutting, grinding and gluing smaller pieces of stone to the main bench top. After joinery, the edges are bevelled and bench tops are polished using handheld grinders, polishers, edge or surface polishing machines depending on the customer's requirements. Once finished, bench tops are installed into residential and commercial premises.

Why is crystalline silica a concern for workers in stone bench top fabrication and installation?

Activities including cutting, grinding and polishing stone generates dust containing respirable crystalline silica.

Engineered stone contains high amounts of crystalline silica.

Crystalline silica content in stone benchtops can vary widely depending on the type of stone. Engineered stone can contain up to 95 per cent crystalline silica whereas a natural stone such as granite may contain from 20 to 60 per cent. Generally, cutting, grinding, drilling, and polishing stone products with a higher silica content creates larger amounts of very small, crystalline silica dust particles that workers may breathe. Even though silica content is generally lower in natural stone products, workers can be exposed to levels of RCS which are hazardous to their health, if adequate controls are not used.

Certain tools release more respirable crystalline silica dust into the air.

Workers who operate powered hand tools to cut or grind stone, such as circular saws or grinders, have some of the highest RCS exposures of all fabricators. These tools are often used to complete tasks including cutting holes for sinks and stove tops or during shaping and joining stone. The tasks may occur in a workshop environment or on job sites during installation.

Workers performing other tasks in areas where powered hand tools are used may also be exposed to high levels of dust.

What can be done to protect workers from exposure to RCS?

The *Work Health and Safety Act 2011* (the Act) places duties on persons conducting a business or undertaking to ensure the health and safety of workers and others.

A combination of controls are required to protect workers' health including engineering, isolation, work practices, personal protective equipment, worker training and consultation.

Prohibit dry cutting, grinding or polishing

Dry cutting, grinding or polishing stone without water suppression or local exhaust ventilation generates very high levels of dust containing RCS. These levels can exceed the capabilities of half face respiratory protective equipment. For this reason, engineering controls must be implemented.

Use engineering controls

Properly designed water suppression and/or local exhaust ventilation provide the best protection. A combination of water suppression and local exhaust ventilation has been demonstrated to be more effective at reducing dust than either on their own.

Water suppression for fabrication and installation tasks:

- Only use tools and machinery that have been specifically designed for use with water attachments.
- Use an adequate number of water feeds directed at the material and/or tool to prevent visible dust during the process.
- Maintain an adequate water pressure to make sure water is reaching the material and/or tool.
- Control water spray from water suppressed tools and machinery using guards, plastic flaps or brush guards.
- Prevent workers from being able to turn water suppression systems down or off during operation.
- Use bridge saws fitted with water attachments to suppress dust when cutting slabs.
- Use water suppressed routers, water jet cutters or bridge saws to complete sink and stovetop cut outs.
- Use hand-held angle grinders fitted with multiple water feeds to deliver water to the cutting disc and point of contact with the stone.
- Use water suppressed wet-edge milling machines or polishing machines.
- Use polishers with a centre water feed to polish or grind stone.

Local exhaust ventilation for fabrication and installation tasks:

- Only use tools and machinery that have been specifically designed for local exhaust ventilation attachments.
- Use hand tools (for example drills, circular saws, grinders) equipped with a shroud and a H class rated vacuum.
- Install fixed, portable or flexible capturing hoods to capture dust at the point of generation.
- Use a combination of both water suppression and local exhaust ventilation controls, if necessary.

Isolate workers from dust generating processes:

- Provide distance between the work process and the worker (for example operators positioning when using bridge saws or routers)
- Provide distance between workers using powered hand tools and other workers at the workplace.
- Provide physical barriers between different workers and workstations to prevent the water mist moving into other work areas or towards other workers.
- Provide workers with a separate room or area away from the fabrication area for food preparation and dining.

Work practices:

- Use routers or water jet cutters for sink and stovetop cut outs and edge or surface polishing machines for edge polishing.
- Wet slabs before cutting, grinding or polishing to aid with dust suppression.
- Capture excess water generated from water suppressed processes through curbing and channelling.
- Prevent water pooling and drying on surfaces leaving dry dust deposits.
- Wash hands and face thoroughly before eating, drinking or leaving the workplace.
- Launder dusty work clothing at the workplace or use a commercial laundry to avoid taking them home.

Ventilation:

- Use mechanical extraction ventilation to remove contaminated air from the workplace or from a work area.

- Maintain a flow of air through open doors and windows to naturally dilute contaminated air.
- Move dust generating processes to a ventilated area (near a door or window) or outside to reduce the amount of contaminated air inside the building.

Cleaning and housekeeping:

- Implement daily and thorough housekeeping and cleaning procedures for water slurry and settled dust.
- Use low pressure water, wet sweeping or a H class rated vacuum cleaner to clean floors, walls and other surfaces.
- Regularly clean vehicle track or high use areas and keep them wet during the day.
- Prohibit the use of dry sweeping or compressed air to clean surfaces or clothing.
- Provide hoses for cleaning between tasks.
- Follow the vacuum manufacturers operator's manuals/instructions for changing dust bags and filters
- Wet slurry should be placed inside a sealed container/bin awaiting disposal

Personal protective equipment:

- Provide workers with gum boots and aprons to prevent contamination of clothing.

Decontamination of workers

- Worker clothes and uniforms must be cleaned frequently to prevent the transfer of silica dust from work areas to break rooms, other parts of the facility, and most importantly, into the home. Industrial vacuum cleaners are an easy way to remove excess silica debris from clothes and uniforms. Portable industrial vacuum units should be positioned at the exits of silica work areas, so workers can decontaminate their clothes before leaving. Water for hand, face, and hair cleaning should also be provided.
- Alternatively, after each shift workers can change their clothing and worker clothing that has been contaminated with silica dust can be washed separately from other clothing.

Use respiratory protective equipment

When engineering and work practice controls do not completely limit silica exposures employers must provide workers with respiratory protective equipment (RPE) that must be worn during all tasks associated with risk of exposure to RCS. A respiratory protection program that includes the following elements must also be implemented.

Correctly selecting appropriate RPE

It is essential the right type of filter for the work task is used otherwise the wearer may be unprotected.

The minimum RPE required is a (negative-pressure) half face respirator with a particulate filter (P1 or P2), preferably a tight-fitting re-usable respirator. Where disposable RPE is used it must be disposed when they become difficult to breathe through or at the end of each shift. The cost of replacing disposable respirators daily quickly mounts and it is more cost effective in the long run to use reusable half face respirators or powered air purifying respirators (PAPR). Strong consideration should be given to providing PAPR because of the physical demands of the task and potential for a hot and humid work environment. Additionally, this improved comfort of PAPR compared to negative pressure respirators make it more likely that the respirator will be worn at all times.

Particulate filters only protect against solid and liquid particles including microorganisms.

Medical screening of RPE users

Using a respirator may impose some physical and psychological stress on a worker. Workers should be provided with an initial medical assessment prior to using a respirator. A further medical assessment may be required when there is a change that may affect the worker's ability to wear RPE.

A medical assessment should evaluate both physical and psychological considerations including:

- chronic lung conditions such as emphysema, silicosis or asthma
- circulatory diseases such as heart disease or anaemia
- epileptic seizures
- psychological factors such as claustrophobia or anxiety.

Fit testing and fit checking

Tight fitting respirators including half face disposable, reusable or full face respirators and PAPR^[1] rely on an air tight seal between the wearer's face and the respirator to provide adequate protection. If there is not a good seal, contaminated air will leak into the respirator and the wearer may not get the level of protection that is needed to protect their health.

Workers must pass a respirator fit test before they first start wearing a respirator.

Fit testing measures the effectiveness of the seal between the respirator and the wearer's face. There are two types of facial fit tests, qualitative or quantitative.

- Qualitative – a pass/fail test that relies on the wearer's ability to taste or smell a test agent.
- Quantitative – uses specialised equipment to measure how much air leaks into the respirator and is not affected by the wearer's sense of taste or smell, or their sensitivity to the test agent.

Quantitative fit testing results are objective and more reliable than qualitative testing which relies on a workers ability to detect the testing agent by smell or taste. Employers should ensure workers are subject to a quantitative fit test only. It is important to note many adults may have problems with their ability to taste or smell and can result in a potential for a false pass to the test. This can result in workers not being adequately protected against respirable crystalline silica.

It is important that fit testing is carried out by a competent person. You should take steps to ensure the person who carries out the fit test is appropriately trained, qualified and experienced, and is provided with appropriate information regarding each particular task.

A competent person could be a reputable consultant or someone in-house or a representative from a RPE manufacturer or supplier.

Fit testing is required:

- before wearing a respirator for the first time
- each time a new make or model of respirator is issued
- whenever there is a change in the wearer's facial characteristics or features which may affect the facial seal (for example large weight loss or gain)
- on a regular basis upon risk assessment, one or two yearly is reasonable.

Each time a tight-fitting respirator is put on, the wearer should carry out a fit check. A fit check is a quick check to ensure the respirator, which has been fit tested, has been properly

^[1] Loose-fitting PAPRs, in which the hood or helmet is designed to form only a partial seal with the wearer's face or hoods which seal loosely around the wearer's neck or shoulders, do not require fit testing

positioned on the face and there is a good seal between the respirator and face. Fit checks do not replace the need for a fit test. Follow the manufacturer's instructions on how to carry out a fit check.

Training workers in the correct use and maintenance of RPE

When issuing RPE, training is required to ensure that workers correctly use and maintain RPE. Training must be provided by a competent person, this could be a consultant, someone in-house or a representative from a RPE manufacturer or supplier.

Training should cover the following topics:

- Why RPE is required
- When RPE is required to be worn
- How RPE works
- The limitations of RPE
- How to correctly put on and take off RPE
- How to conduct a fit check
- How to clean and maintain RPE
- When and how to replace filters
- How and where to store RPE when not in use.

Ensuring RPE is correctly used

Ongoing training and supervision may be required to ensure that RPE is used correctly by workers. Work health and safety laws require workers to take reasonable care for their own health and safety, comply with any reasonable instruction, and cooperate with any reasonable policy or procedure of the employer relating to health or safety. Specifically for RPE, a worker must use or wear RPE in accordance with any information, training or reasonable instruction given.

Inspecting, maintaining and repairing RPE

RPE needs to be inspected, maintained and repaired to make sure it continues to function properly and protect workers from exposure.

A system of maintenance should include:

- cleaning and disinfection
- inspection
- repair and replacement of components, including filters
- proper storage.

Workers should not wear any damaged, defective or contaminated RPE. Workers also must not intentionally misuse or damage RPE.

Correct storage

Consult the manufacturer's instructions when storing RPE. Each worker should be provided with a dedicated container to store their RPE. Clean, dry RPE should be stored away from dust and out of direct sunlight. Face pieces should be stored so that they are not subject to distortion.

Keeping records

Records assist in keeping track of the RPE program. Records should include the following:

- Details of issue including date (for reusable only).
- User records including training provided, and medical screening results.
- Fit testing records for each worker including.
- Type of test performed.
- Make, model, style and size of respirator tested.

- Date of the test.
- Result of the test.
- Maintenance records including filter replacement and RPE maintenance schedules.
- RPE program records including procedures for use and audits or evaluations.

Installing stone bench tops

Workers may be exposed to crystalline silica if cutting, grinding, sanding and polishing during the installation of stone bench tops. Generally workers have a higher risk of exposure to RCS during fabrication rather than installation of the stone benchtop due to less cuts and fabrication taking place. Where no cutting, grinding, sanding or polishing of the benchtop occurs during installation then no RCS should be released.

Workers installing stone benchtops that have been completely fabricated in a workshop with no additional cutting or fabrication required on site, should have minimal exposure to RCS exposure compared to workers involved in fabrication.

Working in an environment with control measures in place will reduce the exposure of workers and dust contaminating the site or a customer's home during installation.

The dimensions and locations of cut outs should be obtained prior to installation so they can be completed at the workshop. Alterations during installation can be reduced by accurate measuring, however, when required consider taking the slab back to the workshop if possible.

When cutting or grinding on site:

- work outdoors or in well-ventilated areas
- use water suppression or tools equipped with dust shrouds coupled with a H class vacuum
- use a H class vacuum to clean up dust as soon as practicable
- wear a half face respirator with a P1 or P2 filter.

Providing information, training, instruction and supervision

Information, training, instruction and supervision must be provided to workers and other persons at the workplace such as visitors. The information, training and instruction provided must be in a way that it is easily understood.

Information, training and instruction should include the following:

- Information about RCS and the risks to the worker from exposure.
- Control measures implemented, how to use and maintain them correctly.
- Arrangements in place to deal with emergencies, including evacuation procedures.
- The selection, use, maintenance and storage of personal protective equipment (PPE) required to control risks and the limitations of the PPE.
- Information about health monitoring required and the worker's rights and obligations.
- Work practices and procedures to be followed when handling, processing, storing, transporting, cleaning up and disposing of stone slabs and/or dust.

Records of training provided should be kept, documenting who was trained, when and on what.

Provide health monitoring for workers exposed to RCS

Health monitoring is required for workers in this industry because there can be a significant risk to worker's health if the exposure to RCS is not controlled. All workers must be provided with information about the purpose of health monitoring and a copy of their health monitoring results.

Health monitoring is recommended before a worker starts work to establish a baseline from which changes can be detected. Periodic health monitoring intervals should be decided in consultation with the doctor. Health monitoring is also recommended when a person leaves employment at the workplace.

How to choose a suitable medical practitioner

Health monitoring must be done or supervised by a doctor with experience in health monitoring. As an example, any doctor who is a fellow of the Australian Faculty of Occupational and Environmental Medicine will have the necessary experience. A list of these practitioners can be found on The Royal Australasian College of Physicians website. (<https://www.racp.edu.au/about/racps-structure/australasian-faculty-of-occupational-and-environmental-medicine/find-a-consultant>)

These lists are not exhaustive and other doctors may have the necessary experience required to conduct health monitoring for RCS.

Workers must be consulted when selecting a doctor and their preference considered if they request a particular doctor.

Appropriate health monitoring

Make sure the doctor selected provides a level of health monitoring that includes:

- demographic, medical and occupational history
- records of personal exposure
- standardised respiratory questionnaire
- standardised respiratory function test, including FEV1, FVC, FEV1/FVC – it is strongly recommended this testing be undertaken by an accredited respiratory function laboratory and include testing of diffusing capacity – refer to **Appendix A** for a list of accredited providers).
- Chest X-ray full size PA view – it is strongly recommended an ILO X-ray be undertaken to allow for reading by a B-reader

Refer to **Appendix A** for an outline of the standard of health monitoring required, which can be provided to the doctor.

Informing workers about the need for health monitoring

Information about health monitoring must be provided to workers. This information should include a copy of:

- Health monitoring for exposure to hazardous chemical – Guide for workers
- [Crystalline silica](#) – Safe Work Australia
- Health monitoring standard – crystalline silica – WHSQ (Appendix A).

Who pays for health monitoring?

The employer must pay the costs of health monitoring if it is required. This includes the costs of the medical services provided and the travel and wage costs of the worker.

What to tell the doctor

The following information must be supplied to the doctor:

- The name and address of the business.
- The name and date of birth of the worker.
- A description of all of the worker's tasks that relate to crystalline silica.
- How long the worker has been doing the work.

The health monitoring report

All reasonable steps must be taken to obtain a health monitoring report from the doctor who carried out the health monitoring. The health monitoring report should only contain information relating to health monitoring for respirable crystalline.

The health monitoring report should include:

- name and date of birth of worker
- the doctor's details (name and registration number)
- business details (name and address)
- the dates each aspect of health monitoring was undertaken
- details of test results that indicate whether or not the worker has been exposed to respirable crystalline silica
- the professional view regarding whether:
 - the worker has contracted a disease, injury or illness as a result of work with crystalline silica
 - any remedial measures can be taken by the business
 - the worker can continue in his/her current work
 - medical counselling is required for the worker.

Refer to Appendix B for a template letter that can be provided to a doctor when requesting a health monitoring report.

The workplace should consider the results, recommendations and advice provided by the doctor, and take appropriate action.

Informing workers' of their results

Once the doctor has provided a health monitoring report a copy must be provided to the worker as soon as practicable, even if they leave employment at the workplace.

When to provide a health monitoring report to WHSQ

WHSQ requires a copy of the health monitoring report if:

- the report indicates the worker may have contracted a disease, injury or illness. (Any reduction in lung function is considered an injury.)
- the report recommends remedial measures at the workplace

In either case the report can be supplied by emailing it to AOHHU@oir.qld.gov.au.

Please note employers have a duty to report a disease, injury or illness as a result of work with crystalline silica to WorkCover Queensland. You can lodge a notification by calling 1300 362 128.

When to provide a health monitoring report to another business

If another business also has a duty to provide health monitoring for the worker, a copy of the health monitoring report for that worker must be provided to that business. This would include if the worker is employed as labour hire.

Consent is not required to provide the report to WHSQ or to another business that also has a duty to provide health monitoring for the worker.

Keeping records

Health monitoring reports must be kept for 30 years. They must be kept confidential and not released to anyone without the worker's consent.

Consulting with workers

Workers must be consulted about workplace health and safety risks, including those related to RCS.

Worker consultation improves decision-making about health and safety matters and assists in reducing work related injuries and disease. A safe workplace is achieved when everyone involved in the work communicates with each other to identify hazards and risks, talks about health and safety concerns and works together to find solutions.

Effective consultation includes:

- talking about health and safety matters
- listening and raising concerns
- seeking and sharing views and information
- considering what workers say before making decisions.

Workers must be consulted on health and safety matters relating to RCS including when:

- managing risks of RCS exposure
- making changes to processes or procedures that generate RCS
- making changes to controls to protect workers from RCS
- resolving health and safety issues
- monitoring the health of workers exposed to RCS
- monitoring the conditions at the workplace
- providing information and training for workers.

Further Guidance

Managing risks

- Chapter 3 Part 3.1 of the [Work Health and Safety Regulation 2011](#)
- [How to manage work health and safety risks code of practice 2011](#)

Health monitoring

- Health monitoring standard – crystalline silica (WHSQ) (See attachment)
- Health monitoring for exposure to hazardous chemicals – guide for persons conducting a business or undertaking (Safe Work Australia)
- Health monitoring for exposure to hazardous chemicals – guide for workers (Safe Work Australia)
- Hazardous chemicals requiring health monitoring – crystalline silica (Safe Work Australia)
- Letter for practitioners – health monitoring report (WHSQ) (See attachment)
- <https://www.worksafe.qld.gov.au/injury-prevention-safety/hazardous-chemicals/health-monitoring>

Consultation

[Work health and safety consultation, co-operation and co-ordination code of practice 2011](#)
(WHSQ)

Appendix A: WHSQ Health monitoring standard – Crystalline silica

Health monitoring is required under the *Work Health and Safety Regulation 2011* (WHSR) in certain circumstances. Schedule 14 the WHSR identifies the following health monitoring:

- Demographic, medical and occupational history
- Records of personal exposure
- Standardised respiratory questionnaire to be completed
- Standardised respiratory function test, for example, FEV1, FVC and FEV1/FVC
- Chest X-ray full size PA view.

These terms are broad and further detail is not provided under the safety laws. Workplace Health and Safety Qld has produced the present standard to outline the standard of health monitoring required.

1. Demographic, medical & occupational history

Safe Work Australia (SWA) publishes a document titled 'Crystalline Silica Health Monitoring' which is available online

https://www.safeworkaustralia.gov.au/system/files/documents/1702/crystalline_silica.pdf

The minimum standard of demographic, medical & occupational history data that should be captured for health monitoring is outlined in pages 6 - 8.

2. Records of personal exposure

The health monitoring must detail any personal exposure the worker has had to crystalline silica.

This includes both (1) results of air monitoring that relate to the individual and (2) results of testing for any work groups that the worker was part of.

These records of exposure should be kept with the individual's health monitoring files. A medical practitioner should ensure they request any personal exposure records from the employer and review these as part of the health monitoring process.

3. Standardised respiratory questionnaire to be completed

The document 'Crystalline Silica Health Monitoring' identified above includes a questionnaire that provides the minimum standard of questioning needed.

The questionnaire must be completed by a medical practitioner or nurse.

4. Standardised respiratory function test, for example, FEV1, FVC and FEV1/FVC

It is a requirement to measure the following:

- FEV1 (forced expiratory volume in one second)
- FVC (forced vital capacity).
- FEV1/FVC
- Diffusing capacity test.

The following two requirements must also be met:

- Standardised respiratory function tests must be conducted at an accredited respiratory function laboratory. The Medical Practitioner shall ensure that equipment calibration and maintenance conforms to Queensland Health Guidelines for spirometry testing (ATS/ERS guidelines).

A list of accredited respiratory function laboratories in Queensland can be found on The Thoracic Society of Australia and New Zealand website

<https://www.thoracic.org.au/respiratorylaboratoryaccreditation/australia>

5. ILO Standard Chest X-ray full size PA view

All CXR (PA) are to be classified by two B readers or by registered radiologists whose names appear on the register of clinical radiologists for coal worker pneumoconiosis screening, maintained by the Royal Australian and New Zealand College of Radiologists.

Where health monitoring is required, the frequency of chest X-rays should be determined by the Medical Practitioner, but it is recommended that a chest X-ray should be conducted at least every five years as part of the health monitoring process. However, given the potential shorter latency periods for diagnoses of acute and accelerated silicosis, it is recommended that a chest X-ray be conducted every one to three years, in circumstances of higher levels of exposure or where other medical factors indicate it may be required. In assessing the need for more frequent chest X-rays, the records of personal exposure and general exposure history for crystalline silica should be taken into account. The Michigan State University 'Recommended Medical Screening Protocol for Silica Exposed Workers' provides further detail on indicative chest X-ray frequency at Table I. The protocol is available online <http://www.oem.msu.edu/images/resources/SilicaScreenProtocol.pdf>

6. Frequency of health monitoring

Health monitoring should be commenced before starting work involving crystalline silica exposure (baseline). Monitoring should be repeated at least annually and more frequently if advised by the Medical Practitioner and upon termination of employment. As indicated above, frequency of X-Rays is subject to clinical recommendation. The Coal Mine Workers' Health Scheme (CMWHS) Clinical Pathways Guideline is a relevant reference document to guide the Medical Practitioner regarding health monitoring for pneumoconiosis including silicosis. The guideline can be found online https://www.dnrm.qld.gov.au/_data/assets/pdf_file/0005/1278563/cmwhs-clinical-pathways-guideline.pdf

Appendix B: Template letter requesting health monitoring

Dear Dr INSERT NAME

Thank you for agreeing to undertake respirable crystalline silica health monitoring for the following workers.

Workers Name	Date of Birth	Description of work with RCS	Period of time worker has been doing work

I confirm that the minimum health monitoring required has been identified in the attached document – WHSQ Health monitoring standard – crystalline silica (the standard). Upon completion of the health monitoring could you please provide a report for each worker that at a minimum contains the information outlined below. Please include a confirmation in your report that all requirements of the standard have been met.

Health Monitoring Report

1. Worker details:

Name and date of birth of worker

2. Medical practitioner details:

Your name and registration number

3. Business details:

Business name and address

4. Health monitoring dates:

The dates each aspect of health monitoring was undertaken

5. Test results:

Details of test results that indicate whether or not the worker has been exposed to respirable crystalline silica

6. Assessment:

Your professional view whether the worker may have contracted a disease, injury or illness as a result of work with crystalline silica.

7. Recommendation:

Your professional view regarding:

- Whether any remedial measures are required to be taken.
- Whether the worker can continue in his/her current work.
- Whether medical counselling is required for the worker.

If you have any queries about this request, please contact me on INSERT PHONE NUMBER.

Yours sincerely

BUSINESS REPRESENTATIVE

BUSINESS NAME

BUSINESS ADDRESS