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Silica dust in the workplace / Te puehu takawai i te wāhi mahi

This guidance advises PCBUs of the risks of respirable crystalline silica dust and how to control them and protect their workers.

Tā ēnei aratohu he whakamōhio i ngā tāngata whakahaere umanga, mahi hoki (PCBU) mō ngā mōrea o te puehu takawai tioata, me pēhea te wawao atu, me pēhea hoki te tiaki i ā rātou kaimahi.

Silicosis is a progressive and deadly disease that causes fibrosis of the lungs from the inhalation of respirable crystalline silica (RCS) dust.

As a PCBU, you have a duty to eliminate, or use controls to minimise worker exposure to the hazard of, and risks from, RCS dust.

Ko te mate takawai tētahi mate ka kino haere te ngau, mate whakamate tangata e puta ai te riwha o ngā pūkahukahu nā te whakahā i te puehu takawai tioata ka taea te whakahā (RCS).

Nā te mea he Tangata Whakahaere Umanga, Mahi rānei koe, ka noho ki a koe te haepapa kia whakakore rawa, kia whakamahi kauparenga rānei hei ārai tūturu i te pānga o tētahi kaimahi e te pūmate me ngā mōreareatanga o ngā puehu takawai ka taea te whakahā, arā, te puehu RCS.

Respirable crystalline silica dust / Te puehu takawai ka taea te whakahā

Silica is a natural substance found in concrete, bricks, rocks, stone (including artificial or engineered stone found in composite kitchen benchtops), sand and clay. RCS dust is created when materials containing silica are cut, ground, drilled, sanded, polished or otherwise disturbed. RCS particles are extremely small; they can't always be seen with the naked eye.

Ko tēnei mea te takawai he āhuatanga nō te aotūroa ka taea te kite i roto i te raima, i ngā toka, me te kōhatu (tae atu ki ngā momo kōhatu nā te tangata i waihangā, i mahi rānei, ka kitea i roto i ngā papatū kīhini hanumi) i te onepū me te uku. He mea hanga te puehu takawai ka taea te whakahā ina tapahia, ina kauorotia, kōwiritia, mukumukua, morimoria, paoa rānei kia wāhia ngā hanga kei roto nei te takawai e noho ana. He mea moroitia rawa ngā pakuriki puehu takawai RCS nei, e kore e kitea e te kanohi tangata i ngā wā katoa.

How workers can be exposed to RCS dust / He pēhea e pāngia ai ngā kaimahi e te puehu takawai ka taea te whakahā, arā te puehu RCS

Workers in the following industries or who work with the following materials are most at risk of being exposed to RCS dust:

- quarrying
- roading
- foundries
- construction: concrete, stone, bricks, mortar, fibre cement products
- manufacturing of concrete, bricks and tiles
- kitchen benchtop manufacturing (natural and engineered stone), finishing and fitting
- abrasive blasting
- monumental masonry work
- mining
- concrete drilling, cutting, grinding, fettling, mixing, handling, dry shovelling, tunnelling.

Ko ngā kaimahi o ngā ahumahi e whai ake nei, e mahi ana rānei ki ngā matū e whai ake nei, te hunga noho nōrearea mō te tūpono o te pānga e te puehu takawai ka taea te whakahā:

- te karikari kōhatu
- te hanga rori
- ngā wheketere mahi rino
- te hangawhare: raima, ngā pereki, te mōtā, ngā mea ka hangaia ki te kaka raima (fibre cement)
- te mahi raima, te mahi pereki, te mahi taera rānei
- te mahi, te whakatikatika, te whakamau rānei i tēnei mea te papatū kīhini hanumi (ahakoa kōhatu nō te aotūroa, he kōhatu nā te tangata i mahi rānei)
- te mahi puha mukumuku (abrasive blasting)
- te mahi tārei kōhatu whakapaipai whare
- te mahi maina
- te kōwiri, te tapahi, te orooro, te whakamahine, te whakahanumi, te whāwhā, te koko paura rānei, te kerī tomo rānei i te raima.

Health effects of exposure to RCS dust / Ngā pānga hauora o te noho wātea ki te puehu takawai ka taea te whakahā

Workers may develop the following lung diseases from breathing in RCS dust:

- **Silicosis:** scarring of lung tissue resulting in shortness of breath. May continue to develop even after exposure to RCS dust has stopped. **The effects of silicosis are permanent.** There are three types of silicosis:
 - **acute silicosis:** may occur after exposure of less than a year to very large amounts of RCS dust
 - **accelerated silicosis:** may occur after exposure to large amounts of RCS dust over a shorter period of time, typically 3 to 10 years. Has been seen in workers from the artificial/engineered stone kitchen benchtop industry
 - **chronic silicosis:** typically results from exposure to RCS dust over more than 20 years.
- **Lung cancer:** may occur in workers exposed to high levels of RCS dust over a long period of time.
- **Chronic obstructive pulmonary disease (COPD):** a chronic lung condition that can lead to breathing difficulties such as emphysema in workers exposed to high levels of RCS dust over a long period of time.

There is some evidence that exposure to RCS dust may also cause kidney disease.

Ka puta ake pea ēnei māuiui pūkahunahū nā te whakahā i te puehu takawai ka taea te whakahā

- **Te mate takawai:** te riwhatanga o ngā kiko o ngā pūkahunahū, e ngawhīngawhī ai te hā o te tangata. Ka hē haere tonu ahakoa kua mutu te pānga e ngā puehu takawai. **Ka noho tūturu ngā pānga o te mate takawai ki te tinana.** E toru ngā momo mate takawai:
 - **te mate takawai taumaha:** ka puta pea ahakoa iti iho i te kotahi te pānga e ngā rahinga puehu takawai ka taea te whakahā tino nui
 - **te mate takawai hohoro:** ka puta pea i muri i te pānga e ngā rahinga puehu takawai i roto i te wā poto kē iho, mō te nuinga, atu i te 3 ki te 10 tau. Kua kitea i waenga i ngā kaimahi mai i te ahumahi mahi papatū kīhini hanumi, tae atu ki ngā momo kōhatu nā te tangata i ahūahu, i mahi rānei,
 - **te mate takawai pūputu:** mō te nuinga ka puta pea i muri i te pānga e ngā puehu takawai ka taea te whakahā mō neke atu i te 20 tau.
- **Te mate pukupuku o ngā pūkahunahū:** ka puta pea i waenga i ngā kaimahi kua pāngia e ngā taumata tiketike o te puehu takawai ka taea te whakahā i roto i te wā tino roa.
- **Te mātē pāpuni pukapuka (COPD):** tētahi tahumaero pūputu ka mau ki ngā pūkahunahū, e hua ake ai ngā uauatanga whakahā pēnei i te mate miru pupuhi i waenga i ngā kaimahi kua pāngia e ngā taumata tiketike o te puehu takawai ka taea te whakahā i roto i te wā tino roa.

Tērā hoki ētahi taunakitanga mā te pānga e te puehu takawai ka taea te whakahā, ka puta ngā mate tākihi i muri.

Your responsibilities as a PCBU / Ō kawenga haepapa hei tangata whakahaere umanga, mahi rānei (PCBU)

As a PCBU, you **must** ensure the health and safety of workers and that others are not put at risk from your work.

Before starting work using artificial/engineered stone, you must complete a risk assessment and review your controls.

You **must** eliminate risks that arise from your work so far as is reasonably practicable.¹

- When deciding how (control measures) to eliminate or minimise risks, you must identify when work tasks may create RCS dust.
- Give preference to effective control measures that protect many workers at the same time.
- Talk to your workers to get their views on which control measures to use.

Nā te mea he tangata whakahaere umanga, mahi rānei (PCBU) me **mātua** whakapūmau koe i te hauora me te noho haumarū o ngā kaimahi, me ētahi atu, nā ō mahi te take.

I mua i te tīmata i ō mahi mā te whakamahi i ngā momo kōhatu nā te tangata i ahūahu, i mahi rānei, me whakaoti koe i tētahi aromatawai mōreareatanga, me te tiro hōhonu ki ō whakahaere.

Me **mātua** whakakore rawa koe i ngā mōreareatanga ka ara ake i ō mahi mehemea ka taea.¹

- Ina whakatau tikanga koe me pēhea (ngā ritenga whakahaere) te whakauru tikanga whakakore rawa, kaupare rawa rānei i ngā mōreareatanga, me mātua tautohu koe āhea puta ai he puehu takawai ka taea te whakahā i ngā momo mahi o te wāhi mahi.
- Me whakamana koe i ngā ritenga whakahaere ka kaupare i te tini o ngā kaimahi i te wā kotahi.
- Me kōrero koe ki ō kaimahi kia rongō i ō rātou whakaaro mō ngā tikanga whakahaere hei whakamahi.

¹ 'So far as is reasonably practicable' means you first consider what is possible in your circumstances to ensure health and safety. You then consider what is reasonable to do in your circumstances. You need to achieve a result that provides the highest protection that is reasonably practicable in the circumstances.

¹ Te tikanga o tēnei kīanga 'Kia eke ki ngā ritenga ka kīa ka tika kia mahia, ka taea hoki' he whakapuaki i te whakaaro ka mātua whai whakaaro koe i roto i ngā āhuatanga katoa o tō mahi ki te whakapūmau i te hauora me te noho haumarū. Me whakaaro koe i muri he aha ngā mea ka taea te mahi i tō wāhi mahi. Me puta tētahi hua e horaina ai e koe te kauparenga tino tiketike, ka taea hoki te mahi i tō wāhi mahi.

To eliminate RCS / Hei whakakore i te puehu takawai ka taea te whakahā RCS

- Use alternative products (eg metallic shot, slag products or grit instead of sand for abrasive blasting).

If you can't eliminate risks, you must **minimise** them so far as is reasonably practicable.

- Me whakamahi i ētahi hua kē noa atu (hei tauira, te hōta maitai, ngā hua rānei o te mahi rino, te kirikiri rānei, me te waiho i te onepū mō ngā mahi puha mukumuku (abrasive blasting).

Mehemea kāore e taea ngā mōreatanga te whakakore me **kaupare rawa** i aua mōreatanga ka ara ake i ō mahi mehemea ka taea.

To minimise exposure to RCS dust / Hei kaupare rawa i te pānga e te puehu takawai RCS

Instead of using engineered stone, use materials with a lower silica content. Engineered stone has approximately 90% silica compared with natural stone like marble and limestone which have around 2% silica. For more information about managing risk, see: [worksafe.govt.nz](https://www.worksafe.govt.nz)

Me waiho pea te whakamahi kōhatu kua ahuhua e te tangata, me whakamahi i ngā rawa he iti iho te takawai o roto. He āhua 90% te takawai o roto i ngā kōhatu nā te tangata i ahuhua, tēnā ko te kōhatu māori noa pēnei i te māpare me te pākeho, he āhua 2% te takawai o roto. Mō ētahi atu kōrero mō te whakahaere mōreatanga, haere ki: [worksafe.govt.nz](https://www.worksafe.govt.nz)

WET-WORKING CONTROL MEASURES / NGĀ RITENGA WHAKAHAERE WHAKAMAHI KŌHATU-MĀKŪ

Freshly exposed silica particle surfaces (created due to grinding, drilling, cutting etc) are more toxic than older weathered particle surfaces. Using water to suppress dust has the added benefit of speeding up the weathering process.

He kaha kē atu te tāoke o ngā mata takawai pakuriki kātahi anō ka whakawāteatia ki te hau (ērā i hangaia nā te kauoro, te kōwiri, te tapahi rānei, te aha atu) i ērā i ngā mata pakuriki kua ngawheretia. Mā te whakamahi i te wai hei pēhi atu i te puehu ka puta atu te hua o te whakahohoro i te ngawheretanga.

DO	DON'T
Use water spray or misting systems to suppress dust. Keep the work material (eg concrete, engineered stone benchtops) wet while work is carried out on them (eg cutting, polishing, etc). Use on-tool water suppression systems to keep dust out of the air	Dry sweep work areas
Frequently hose down equipment and work areas with water	Use compressed air to blow away dust
ME PĒNEI	KAUA E PĒNEI
Me whakamahi rehu wai, ngā pūnaha whakarehu wai rānei hei pēhi i ngā putanga puehu. Whakamākūtia ngā hanga mahi (hei tauira, ngā papatū kīhini kōhatu nā te tangata i mahi) i te wā e mahia ana (hei tauira, te tapahi, te morimori rānei, te aha). Whakamahia ngā pūnaha pana ā-wai mō te taputapu kia kore ai te puehu e rere ki te hau	Te tahitahi maroke i ngā wāhi mahi
Me uwaihiwahi pūputu ngā taputapu mahi me ngā wāhi mahi ki te wai	Te whakamahi hau pēhi hei pupuhi atu i te puehu

DUST CONTROL MEASURES / NGĀ RITENGA WHAKAHAERE PUEHU

- Use physical barriers or computer numerical control (CNC) machines to isolate work areas or tasks that generate dust.
- When purchasing equipment and machinery, look for dust control features and dust collection systems. For example, tools used for cutting, grinding or polishing concrete and masonry should provide water to the blade and/or be fitted with an on-tool extraction system. See: [worksafe.govt.nz](https://www.worksafe.govt.nz)
- Ensure dust-generating equipment has a dust collection system with a filtered air supply to isolate the worker from the dust.
- Use an H-class HEPA-filtered vacuum cleaner in accordance with Standard AS60335-2-69. This includes when working at someone's home (eg to fit a bench). Workers should not use the household vacuum cleaner to remove dust.
- Seal dust waste bags and place them in the correct waste container.

- Me whakamahia maioro ā-kiko, ngā mīhini whakahaere tau ā-rorohiko rānei (CNC) hei wehewehe i ngā wāhi mahi, ngā momo mahi rānei, e puta ai he puehu.
- Ina hoko koe i ngā taputapu me ngā mīhini, me āta rapu ngā āhuahira kaupare puehu, kohikohi puehu hoki. Hei tauira, me hoatu wai ngā taputapu ka whakamahia hei tapahi, hei kauoro, hei morimori rānei i te raima me ngā kōhatu tārei kia hua ai he wai ki te mata, me whakamau atu he pūnaha tangotango puehu i te taputapu hoki/rānei. Tirohia: worksafe.govt.nz
- Āta whakaritea he tikanga kia noho he pūnaha kohikohi puehu ki ngā taputapu whakaputa puehu, me tētahi whāinga hau tātari kia noho wehe te kaimahi i te puehu.
- Whakamahia he pū ngote puehu H-class tātari ā-HEPA i runga anō i te Paerewa Standard AS60335-2-69. Me pēnei hoki ina mahi te kaimahi i te kāinga o tētahi tangata (hei tauira, hei whakamau atu i tētahi papatū). Kaua ngā kaimahi e whakamahi i te ngote puehu o te kāinga hei ūkui atu i ngā puehu.
- Me āta kati rawa ngā pēke parahanga, ka hoatu ai ki tētahi paepae para tōtika.

ADMINISTRATIVE CONTROL MEASURES / NGĀ RITENGA WHAKAHAERE WHAKARITE TIKANGA

- Set up exclusion zones with signs to mark the boundaries of work areas where RCS dust is created. The signs should warn workers about the hazards and specify the PPE to be used.
- Schedule potential high-exposure work for times when there are fewer workers and others around (eg breaks or after normal working hours).
- Me whakarite wāhi aukati i ngā wāhi e puta ai te puehu takawai. Me whakatūpatō ngā pānui i te taha mō ngā pūmate me te tautohu hoki ngā taputapu kaupare whaiaro (PPE) e tika ana kia whakamahia.
- Me whakahōtaka ngā wā pānga tiketike mō ngā wā e iti iho ngā kaimahi me ētahi atu tāngata (hei tauira, ngā wā kaputī, i muri rānei i ngā hāora mahi tūturu o te rā).

PERSONAL PROTECTIVE EQUIPMENT (PPE) / NGĀ TAPUTAPU KAUPARE WHAIARO (PPE)

- **PPE is the least effective control measure. It should not be the first or only control measure you consider.**
- PCBUs must provide PPE to workers unless another PCBU provides it or the worker genuinely and voluntarily chooses to provide their own PPE (and you are satisfied it is suitable).
- Seek expert advice when choosing PPE and consult with the workers who will be using it.
- **Ko ngā taputapu kaupare whaiaro (PPE) te ritenga whakahaere ngoikore rawa. Kaua e waiho ēnei taputapu hei ritenga kaupare tuatahi, hei ritenga whakahaere tōtahi rānei ka whiria e koe.**
- Me hoatu ngā umanga me nga tāngata whakahaere mahi i ngā taputapu kaupare whaiaro ki ngā kaimahi, ki te kore e homai e tētahi atu tangata PCBU rānei, ki te kore hoki te kaimahi e kōwhiri māna anō, i runga anō i ōna hiahia motuhake, pono hoki, kia rapua āna ake taputapu kaupare whaiaro (PPE) (me tō mōhio pū he tōtika).
- Rapua ngā tohutohu a te hunga mātanga ina kōwhiri koe i ētahi taputapu kaupare whaiaro (PPE) me kōrero hoki ki ngā kaimahi mā rātou e whakamahi.

Respiratory (breathing) protection / Te kaupare i ngā mea mōrea ki te whakahā

- A respirator may be half-face, full-face or a Powered Air Purifying Respirator (PAPR) (see pictures below). The type of respirator you choose will depend on the job and the levels of toxicity and concentration of RCS. Always choose a respirator that fully protects the worker, conforms with AS/NZS 1716 and is selected in accordance with Standard AS/NZS 1715.
- Carry out fit testing for each worker who will wear a respirator that requires a seal against the face.
- Provide information, training and instruction so workers can correctly use, wear, store and maintain their PPE.
- Ko ētahi o ngā taonga whakahā he kanohi-haurua, ko ētahi he kanohi-katoa, ko ētahi he Taonga Whakahā Tātari Hau Whai Pūkaha (PAPR) (tirohia ngā pikitia i raro iho nei). Kei te āhua o te momo mahi me ngā taumata tāoke, kukūtanga hoki o ngā puehu takawai, te momo taonga whakahā ka kōwhiria e koe. Me kōwhiri taonga whakahā hei tino tiaki i te kaimahi, e hāngai ana ki AS/NZS 1716, ka kōwhiria hoki kia hāngai ki te Paerewa AS/NZS 1715.
- Me āta whakamātautau mō ia kaimahi ka whakamahi taonga whakahā kawē taupoki ki te kanohi.
- Me hoatu mōhio tangata, whakangungu, tohutohu hoki ki ngā kaimahi kia tika ai te whakamahi, te mau, te rokiroki, me te tiaki i ā rātou taputapu whaiaro (PPE).



FIGURE 1:
Re-usable half-face respirator (cartridge)

WHAKAAHUA 1:
Taonga whakahā
kanohi-haurua (kōnae)



FIGURE 2:
Full-face respirator (cartridge)

WHAKAAHUA 2:
Taonga whakahā
kanohi-katoa (kōnae)



FIGURE 3:
Full-face powered respirator (cartridge)

WHAKAAHUA 3:
Taonga whakahā
kanohi-katoa whai
pūkaha (kōnae)

Protective clothing and cleanliness / Ngā kākahu tiaki tangata me te mā

- Ensure workers have overalls and gloves to wear at work. Workers should leave their dust-covered clothes at work to be cleaned. They should not wear them home.
- Ensure workers understand the importance of washing their hands before eating, drinking and smoking, and of washing up before they go home at the end of the day.
- Ensure washing facilities are provided.
- Āta horaina he kahu-kaupare paru (overalls), he karapu hoki mō ngā kaimahi i te wāhi mahi. Me waiho ngā kaimahi i ō rātou kākahu i te wāhi mahi kia horoia. Kaua e mauria e rātou ki te kāinga.
- Me mōhio ngā kaimahi katoa he mea hira te horoi i ō rātou ringa i mua i te kai, i te inu, i te kaipaipa, me te horoi anō i mua i te hokinga atu ki te kāinga i te mutunga o te rā.
- Me whakarite wāhi horoi mō ngā kaimahi.

Exposure monitoring / Te aroturuki pānga

Exposure monitoring involves measuring and evaluating workers' exposure to a health hazard. It includes monitoring workplace conditions as well as biological monitoring.

- As a PCBU you **must**, so far as is reasonably practicable, monitor workplace conditions if exposure to a particular health risk warrants it.
- Exposure monitoring will confirm whether workers are exposed to RCS dust at potentially harmful levels and if your control measures are working properly.
- Exposure monitoring does not replace the need for control measures.
- You can engage an occupational hygienist from the New Zealand Occupational Hygiene Society: www.nzohs.org.nz or the Health and Safety Association of New Zealand (HASANZ) Register: <https://register.hasanz.org.nz> to measure RCS dust concentrations and help evaluate risks to worker health.
- Ask your workers for their views when making decisions about exposure monitoring.

I raro i ngā tikanga aroturuki pānga ka inea, ka aromātaitia hoki te pānga o ngā kaimahi e tētahi pūmate hauora. Ka uru ki tēnei tikanga te aroturuki i ngā āhuatanga o te wāhi mahi, me te ine ā-koiora i te tinana.

- Hei tangata whakahaere umanga me **mātua**, aroturuki i ngā ritenga o te wāhi mahi, mō ngā āhuatanga e tika ana, ki te mea e tika ana mō tētahi mōreareatanga hauora.
- Mā te aroturuki pānga e whakaū mehemea kua pāngia ngā kaimahi e ngā puehu takawai ka taea te whakahā (RCS) i ngā taumata tiketike, e tika ana hoki te whāinga hua o ō ritenga whakahaere.
- Ehara i te mea mā te aroturuki pānga e kore ai e hiahiatia ngā ritenga whakahaere.
- Ka taea e koe te kimi Kaitirotiro i te noho mā o te wāhi mahi i te New Zealand Occupational Hygiene Society: www.nzohs.org.nz i te Rēhita rānei o te Health and Safety Association of New Zealand (HASANZ): <https://register.hasanz.org.nz> hei ine i te ngā kukūtanga puehu takawai, hei aromātai hoki i ngā mōreatanga mō te hauora kaimahi.
- Uia ō kaimahi mō ō rātou whakaaro mō ngā whakatau mō te aroturuki pānga.

Health monitoring / Te aroturuki hauora

Health monitoring involves testing workers to identify any changes in their health status because of exposure to hazards arising from their work.

- As a PCBU you must, so far as is reasonably practicable, monitor workers' health if exposure to a particular health risk warrants it.
- Provide health monitoring for all your workers who may be exposed to RCS dust. You can engage an occupational health practitioner from the New Zealand Occupational Health Nurses' Association: www.nzohna.org.nz from the HASANZ Register, and/or the Australian and New Zealand Society of Occupational Medicine: <https://anzsom.org.nz> to perform health monitoring.
- Monitoring should include:
 - collection of workers' demographic, medical and occupational histories
 - records of workers' exposure
 - a respiratory questionnaire
 - respiratory function tests
 - in some cases, chest x-ray or other radiological procedure.
- You must have workers' consent before you monitor their health.
- Ask your workers for their views when making decisions about health monitoring.

I raro i ngā tikanga aroturuki hauora ka whakamātauria ngā kaimahi hei tautohu i ētahi rerekētanga i ō rātou tūranga hauora nā te pānga mai o ētahi pūmate i ā rātou mahi.

- Hei tangata whakahaere umanga, mahi rānei (PCBU) me mātua aroturuki koe i te hauora o ngā kaimahi mehemea ka taea, mehemea e tika ana mō tētahi mōreareatanga hauora.
- Me hoatu aroturuki hauora mō ō kaimahi katoa tērā pea ka pāngia e te puehu takawai ka taea te whakahā. Ka taea e koe te whakauru mai i tētahi kaimahi hauora i te wāhi mahi mai i te New Zealand Occupational Health Nurses' Association: www.nzohna.org.nz i te Rēhita HASANZ, i te Australian and New Zealand Society of Occupational Medicine hoki/rānei: <https://anzsom.org.nz> hei whakahaere i ngā mahi aroturuki hauora.
- Me uru ki roto i ngā mahi aroturuki:
 - te kohikohi i ngā hītori ā-taupori, ā-tākuta, ā-wāhi mahi hoki
 - ngā rēkoata o te pānga o te kaimahi
 - tētahi rārangi pātai mō te whakahā
 - ngā whakamātautau i te pai o te whakahā
 - mō ētahi tāngata, he hihi-x, tētahi atu whakahaere whakaahua rānei.
- Me mātua whakaae ō kaimahi i mua i te aroturukinga i tō rātou hauora.
- Me inoi ki ō kaimahi mō ō rātou whakaaro i mua i te whakatau tikanga mō te aroturuki hauora.

Health monitoring for workers exposed to engineered stone / Te aroturuki hauora mō ngā kaimahi ka pāngia e te kōhatu ka mahia e te tangata

Due to the serious risk of developing accelerated silicosis in those working with engineered stone, an Occupational Medicine Specialist should be engaged to provide health monitoring advice and services.

Nā te tino mōreatanga nui o te puta mai o te mate takawai hohoro ki te tangata e mahi ana ki te kōhatu ka mahia e te tangata, me rapu tētahi Mātanga Hauora Wāhi Mahi hei hora i ngā tohutohu aroturuki hauora me ngā ratonga i te taha.

Training / Te Whakangungu

- As a PCBU you must, so far as is reasonably practicable, ensure workers are supervised or trained to work healthily and safely.
- Provide your workers with information, training and instruction on the control measures (including the use and care of PPE) and the potential health risks of wearing PPE. For more information, see: worksafe.govt.nz
- Ask your workers for their views when deciding how to provide information and training.
- He tangata whakahaere i tētahi umanga me ngā mahi i te taha, me āta whakarite tikanga kia mahi ngā kaimahi i runga i te hauora me te haumaruru.
- Me hoatu mōhiotanga, whakangungu, tohutohu hoki ki ō kaimahi mō ngā ritenga whakahaere (tae atu ki te whakamahinga me te āta tiaki i ngā taputapu kaupare whaiaro) me ngā mōreatanga tērā pea ka pā nā te mau i aua taputapu PPE. Mō ētahi atu kōrero tirohia, see: worksafe.govt.nz
- Me uiui koe i ō kaimahi mō ō rātou whakaaro ina whakatau take koe mō te hora mōhiotanga, whakangungu hoki.

More information / Ētahi atu kōrero

Safety alert / Whakatūpato haumaruru

[Accelerated silicosis / Te Mate Takawai Hohoro](#)

Fact sheets / Ngā Rārangi Kōrero Pono

[Controlling dust with on-tool extraction](#)

[Respiratory Protective Equipment - advice for PCBUs](#)

[Workplace Exposure Standards \(WES\)](#)

[HASANZ Register](#)

[NZOHS](#)

[NZOHNA](#)

[ANZSOM](#)