

GOOD PRACTICES FOR LABORATORY WORK

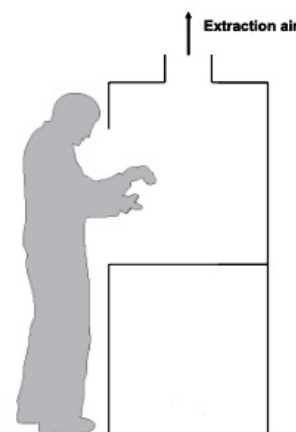
This sheet provides guidance on the control measures to be used in a laboratory environment in order to control laboratory workers' exposure to respirable crystalline silica dust in the workplace.

ACCESS

Restrict access to the work area to authorised personnel only.

DESIGN AND EQUIPMENT

- Laboratories should have their own, clean air supply and they should be sealed and physically separated from any adjacent dusty areas.
- Use flooring surfaces and furniture that are easy to keep clean and that do not absorb dust. Use solid floors (rather than grid/mesh) and seal them with a wear resistant material which is coloured to highlight dust contamination.
- Provide local exhaust ventilation systems for specific laboratory test equipment which may cause airborne dust generation. See for example: waldner-lab.de/en/fume-cupboards/bench-mounted-fume-cupboard-with-side-installation.aspx
- Grinding equipment is available with an integrated exhaust ventilation system.
- The use of fume cupboards may be appropriate when handling samples of silica flour and other similar materials.
- Wherever possible, use wet cleaning methods when cleaning items of laboratory test equipment.
- Store samples in a dedicated store room outside the main laboratory area.
- Provide facilities, including notice boards, for the communication of health and safety information, safe working procedures etc.



MAINTENANCE

- Maintain laboratory equipment and all equipment provided for dust control as advised by the supplier/installer.

EXAMINATION AND TESTING

- Check the condition and the performance of all dust control equipment at least once per week for signs of damage or reduced efficiency. If it is in constant use, check it more frequently. If used infrequently, then check it before each use.
- Have dust control equipment tested against its performance standard in compliance with local legal requirements, at a frequency which meets with manufacturers' recommendations and which complies with the outcome of a risk assessment.
- Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).
- Put in place measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated.

GUIDANCE FOR EMPLOYERS ON CONTROLLING EXPOSURE TO RCS IN THE WORKPLACE

CLEANING AND HOUSEKEEPING

- Clean floors and other surfaces regularly.
- **DO NOT clean up with a dry brush or using compressed air.**
- Use vacuum or wet cleaning methods.

TRAINING

- Give your employees information on the health effects associated with respirable crystalline silica dust.
- Provide employees with training on: dust exposure prevention; checking controls are working and using them; when and how to use any respiratory protective equipment provided and what to do if something goes wrong. Refer to task guidance sheet **2.3.4** and part 1 of the Good Practice Guide.

SUPERVISION

- Have a system to check that control measures are in place and that they are being followed. Refer to task guidance sheet **2.3.3**.
- Employers should make sure that employees have all the means to perform the checklist given below.



PERSONAL PROTECTIVE EQUIPMENT

- Refer to task guidance sheet **2.1.15** dedicated to Personal Protective Equipment.
- Indicate areas where personal protective equipment (e.g. dust masks) must be worn using appropriate signs.
- Provide storage facilities to keep personal protective equipment clean when not in use.
- Provide adequate supplies of personal protective equipment. Ensure that it is readily obtainable. Identify the locations of these supplies using appropriate signs.

EMPLOYEE CHECKLIST

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Keep laboratories clean in order to prevent dust being stirred up. | an accumulation of fine dust on surfaces inside the laboratory may indicate that dust control measures are not working correctly. | <input type="checkbox"/> If you think there is a problem with your dust control equipment, ensure additional control measures are taken to reduce exposure to respirable crystalline silica dust while the problem persists. | <input type="checkbox"/> Check and implement measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated. |
| <input type="checkbox"/> For dry dusts, use vacuum or wet cleaning methods. | | | |
| <input type="checkbox"/> Keep doors and windows closed to prevent dust entering. | <input type="checkbox"/> Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. Do not carry on working if you think there is a problem. | | |
| <input type="checkbox"/> Remember that airborne respirable crystalline silica dust cannot be seen with the naked eye. However, | | | |

This guidance sheet is aimed at employers to help them comply with the requirements of workplace health and safety legislation, by controlling exposure to respirable crystalline silica. Specifically, this sheet provides advice on control measures that may be used in laboratories.

Following the key points of this task guidance sheet will help reduce exposure.

Depending on the specific circumstances of each case, it may not be necessary to apply all of the control measures identified in this sheet in order to minimise exposure

to respirable crystalline silica. i.e. to apply appropriate protection and prevention measures. This document should also be made available to persons who may be exposed to respirable crystalline silica in the workplace, in order that they may make the best use of the control measures which are implemented.

This sheet forms part of the Good Practices Guide on silica dust prevention, which is aimed specifically at the control of personal exposure to respirable crystalline silica dust in the workplace.