

Curriculum activity risk assessment

Compressed Air Equipment

clever • skilled • creative

Activity scope

This document relates to student use of Compressed Air equipment as part of a curriculum activity.

The use of power pneumatic tools and equipment should be restricted to secondary schools.

Compressed-air equipment refers to all tools and equipment that use compressed air as a means of their functioning. A variety of compressors may be used, ranging from small portable types to large fixed machines.



Teachers/leaders:

Activity description:

Start date:

Finish date:

No of students (approx.):

Class groups:

Supervision ratio (approx.):

Risk level

The actual risk level will vary according to the specific circumstances of the activity and these **must** be considered when assessing the inherent risk level and planning the activity. As a starting point, ask the following questions:

- Which students will be involved?
- Where will the students be?
- What will the students be doing?
- Who will be leading the activity?
- What will the students be using?

Risk level		Action required / approval
<input type="checkbox"/>	Medium	Operation of pneumatic system (compressor) and fittings <input checked="" type="checkbox"/> Record controls in your planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	High	Operation of pneumatic system (compressor) and fittings encompasses: <ul style="list-style-type: none"> • pressurised vessel • fittings and hardware. This may result in: <ul style="list-style-type: none"> • dust and particle inhalation • physical injury. <input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal or delegated Deputy Principal or Head of Program (i.e. HOD, HOSES, HOC) to review and approve risk assessment. <input checked="" type="checkbox"/> Obtaining parental permission is recommended. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .

Listed below are the minimum recommendations for this type of activity. For any items ticked 'No', provide further information regarding the additional or alternate controls to be implemented for the safe conduct of the activity.

Minimum supervision
Adequate adult supervision is to be provided. In determining what is adequate, consider the number of students, their individual needs, and the nature of the activity. If an adult other than a registered teacher is engaged for instruction, a teacher should be present to take overall responsibility. Blue Card requirements must be adhered to.
<input type="checkbox"/> Registered teacher with minimum qualifications as outlined below OR <input type="checkbox"/> An adult with minimum qualifications as outlined below, in the presence of a registered teacher
Further information:

Minimum qualifications
The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.
<input type="checkbox"/> Current first aid qualifications including Cardio Pulmonary Resuscitation (CPR) or ready access to first aid facilities, including qualified personnel.
<input type="checkbox"/> Blue Card requirements met
Medium — Operation of pneumatic system (compressor) and fittings
For a registered teacher: <input type="checkbox"/> experience (previous involvement) in the use of pneumatic tools and equipment OR For a leader other than a registered teacher: <input type="checkbox"/> qualifications in the use of compressed-air equipment or in a trade where compressed-air equipment is used, if a teacher with experience is not available

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

High — Operation of pneumatic system (compressor) and fittings encompasses:

- pressurised vessel
- fittings and hardware.

This may result in:

- dust and particle inhalation
- physical injury.

For a registered teacher with qualifications in Industrial Technology Design (ITD):

- competence (demonstrated ability) in the use of pneumatic tools and equipment

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

For a leader other than a registered teacher:

- qualifications related to the activity and competence (demonstrated ability), when a teacher as described is not available

Further information:

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
Electricity <ul style="list-style-type: none"> • Burns • Electrocution 	<ul style="list-style-type: none"> • Ensure Electrical Safety Guidelines are adhered to. 	<input type="checkbox"/>	<input type="checkbox"/>	
Environmental conditions <ul style="list-style-type: none"> • Surfaces/surrounds • Confined spaces • Asphyxiation 	<ul style="list-style-type: none"> • Ensure that activities are conducted in an enclosed but well-ventilated room. • Ensure that the use of compressed air for cleaning down surfaces and workspaces is minimised. • Ensure that spray-painting activities are conducted in an enclosed but well-ventilated room. • Complete the Curriculum Activity Risk Assessment – Managing a Practical ITD Workspace. 	<input type="checkbox"/>	<input type="checkbox"/>	
Manual handling <ul style="list-style-type: none"> • Lifting equipment 	<ul style="list-style-type: none"> • Undertake a risk management process in order to prevent or minimise the risk of injuries caused by manual tasks. 	<input type="checkbox"/>	<input type="checkbox"/>	
Noise (loud and/or continuous)	<ul style="list-style-type: none"> • Ensure, where the noise level of the air-operated device and the frequency of use demand it, that appropriate ear protection is worn during operation. 	<input type="checkbox"/>	<input type="checkbox"/>	
Physical contact <ul style="list-style-type: none"> • Accidental 'bumping' 	<ul style="list-style-type: none"> • Monitor student numbers and available space. 	<input type="checkbox"/>	<input type="checkbox"/>	
Pressurised containers <ul style="list-style-type: none"> • Gas cylinders 	<ul style="list-style-type: none"> • Note that qualified personnel should run checks (as per manufacturer's specifications) of compressors with cylinders that have a capacity of 26 cubic feet or more. • Ensure that compressors are fitted with functioning relief valves and suitable regulators. 	<input type="checkbox"/>	<input type="checkbox"/>	
Students <ul style="list-style-type: none"> • Student numbers 	<ul style="list-style-type: none"> • Obtain parental permission, including relevant medical information. 	<input type="checkbox"/>	<input type="checkbox"/>	

Additional control measures

These would relate to the specific student needs, location and conditions in which you are conducting your activity.

Hazards/Risks	Control Measures

Submitted by:	Date:
List the names of those who were involved in the preparation of this risk assessment.	

Approval	
<input type="checkbox"/>	Approved as submitted:
<input type="checkbox"/>	Approved with the following condition(s):
<input type="checkbox"/>	Not approved for the following reason(s):
By:	Designation:
Signed:	Date:
Once approved, activity details should be entered into the <i>School Curriculum Activity Register</i> by administrative staff.	Reference no.

Monitor and review <i>To be completed during and/or after the activity and/or at the completion of the series of activities.</i>	Yes	No
Are the control measures still effective?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes?	<input type="checkbox"/>	<input type="checkbox"/>
Are further actions required?	<input type="checkbox"/>	<input type="checkbox"/>
Details:		

Important links

- HRM-PR-010: Working with Children Check – Blue Cards
<http://education.qld.gov.au/strategic/eppr/hr/hrmpr010/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions
<http://education.qld.gov.au/strategic/eppr/health/hlspr004/>
- HLS-PR-006: Managing Occupational Risks with Chemicals
<http://education.qld.gov.au/strategic/eppr/health/hlspr006/hs16.pdf>
- Infection Control Guideline:
http://education.qld.gov.au/health/pdfs/healthsafety/infection_control_guideline.pdf
- Standard Operating Procedures for EQ sites
<http://education.qld.gov.au/health/safety/hazards/equip-resources.html#sop>
- Hearing Protection Fact Sheet
<http://education.qld.gov.au/health/pdfs/healthsafety/hearing-protection-factsheet.pdf>
- 2004 Noise Code of Practice
http://www.deir.qld.gov.au/workplace/resources/pdfs/noise_code2004.pdf
- Managing a Practical ITD Workspace
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/pracitdworkspace.pdf>

Further information

For further information on incorporating risk management strategies into curriculum activity planning refer to [HLS-PR-012 Managing Risks in Curriculum Activities](#) and the associated list of [Curriculum Activity Risk Assessment Guidelines](#). (See: <http://education.qld.gov.au/strategic/eppr/health/hlspr012/index1.html>)

For further support with risk management training and advice, contact trained staff in schools such as Workplace Health and Safety Officers (WHSOs) and Workplace Health and Safety Representatives (WHSRs), and regional staff such as Senior Health and Safety Consultants