

Specific hazards to young people – Appendix A

Please note. This table forms part of the publication, Work Related Learning – Safeguarding Young People (August 2008), and the information contained should not be interpreted without reference to the guidance.

Agents, processes and work activities	What is the risk?	Control measures (how to avoid the risk)
Psychological capacity	<p>In the vast majority of jobs there is no difference in the kind of mental and social skills used by young people and adults.</p> <p>But there may be large individual differences in the psychological capacity of young people (due to training, experience, skills, personality and attitudes), However, there are some areas of work that could be beyond a young person's ability, such as;</p> <ul style="list-style-type: none"> • dealing with violent and aggressive behaviour and; • decision making in stressful situations. 	<p>A risk assessment must identify any critical tasks that rely on skill, experience and an understanding of the task requirements.</p> <p>Training and effective supervision must be provided, particularly where young people are:</p> <ul style="list-style-type: none"> • Using machinery with exposed dangerous parts (e.g. food slicing machinery). • Potentially exposed to violent or aggressive behaviour.
Physical capacity	<p>Accidents, injuries and/or musculoskeletal disorders that can occur in tasks that require repetitive or forceful movements, particularly in association with awkward posture or insufficient recovery time. Young people may not be capable of driving or operating machinery that is designed for adults.</p>	<p>The risk assessment must take into account factors relating to physique, general health, age and experience. Training and effective supervision must be provided.</p>
Work where the pace is determined by machinery and involving payment by results	<p>Young workers may be more at risk as their muscle strength may not be fully developed, and they may be less skilled, E.g. in handling techniques or in pacing the work according to their capacity. They may also be more subject to peer pressure to take on tasks that are too much for them, or to work more quickly.</p>	<p>The risk assessment must take account of age and experience. Training and effective supervision should be provided.</p>
Extreme cold or heat	<p>Exposure to extreme heat carries risks for workers of all ages, including heat exhaustion or potentially fatal heat stroke. Protective clothing may prevent the body losing heat normally. Their response to work in hot conditions will depend on physical fitness, physique and past experience of hot conditions, which will be vary from person to person. Exposure to extreme cold also carries risks for workers of all ages. Principally hypothermia and local cold injuries such as frostnip/frostbite.</p>	<p>It must be ensured that any intended exposure to extreme heat or cold is carefully risk assessed and minimised by:</p> <ul style="list-style-type: none"> • Suitable work patterns. • Reducing work rates. • Controlling work periods. • Getting a medical assessment of the young person before they start work. • Effective supervision.

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Noise	There is no evidence that young workers face greater risk of damaged hearing from exposure to noise than other workers.	The general requirements of the Noise at Work Regulations apply (risk assessment, hearing protection, etc.). The HSE advises that hearing protection (e.g. hearing defenders) be provided to young persons where daily exposure exceeds the 'first action level' (see departmental guidance on noise at work as appropriate). Effective supervision must be provided to ensure hearing protection is worn properly.
Hand-arm vibration	There is no evidence that young workers face a greater risk of developing Hand-Arm Vibration Syndrome (Vibration White Finger). However, there is an increased risk in the onset of non-occupational Raynaud's disease during adolescence which can give similar symptoms to vibration white finger. Young people with non-occupational Raynaud's Disease should not be exposed to HAV.	Control measures relevant to all employees must be implemented, including: <ul style="list-style-type: none"> • Identifying hazardous equipment/tasks. • Limiting exposure. • Providing effective supervision. • Health surveillance.
Whole-body vibration	Regular exposure to shocks, low frequency whole-body vibration, e.g. driving or riding in off-road vehicles on uneven surfaces, or excessive movement may be associated with back pain, and other spinal disorders. Young workers may be at greater risk of damage to the spine as the strength of the muscles is still developing and bones do not fully mature until around the age of 25.	Controls must be introduced where significant risks are identified. Controls may include; <ul style="list-style-type: none"> • identifying hazardous equipment/tasks; • limiting exposure by reducing either the time and/or level; • providing effective supervision; and • health surveillance.
Ionising radiation	The risk of developing cancer and hereditary defects from exposure to ionising radiation is slightly higher for young people. Setting statutory annual dose limits controls the risk of developing cancer and hereditary defects from exposure to ionising radiation. The dose limits for young trainees are set at 30% of the adult limits.	Work procedures should be designed to keep exposure to ionising radiation as low as is reasonably practicable. Young people are not permitted to be designated as 'classified persons' and must only enter a 'controlled area' under the terms of a written safe system of work.

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Non-ionising electro-magnetic radiation	Optical radiation: There is no evidence that young workers face greater risk of skin and eye damage.	Procedures for adult employees exposed to non- ionising radiation (e.g. outdoor workers) must be applied.
Non-ionising electro-magnetic radiation (continued)	Electromagnetic fields and waves: Exposure within current recommendations is not known to cause ill health. Extreme over-exposure to radio-frequency radiation may cause harm by raising body temperature.	Exposure to electric and magnetic fields must not exceed restrictions published by the National Radiological Protection Board.
Biological agents	Young workers are not intrinsically more susceptible to infections from biological agents than adults. Like any other worker, they may be at greater risk if they suffer from any disease or from the effects of medication or pregnancy.	Controls must be implemented for all employees regardless of their age or state of health against the risk of: <ul style="list-style-type: none"> • Infection at work, and • Acquiring an allergy to certain micro-organisms. Relevant COSHH risk assessments must be carried out and control measures implemented (e.g. maintaining high standards of hygiene, use of Personal Protective Equipment, etc.). Vaccinations (e.g. Hepatitis B) should be offered as a supplement to procedural or physical controls.
Very toxic, toxic, harmful, corrosive and irritant substances	Young people are not physiologically at any greater risk from exposure to such substances. However, they may not appreciate the dangers to their health, or follow instructions properly because of their immaturity. Some substances can cause allergic reactions in people, which may result in dermatitis or asthma, although they do not affect young people any differently.	COSHH risk assessments must be carried out for all substances in this group. Particular attention must be paid to the requirements for: <ul style="list-style-type: none"> • Information, instruction and training. • Effective supervision within a safe system of work. See control measures detailed above. For further advice on asthma and dermatitis please contact your Dept. H&S Adviser.

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	Some substances (carcinogens) may cause cancer. They need special consideration because of that property — they have no special effect on young people.	There are special precautions for Carcinogens under the COSHH Carcinogens ACOP. Please contact your Dept. H&S Adviser for further information.
	Some substances may impair a woman's ability to have children or may damage the unborn child. These substances do not affect young people any differently from adults.	A separate risk assessment of new and expectant mothers at work must be carried out (see separate guidance).
Asbestos	Young people are not physiologically at any greater risk from exposure to asbestos. However, young people may not appreciate the dangers and/or follow instructions properly because of their immaturity.	In addition to normal controls for all employees, special attention must be paid to the provision of information, instruction and training, and effective supervision.
Flammable liquids	Accidental spills can cause fires or explosions. Flammable liquids must be used only for their intended purposes.	Information must be given on: <ul style="list-style-type: none"> • The basics of flammability. • What to do if a liquid is spilt. • The dangers of misusing flammable liquids.
Flammable gases	Leaking gas from pipes, appliances or cylinders can cause fires or explosions.	Information must be given on: <ul style="list-style-type: none"> • The basics of flammability. • How to detect leaking gas. • What to do in the event of a gas leak.
Gas cylinders	Leaking gas from cylinders (e.g. due to physical damage) may cause fires or explosions. Heavy cylinders may cause physical injury if not properly handled.	Information must be given on: <ul style="list-style-type: none"> • The basics of flammability. • How to detect leaking gas. What to do in the event of a gas leak.
	Physical damage to cylinders which may lead to fires or explosions. Heavy cylinders may cause physical injury if not properly handled.	Gas cylinders need to be properly handled, to avoid: <ul style="list-style-type: none"> • Danger of fire or explosion • Risk of physical injury to the worker, e.g. crushed toes.
	Application of heat to gas cylinders may cause them to burst, possibly resulting in a 'shrapnel' type explosion; Alternatively, the contents may be vented through a pressure release valve resulting in fire or explosion.	It must be ensured that gas cylinders are safely stored and used, away from direct sources of heat.

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Work involving a risk of structural collapse	E.g. demolition, dismantling, construction, refurbishment and alterations when structures may be either deliberately or accidentally weakened.	Young people must only do such work if properly trained and under effective supervision.
Work involving high-voltage electricity (1000 Volts and above)	There is no evidence that young workers face greater physical risks from electricity than other workers.	As with adults, young people must not undertake any work involving electricity unless; <ul style="list-style-type: none"> • they have the necessary technical knowledge and/or experience to prevent danger or injury; or • are under an appropriate level of supervision.
Work with fierce or poisonous animals	Farm animals (including semi-domesticated animals such as deer, as well as domesticated animals such as horses, cows and sheep) may occasionally show aggression. Young works may be more at risk due to inexperience or lack of appreciation of the risks.	Effective supervision and training is essential. Consideration must be given to prohibiting young people working with fierce or poisonous animals. Employees must be segregated from potentially fierce animals, so far as is reasonably practicable.
Woodworking machines	The Approved Code of Practice 'Safe Use of Woodworking Machines' states that young people must not be allowed to use high-risk woodworking equipment unless they have the necessary maturity and competence i.e. completed appropriate training.	Young people must not be permitted to operate any woodworking machine which is hand fed and any of the following machines: <ul style="list-style-type: none"> • Sawing machines with circular blade or saw band. • Planing machines used for surfacing. • Vertical spindle moulding machines.