

Using hand tools in a safe manner

The purpose of this guidance is to remind employees and students who are authorised to work in University workshops about good practice in the use of hand tools, i.e. those that are not powered by electricity or a battery, and the general principles to follow.

What does the law require?

The Provision of Work Equipment Regulations 1998 (PUWER) require all work equipment to be fit for its intended purpose, to be maintained and inspected to ensure it remains in a safe condition, to have relevant clear and visible safety markings, such as a CE mark and British Standard markings.



Some typical risks from hand tools

- Sharp / cutting tools can cause minor or serious cuts to hands and fingers.
- A screwdriver used as a chisel could cause the tip of to break and hit the user or someone nearby.
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another person nearby.
- A wrench with sprung jaws might slip.
- The head of a chisel can become 'mushroomed' and shatter on impact, sending sharp fragments flying.
- Iron or steel hand tools can be a dangerous ignition source around flammable substances.

Ensure hand tools are properly used and maintained¹

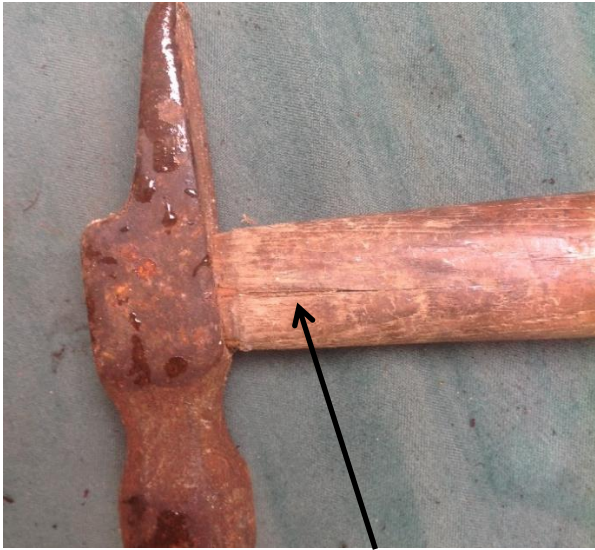
A simple check by users of hand tools can control many risks, for example:

- cutting tools – keep knives and blades sharp, cover exposed edges wherever possible.
- hammers – avoid split, broken or loose shafts and worn or chipped heads. Make sure the heads are properly secured to the shafts.
- files – these should have a proper handle. Never use them as levers.
- chisels – the cutting edge should be sharpened to the correct angle. Do not allow the head of cold chisels to spread to a mushroom shape – grind off the sides regularly.
- screwdrivers – never use them as chisels and never use hammers on them. Split handles are dangerous.
- spanners – avoid splayed jaws. Scrap any which show signs of slipping. Have enough spanners of the right size. Do not improvise by using pipes etc. as extension handles.

What do you need to do?

- Supervisors should take account of risks from hand tools in their risk assessment / safe system of work
- Only use hand tools that you have been trained on and are authorised to use.
- Always ensure hand tools are safe to use, fit for purpose and suitable for the task.
- Do not use hand tools as DIY accessories attached to other tools or equipment.
- If you suspect any hand tool is damaged or unsafe, take it immediately out of service so it cannot be used and report it to your Supervisor.
- Where necessary, wear Personal Protective Equipment (PPE). If you are not sure what might be needed, see your Supervisor or contact the Health and Safety Advisory Service.

Examples of damaged tools



Hammer showing split handle



Makeshift repairs to hammer



Loose bolts



Rusted drill bits



Rusted blade