



# CLOVER SAFE

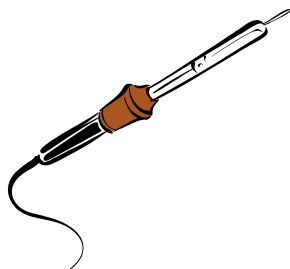
AGRICULTURE AND NATURAL RESOURCES  
ENVIRONMENTAL HEALTH AND SAFETY



#89

## SOLDERING SAFETY

*This Clover Safe note is intended primarily for 4-H volunteers and members twelve years and older.*



Information available from the U.S. Consumer Products Safety Commission indicates most injuries sustained while performing soldering are burns to the fingers and hands. Many of these and other soldering-related injuries were due to operator error or inattention and could have been avoided by following the soldering safety precautions given in this Clover Safe note.

Note: Lead is banned from solder products in California.

### Soldering Safety Precautions

- Prior to use, inspect the soldering iron or gun for damage or disrepair, including the tip or element and electrical cord (cut or frayed cord) and plug (missing or burnt prongs).
- If the soldering iron or gun fails your inspection, inform your group leader, parent, or guardian and remove it from use.
- Always wear appropriate personal protective equipment when soldering, including eye protection. It is recommended that a long-sleeve shirt, long pants, heat resistant gloves, and closed-toed shoes be worn to protect the skin from hot solder spatters and drips.
- Never touch any tip or element of a soldering iron or gun. Always assume the tip or element is hot.
- Avoid contact with fluxes which contain acids that may cause skin, eye, or lung irritation.
- Perform soldering in a well ventilated area. Avoid breathing solder and flux fumes.
- Always place the tip or element of the soldering iron or gun in a stand. Do not lay a soldering iron or gun on a work table.
- A good safety practice is to conduct soldering on a fire resistant soldering mat.
- Keep focused on the soldering task and do not look away from your work while using a soldering iron or gun.
- Never solder parts of a live circuit.
- When soldering small items, use a pair of long-nose pliers or tweezers to hold the item to the soldering tip or element.
- Keep combustible solids (wood, paper) and flammable liquids (gasoline, solvents) away from areas where soldering takes place.
- When possible, use a clamp to hold the piece being soldered.
- Never use a soldering iron or gun in wet conditions.
- Keep the soldering tool tip clean by wiping it on a wet sponge.
- Unplug the soldering iron or gun when it is not in use.
- Always wash your hands with soap and water at the conclusion of the soldering task.
- If you are injured while soldering, notify your project leader, parent, or guardian. Seek medical attention if the injury is serious.

