

# Learning from Safety Incidents – Stoves



**Item Code:** CS245003 Dec/24

## Introduction

This case study aims to support all scout volunteers with anonymised information and key learning points on safety incidents reported to UKHQ. By considering real-life scenarios, volunteers can gain valuable insights into effective strategies for managing similar situations and all scout groups are better prepared for future activities.

## Case Studie Overview

During a cooking activity with a group of scouts in a campfire circle, several cooking bases were set up, utilising various techniques and skills for lighting fires. This included the use of a penny stoves, dragon stoves, and open flame fire.

During the activity, one of the penny stoves went out and could not be relit. The penny stove was located within a fire pit, where a dragon stove was also used to boil water. The volunteer, after two failed attempts to light the penny stove, decided to replace the stove with another one. The replacement stove was placed in the same location and refuelled with methylated spirits. The volunteer moved away from the fire pit area to place the methylated spirits bottle on the table and then returned to light the stove.

Before being lit by the volunteer, the vapours created a flash flame which caused burn injuries to one of the scouts involved in the activity.

## Questions to consider

1. Camp firepit layout – was there sufficient space between the stove and other sources of heat?
2. Familiarity – how experienced was the volunteer with this specific type of stove?
3. Understanding of the flammability of methylated spirits – was there a good understanding by the volunteers that methylated spirits (meths) are highly flammable and can create a flammable vapour at low temperatures (-11 to 13°C) which can ignite causing a fireball?
4. Was the warm stone/brick (the base of the fire pit where the previous penny stove was situated) a contributing factor to its ignition?
5. Was the use of the meths bottle (without a safety valve) a contributing factor in the amount of meths poured into the penny stove?

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## Key Learning Points

- Only use one stove per fire pit.
- Undertake training and be familiar with the stove in use. [How to use a meth burning stove safely | Scouts](#) FS120348
- DIY stoves, often known as Penny Stoves, or Soda Can stoves are not recommended.
- Consider using alternative stoves – some 'Trangia' stoves are adapted to use gas.
- Use a fuel bottle with a safety valve.
- Wear appropriate clothing when using stoves (no fleece or nylon clothes to be worn).
- Make sure the stove, the burner and the surrounding area are cool before attempting to re-light the stove.
- Pre-plan emergency access and know W3W (What 3 Words) or GR (Grid Reference) before the event. All volunteers involved in the event will play a role in the emergency plan if activated.