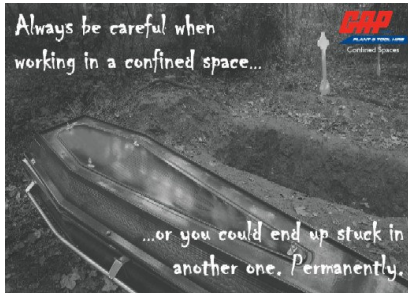


Always be careful when  
working in a confined space...

**CAP**  
PLANT & TOOL HIRE  
Confined Spaces  
Tool Box Talk

...or you could end up stuck in  
another one. Permanently.

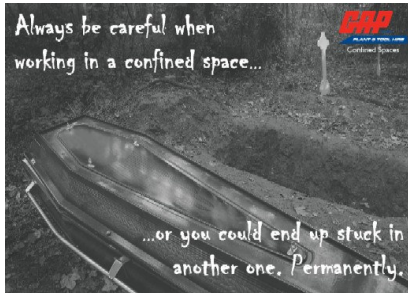


## Confined Spaces

On average Work in Confined Spaces kills approximately 15 people per year in the UK, across different industries, ranging from storage vessels to complex plant and a number of people are seriously injured.

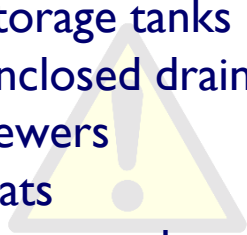
### Definition

A confined space can be any space which is of an enclosed nature where there is a risk of death or serious injury from hazardous substances or dangerous conditions, for example a lack of oxygen.

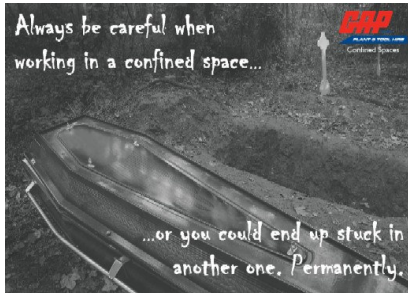


## Some examples of confined spaces are:

- Storage tanks
- Enclosed drains
- Sewers
- Vats
- Duct work
- Open –topped chambers



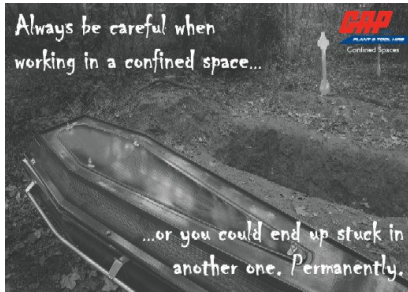
And there are many more, but it should be remembered that some places of work may become confined spaces where work is carried out, or during construction or modification.



## The Dangers of Confined Spaces

Dangers can arise in confined spaces due to lack of Oxygen, this can occur:

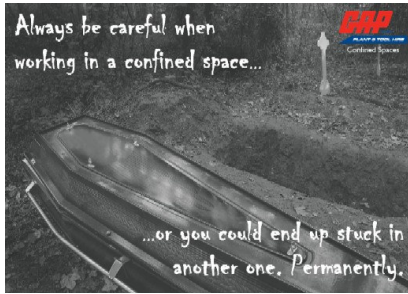
- Inside steel tanks and vessels when rust forms
- Following the action of ground water on chalk and limestone which can produce carbon dioxide and displace the normal air
- Fumes or vapour and poisonous gas



## These can build up:

- In sewers and manholes connected to the system
- Enter tanks and vessels from connecting pipes
- Leaks into trenches
- Fire and explosions (e.g. from flammable vapours etc.)
- Residues left in tanks or vessels
- Hot conditions leading to a dangerous increase in body temperature

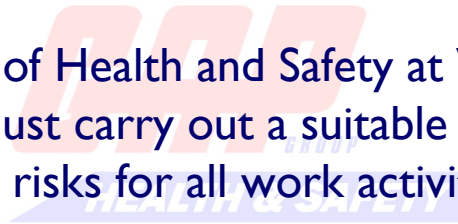
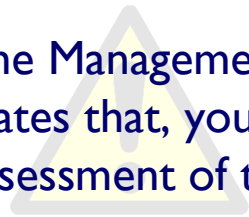
Some of these conditions may arise as a result of work being carried out, or because of ineffective isolation of plant nearby i.e. leakage from a pipe connected to the confined space and some of these may already be present



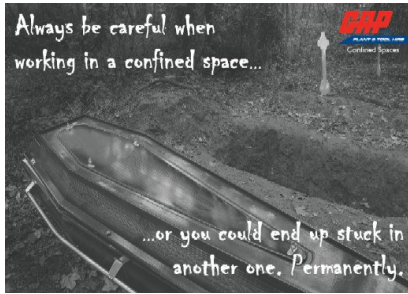
## The Law



The Management of Health and Safety at Work Regulations 1999, states that, you must carry out a suitable and sufficient assessment of the risks for all work activities.



This aids the decision on what measures are necessary for safety.

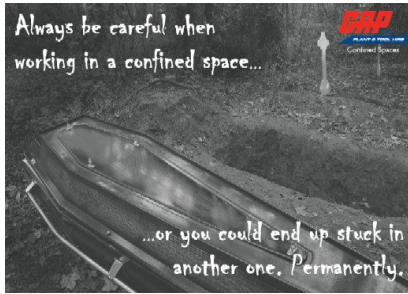


## For work in confined spaces this means identifying the:

- Hazards which are present
- Assessing the risks
- And determining what precautions to take.

## Consideration within the assessment should include:

- The task
- The work environment
- The materials and tools being used
- The suitability of those carrying out the task
- Emergency rescue arrangements



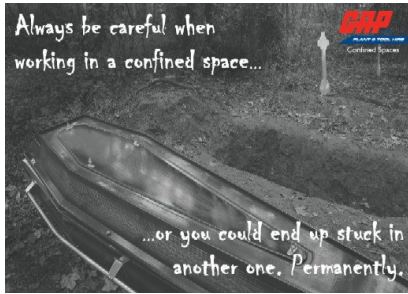
### **It may be necessary to appoint competent people to:**

- Manage the risks
- Ensure that employees are adequately trained and instructed

Further guidance on Risk Assessment can be obtained from the HSE (5 Steps to Risk Assessment). Where the assessment identifies that the risk of injury are serious then The Confined Spaces Regulations 1997 apply.

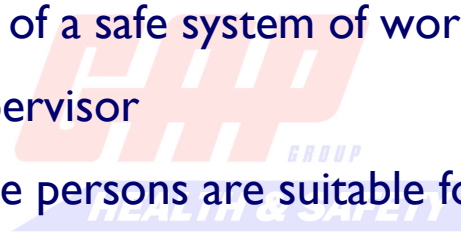
### **The regulations contain key duties which must be followed:**

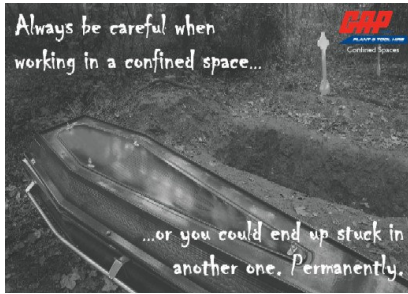
- Avoid entry to a confined space
- Where entry is unavoidable, follow a safe system of work
- Ensure adequate emergency arrangements are in place prior to work commencing



## Areas to be Considered include:

- Avoid entering confined space
- Development of a safe system of work
- Appoint a supervisor
- Check that the persons are suitable for the work
- Isolation
- Cleaning before entry
- Ventilation
- Testing of the air
- Special Tools





## Areas to be Considered include:

- Emergency Procedures / Arrangements
- Communications
- Is a 'Permit to Work' necessary
- First-aid procedures
- Emergency services
- Capability of rescuers
- How is the alarm raised?



There may be more considerations which may need to be looked at these should have been identified through the risk assessment.