

## Immediate, Underlying and Root Causes

### Immediate and Underlying Causes

#### Immediate Cause

The most obvious reason why an adverse event happens, e.g. the tank was overfilled; the drain was open etc. There may be several immediate causes identified in any one adverse event

#### Underlying Cause

These can be attributable to unsafe acts (can include errors and deliberate acts) and unsafe conditions (e.g. the guard was removed, high level alarm was switched off, etc...)

### Root Cause

#### The HSE define root cause as:

An initiating event or failing from which all other causes or failings spring. Root causes are generally management, planning or organisational failings

#### The CCPS define root cause as:

A fundamental, underlying system related reason why an incident occurred that identifies a correctable failure in management systems

Investigations which identify root causes allow organisations to take actions that will strengthen their underlying management system