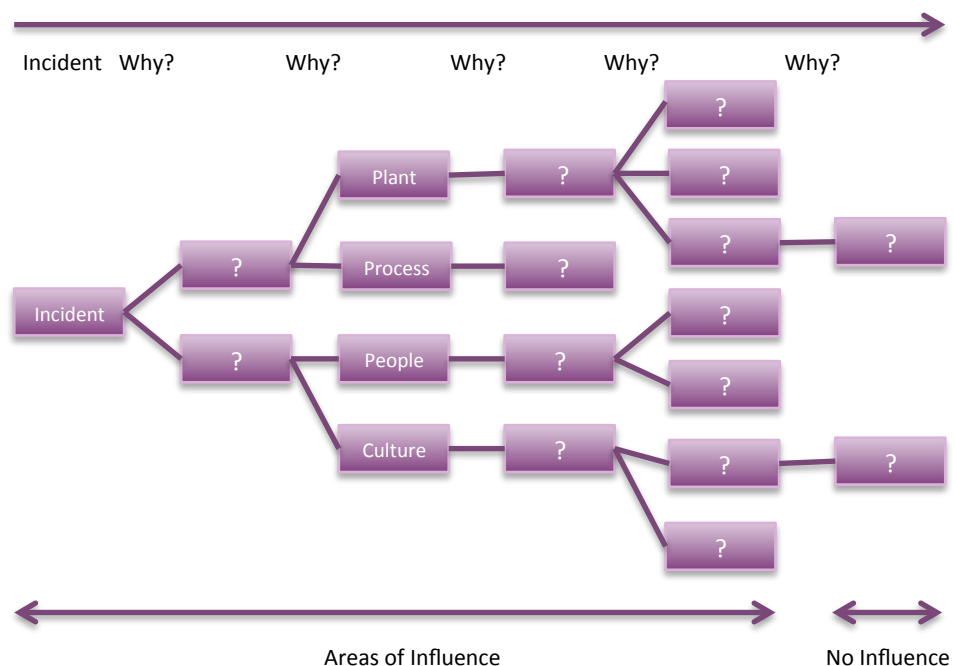# Root Cause Analysis

Root Cause Analysis

The aim of a Root Cause Analysis (RCA) is to investigate and plot graphically the range of proximate (immediate) and root (removed in time & space) causes of an incident with a view to taking action to prevent a reoccurrence. RCA is a "no-blame" process.

Pathways

There are two pathways to incidents. In most cases incidents are triggered by an Unsafe-Act performed by one or more people i.e. talking on a smart-phone leads to a rear-end crash. In a significant minority of cases, Latent Conditions (organisational or social artefacts) lead to incidents without an unsafe-act i.e. a road washes away or subsides because of road building practices from a bygone era leading to a crash.

One-to-Many

A single incident will almost always have multiple causes. Most root causes can be identified, removed in time & space from the event. Investigators should probe backwards through the origins and prolongation of Culture, People, Process and Plant.

Ask Why?

Firstly, define precisely <u>what</u> happened. Then, investigators should ask, without judgement, <u>why</u> did this happen? Plot potential causes in a 'flow' from the incident (at left) through Culture, People, Process and Plant, backwards in time & space, to the range of root causes. Stop asking why when the limit of your influence has been reached. It's far better to correct the root causes than penalise workers/drivers.