

# 1 Problem

<b>What</b>	Problem(s)	Nursing home fire, multiple deaths
<b>When</b>	Date	November 18, 2011
	Time	4:53 am (alarm went off)
<b>Where</b>	Different, unusual, unique	Two areas of fire, no sprinkler system
	State, city	Sydney, Australia
	Facility, site	Nursing Home
	Unit, area, equipment	Six room ward at rear
	Task being performed	High, low and respite care
<b>Impact to the Goals</b>		
	<b>Patient Safety</b>	11 resident deaths
	<b>Employee Impact</b>	Nurse charged with murder
	<b>Compliance</b>	Supreme Court trial
	<b>Patient Services</b>	Residents evacuated
	<b>Property, Equip, Mtls</b>	Construction of new facility (larger) \$25 million
	<b>Labor, Time</b>	Rescue efforts
	Frequency	>2,000 nursing home structure fires/year (US)
	Annualized Cost	This incident ? Substantial

# NURSING HOME FIRE

## Cause Map Sprinkler systems to be required by government

A fire broke out in the early morning hours of November 18, 2011 at a residential aged care facility in Sydney, Australia. At least 11 residents died as a direct result of the fire. The facility was later rebuilt at a cost of \$25 million.

"This is a firefighter's worst nightmare. Turning up to a nursing home with elderly people who can't get themselves out of harm's way."

- Fire and Rescue Commissioner Greg Mullins

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

### CAUSE MAPPING

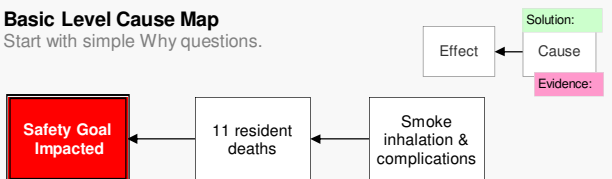
Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 Problem** - What's the Problem?
- Step 2 Analysis** - Why did it happen?
- Step 3 Solutions** - What will be done?

# 2 Analysis

## Basic Level Cause Map

Start with simple Why questions.



## Basic Cause-and-Effect

A nurse has plead guilty to 11 counts of murder as there have been 11 deaths attributed to a fire believed to be arson at a nursing home in Sydney, Australia. (There have been other resident deaths but due to their age and health, it wasn't clear if the deaths were a direct result of the fire.)

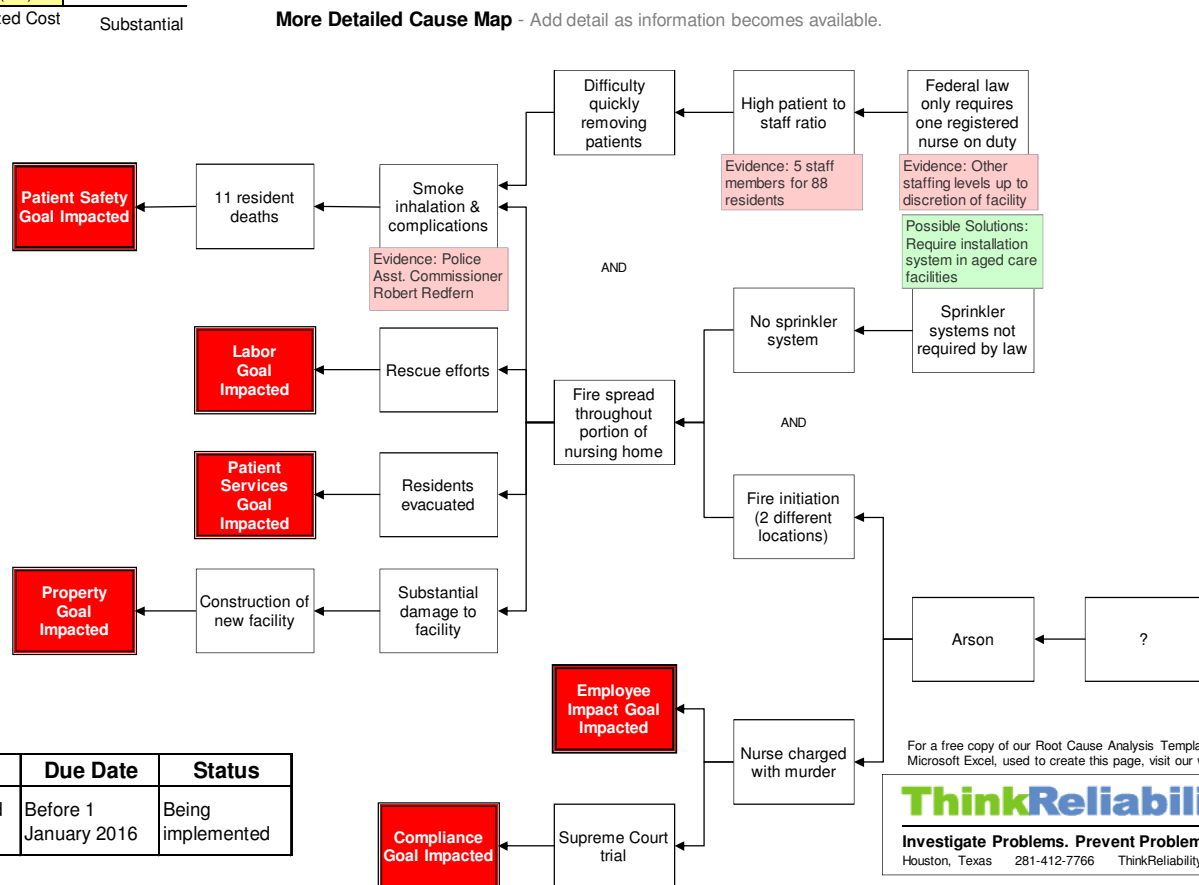
## More Detailed Cause-and-Effect

The cause of the fire initiation resulting in the deaths of residents, evacuation and severe damage to the nursing home facility is believed to have been arson. However, higher staffing levels and an automatic sprinkler system could have decreased the spread of the fire, increased the speed of the evacuation and potentially reduced the number of deaths.

The government of New South Wales passed a law requiring installation of automatic sprinkler systems in all residential aged care facilities prior to January 1, 2016. It is hoped that the presence of an automated sprinkler would slow or prevent the spread of a fire, resulting in fewer resident deaths.

# 3 Solutions

No.	Action Item	Cause	Owner	Due Date	Status
1	Require installation system in aged care facilities	Sprinkler systems not required by law	All residential aged care facilities	Before 1 January 2016	Being implemented



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