

Summary of Incident and Risk Analysis

Risk Modelling

The Fire and Rescue Service nationally uses a number of risk modelling tools. The most common are known as ENTEC and FSEC. In June 1998, the Central Fire Brigades Advisory Councils set up a committee to develop a new standard of fire cover. The new standard called Fire Service Emergency Cover (FSEC) recommended that each brigade should carry out a risk assessment of each risk in its area, and then suggest a flexible operational response and a fire safety strategy to meet that risk.

Those risk assessments were carried out using a set of "toolkits" produced for the Home Office Fire Research Development Group by Entec UK Ltd. (ENTEC), each toolkit comprises a set of guidance notes to cover a particular type of risk.

Key factors in terms of the ENTEC tools are dwelling fire risk and population banding. A standard of fire cover is then recommended once these factors are considered. A brief overview of these two factors as they affect Snainton is set out below.

Within the ENTEC modelling system medium risk is regarded as a frequency of dwelling fires between 1 in 400 and 1 in 800 (fires per dwelling per year) and a frequency of casualties occurring in fires of between 1 in 5,000 and 1 in 2,000. Low risk is less than 1 in 800 dwelling fires and 1 in 5,000 casualties. The recommended minimum response in a categorised area is then aligned to the population and not the dwellings. Snainton is just into the medium risk band based on the current data.

ENTEC population banding is different for low risk and medium risk areas. For low risk areas, populations below 9,000 attract a 'no standard at present costs' attendance. For medium risk areas, there are different population bands with Snainton in the '2,500 dispersed population band' which attracts a '1 fire engine in 20 minutes' standard.

Thus Snainton lies at the low-medium borderline and the ENTEC recommended standard would be for it to have a single fire engine in 20 minutes. If it dropped into the low risk band it would not have any standards for attendance times recommended for it.

This leads to the conclusion that the risk in the Snainton area can be met with an attendance from Scarborough, Pickering or Sherburn, which can be made to the villages within 15 minutes. Being able to provide a response of 3 fire engines in this way places Snainton well within the recommended '1 fire engine in 20' category.

Snainton Incidents in Station Area

The table shows the number of incidents in the Snainton area for the period 2005/6 to 2011/12

Incident Types	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	Grand Total
CHIMNEY	1	4	4	3	3	4	1	20
FALSE - APPARATUS	5	20	16	22	5	10	8	86
FALSE - GOOD INTENT	3	2	2	3	4	1	1	16
FALSE - MALICIOUS	1	1	1	1				4
FIRE	9	9	9	3	6	9	3	48
Fire - Dwelling - Accidental	1	3	4	1		4		13
Fire - Dwelling - Deliberate			1					1
Fire - Other Building - Accidental	2		1	1	1	1	1	7
Fire - Other Outdoors - Accidental		2	1				1	4
Fire - Other Outdoors - Deliberate		1			1			2
Fire - Other Private Buildings - Accidental					2			2
Fire - Outdoor Structure - Accidental						1		1
Fire - Road Vehicle - Accidental	2	2	2		2	2	1	11
Fire - Road Vehicle - Deliberate	4	1		1		1		7
SECONDARY	4	3	5	1	4	2	2	21
Secondary - Derelict Vehicle - Accidental	1							1
Secondary - Grassland - Accidental		1	1		1		1	4
Secondary - Grassland - Deliberate			1		1			2
Secondary - Outdoor Structure - Accidental		1						1
Secondary - Outdoor Structure - Deliberate					1			1
Secondary - Outdoor Structure - Not Known							1	1
Secondary - Refuse - Accidental	2	1	2	1		1		7
Secondary - Refuse - Deliberate	1		1					2
Secondary - Straw/Stubble Burning - Accidental					1			1
Secondary - Straw/Stubble Burning - Deliberate						1		1
SS	7	4	7	8	7	7	3	43
SS - Animal Rescue	1		1			1		3
SS - Assist Police						1		1
SS - Farming Accident					1			1
SS - Making Safe		1				1		2
SS - Precautionary/Standby			1		1			2
SS - Removal/Provide Water			2	4	2	1		9
SS - Rescue/Release People		1			1	1		3
SS - RTC	4	1	3	4	2	1	3	18
SS - Spills & Leaks	2	1				1		4
Grand Total	30	43	44	41	29	33	18	238

Primary Fires

For Snainton of the 48 fires during the period only 14 were dwelling fires, which statistically represent the greater risk to life, which is an average of 2 dwelling fires per year. This puts Snainton at 1 in 622 fires per dwelling per year which is in the medium category but at the lower end. The disproportionate effect of small incident numbers on small populations becomes apparent here. For example, if Snainton has the average number of dwelling fires next year (2) then the rolling 5 year calculation would put Snainton at 1 in 889 fires per dwelling per year, which would then be well into the low risk category.

For injuries from fire Snainton has had 3 in the last 7 years and 2 in the last 5. Both of these figures would result a low risk rating; figures of 1 in 14785 for the 5 year data set and 1 in 13818 for the 7 year set are both considerably less than the 1 in 5000 frequency that constitutes a low risk.

This low number of incidents and casualties makes the statistics unreliable as a sole source of risk assessment and makes them susceptible to the outcomes of single incidents. For reliable interpretation of statistics, the data set needs to include at least 30 incidents. The rate of dwelling fires in Snainton is so low that there would need to be more than 15 years worth of data to have enough incidents.

Road Traffic Collisions (RTCs)

In its own station area Snainton attends an average of 2.6 RTCs per year and 1.2 of those are where extrications are carried out. The injury statistics currently indicate that this equates to 1 injury in 2457 persons per year (with the range in North Yorkshire being 1 in 409 highest to 1 in 10998 lowest). This rate of RTC casualties puts Snainton at the upper end which shows the disproportionate effect on risk in an area of a busy road travelling through a small village.

False Alarms and Unwanted Fire Signals

In the 7 year period 2005/2012 of the 238* calls 106 were false alarms of one type or another which equates 44.5%* of all incidents.

*On 6th August 2012, the number of calls was reduced by one, from 239 to 238. This was due to a Special Service: Animal Rescue in 2011/12 falling from one to zero as the details have not been confirmed as yet.