

**Health and Safety Quarterly Report
Quarter 4 (January – March 2021) Event Reporting and Summary**

1. Overview

In the period January to March 2021 a total of **55** Health and Safety (H&S) events were reported. They fall into the categories of:

- 17 Personal Injury
- 13 Vehicle Collisions
- 4 Property or Equipment
- 15 Near Hits or Causes for Concern
- 3 Violence or Aggression
- 3 Exposure or Contamination

Individual detailed summaries of reporting in the key areas above are outlined in Appendix A.

2. Breakdown of Events

By Activity

Table 1 shows that during Q4, personal injuries and near hit/cause for concerns were the most frequently reported incidents. Personal injuries occurred mostly during training or operational activities. The majority of the near hit/cause for concerns tended to happen during operational activities.

	Total	Training	Operational Activities	Routine Activities	Non-Service Related Activities
Total H&S Events Q4	55	17	22	10	6
Personal Injury	17	7	7	2	1
Vehicle Collision	13	1	4	5	3
Property or Equipment Failure	4	4	0	0	0
Near Hit or Cause for Concern	15	3	8	2	2
Exposure or Contamination	3	2	0	1	0
Violence or Aggression	3	0	3	0	0

Table 1: Safety Event Breakdown Q4 2020-2021

By Injury Type

Table 2 identifies manual handling and slips, trips and falls as being the main cause of personal injuries. The incidents classified as 'other' related to a firefighter feeling unwell following a vaccination, and a firefighter suffering a back sprain whilst undertaking some personal fitness.

Total Personal Injuries	17
Manual Handling	7
Slips, Trips & Falls	6
Hit by Moving Object	0
Hit Stationary Object	2
Burns – Operational	0
Burns – Training	0
Other	2

Table 2: Personal Injury Breakdown Q4 2020-2021

By Vehicle Type

Table 3 highlights that vehicle collisions involving fire engines are mostly whilst non-blue light driving, which is the same for the car and van collisions.

Vehicle Collisions	Fire Engines		Cars and Vans		Non-Service related
	On blue lights	Off blue lights	On blue lights	Off blue lights	
Total Collisions	1	7	0	5	0

Table 3: Vehicle Breakdown Q4 2020-2021

Vehicle Mileage Statistics

Vehicle mileage statistics for the year 2019-2020 were provided by the Operational Logistics Fleet Department and have been used to predict vehicle mileage for 2020-21. These are summarised in Table 3A below. It can be seen that there were five white fleet safety events out of approximately 213,911 miles driven, which equates to one event for every 42,782 miles driven.

The eight safety events involving red fleet vehicles were out of approximately 52,024 miles driven, which equates to one event for every 6,503 miles driven.

Fleet	Total Mileage 2019-2020	Predicted Mileage Q4 2020-2021
White Fleet	855,645	213,911
Red Fleet	208,095	52,024
	Totalling 1,063,740 miles	Totalling 265,935 miles

Table 3A: Vehicle Mileage Statistics Q4 2020-2021

3. Events Requiring Investigation during Quarter 4 (Jan 21 – Mar 21)

Tier One Investigations

A Tier One standard investigation is required for all safety events and is usually conducted by the on-duty / line manager present at the time of the event. Events that are minor in nature usually remain at this tier.

Tier Two Basic Specialist Investigations

In addition to the standard investigation required for Tier One, a Basic Specialist Investigation (SI) is required for:

- Rare, unusual or unlikely events resulting in either serious injuries or losses, or with the potential to incur such injuries or losses.
- Events involving Breathing Apparatus (BA).
- Near Hits resulting from unusual conditions or with the potential to cause serious injury or loss that are rare or unlikely to reoccur.

Seven safety events reported during Q4 required a Tier Two Basic Specialist Investigation:

- 1) 1255 - 1 relates to a personal injury. The firefighter lost their footing and fell from the appliance step onto the floor.
- 2) 1280 - 1 relates to an exposure. A firefighter's lung demand valve (LDV) was pulled out whilst in a contaminated area.
- 3) 1285 - 1 relates to property/equipment failure. Whilst in use the LDV on the BA set went into free flow and couldn't be turned off, causing rapid air loss. No harm was caused to the wearer.
- 4) 1287 - 1 relates to property/equipment failure. Whilst being used in training, there was rapid and uncontrolled air loss through the LDV of a BA set.
- 5) 1290 - 1 relates to property/equipment failure. Whilst being worn during training a BA set failed and the mask went into supplementary supply without being activated.
- 6) 1295 - 1 relates to a personal injury. A firefighter hurt their back whilst moving a length of hose during a drill.
- 7) 1301 - 1 relates to a personal injury. Whilst taking part in RTC training the firefighter slipped and injured their calf muscle.

Tier Two Full Specialist Investigations

A full SI may be assigned immediately or following a Basic SI and is required for:

- Possible or likely events resulting in serious injuries or losses.
- All significant events involving Breathing Apparatus (BA).
- Near Hits resulting from unusual conditions or with the potential to cause serious injury or loss that are possible or likely to reoccur.

No safety events were reported during Q4 that required a full Specialist Investigation.

Tier Three MERP Specialist Investigations

A Tier Three Specialist Investigation is conducted as required by the Major Event Response Protocol (MERP) SPI. These are for the most serious events such as death or potentially life-threatening injury to a member of HWFRS whilst on duty, or a third party either occurring on Service property or as a result of an act or omission by HWFRS.

No safety events during Q4 required a Tier Three Specialist Investigation.

RIDDOR Events for Quarter 4 (Jan 21 – Mar 21)

During Q4, seven RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reports were submitted to the Health and Safety Executive (HSE). Four were classed as Dangerous Occurrences, three were over seven day injuries.

4. Comparison between Quarters and Trend Analysis

Comparison of Events Reported Showing Differences Q4 2019-20 & Q4 2020-21

Table 4 below compares the number of events reported in Q4 2019-20 and Q4 2020-21 for the different categories. For events over the last 12 months, three of the categories experienced a decrease, while three reported an increase, one quite significantly.

Overall, event reporting as a whole increased by one over the period, with 55 reports in Q4 2020-21 compared to 54 in Q4 2019-20. The increase was driven by a significant rise in Near Hits which should be seen as a positive part of the overall H&S culture, because in general these occurrences provide the opportunity to introduce additional control measures helps to reduce the risk likelihood of personal injuries occurring.

Event Type	Q4 2019-20	Q4 2020-21	Increase/Decrease
Personal Injuries	21	17	-4
Vehicle Collisions	18	13	-5
Property or equipment	3	4	+1
Violence & Aggression	7	3	-4
Near Hits	3	15	+12
Exposure / contamination	2	3	+1
Overall	54	55	+1

Table 4: Quarterly Events Reported Q4 2019-20 and Q4 2020-21

Trend Analysis

In summary compared with the previous year, there was an increase in the number of events reported during Q4 (+1).

The main decrease was vehicle collisions (-5). The main increase was Near Hit/Cause for Concerns (+12).

All events that occurred during the quarter were investigated at a minimum of Tier One local level investigation to identify preventative control measures and help to reduce the likelihood of similar occurrences.

12 Month Trend Analysis

Table 5 below breaks down the latest 4 quarters by reported accident type. Q4 figures are above the four previous quarters.

Personal Injuries have significantly increased over the last quarter, as well as Near Hit/Cause for Concerns. Property/Equipment Damage reports have increased this quarter, compared to last. Vehicle collisions continue to rise.

Whilst it appears vehicle collision increased in the final 3 quarters of the year this could be attributed to a return to more normal road usage and working practices following initial COVID restrictions across the Country during quarter 1.

All categories have shown an increase since last quarter, apart from violence/aggression, which has remained the same.

	Q1 20/21	Q2 20/21	Q3 20/21	Q4 20/21
Total H&S Events	43	44	34	55
Personal Injury	15	14	4	17
Vehicle Collision	5	12	12	13
Property or Equipment Failure	4	0	2	4
Near Hit or Cause for Concern	11	17	12	15
Exposure or contamination	6	1	1	3
Violence or Aggression	2	0	3	3

Table 5: 12 Month Trend Analysis Q1 2020 – 2021 to Q4 2020 – 2021

Brief Description of all Safety Events**A1. Personal Injury**

Of the **55** H&S events reported, **17** relate to the category of Personal Injury. These are described in Table A1 below:

Sub-Categories	Break-down of Injuries in Each Sub-Category
2 events were during routine activities	1263 - 1 relates to a personal injury. A firefighter hurt their back whilst opening one of the appliance lockers.
	1276 - 1 relates to a personal injury. A firefighter twisted their knee when stepping backwards out of the appliance.
7 events were during training activities	1255 - 1 relates to a personal injury. The firefighter lost their footing and fell from the appliance step onto the floor. BASIC SI
	1261 - 1 relates to a personal injury. A firefighter slipped on a patch of ice in the training yard.
	1284 - 1 relates to a personal injury. The firefighter had their radio in their pocket. They knelt down to look at something and the radio aerial hit them in the eye.
	1294 - 1 relates to a personal injury. A firefighter became unwell during BA training, following his CV19 vaccination.
	1295 - 1 relates to a personal injury. A firefighter hurt their back whilst moving a length of hose during a drill. BASIC SI
	1300 - 1 relates to a personal injury. Whilst taking part in river training the firefighter collided with some rocks and hurt their coccyx.
	1301 - 1 relates to a personal injury. Whilst taking part in RTC training the firefighter slipped and injured their calf muscle. BASIC SI
7 events were during operational activities	1250 - 1 relates to a personal injury. The firefighter twisted their back whilst lifting a sled out of the water.
	1262 - 1 relates to a personal injury. Whilst using a piece of large, heavy equipment a firefighter felt a pop in their elbow resulting in pain and discomfort. RIDDOR
	1259 - 1 relates to a personal injury. A firefighter twisted their back whilst carrying the rescue boat down an embankment.
	1266 - 1 relates to a personal injury. Whilst working at height the firefighter slipped and their chest made contact with the roof ladder wheel, causing the firefighter to experience chest pains a few days after the event.
	1270 - 1 relates to a personal injury. A firefighter experienced pain in their left shoulder whilst carrying out fire fighting duties. This is suspected to be brought on when rolling out the hose.
	1289 - 1 relates to a personal injury. Whilst attending a house fire a firefighter tripped over the hose and twisted their ankle.
	1302 - 1 relates to a personal injury. Whilst walking over loose debris at an incident, the firefighter slipped and fell, impacting their ribs on the debris.
1 event was non service related	1264 - 1 relates to a personal injury. A firefighter strained their back whilst undertaking some personal training exercises.
	Totalling 17 personal injuries
	32 Calendar Days / 16 Working days lost.

Table A1: Personal Injuries Reported during Q4 2020 – 2021

A2. Vehicle Collisions

Of the **55** H&S events, **13** relate to the category of Vehicle Collisions, which are further described in Table A2 below. All **13** of these events could be attributed to the FRS driver; these events are highlighted in grey. If these collisions occurred whilst on response to an operational incident the category of response has been provided in bold. The majority of the events involved slow manoeuvring contact with objects. Driver training have sent out a bulletin item for crews to familiarise themselves with the 'banksperson' CTR technical knowledge package and requesting that when contact is made with tree branches, crews should contact the local highways team to get the hazard removed.

Sub-Categories	Breakdown of Vehicle Collisions in Each Sub-Category
5 events were during routine activities	1254 - 1 relates to a vehicle incident. While driving down a dark lane the appliance caught a tree branch cracking one of the wing mirrors.
	1257 - 1 relates to a vehicle accident. Whilst driving down a narrow road the appliance had to move out of the way of an oncoming HGV resulting in the mirror making contact with an overgrown hedge.
	1279 - 1 relates to a vehicle accident. Whilst being jacked up the driver's door of the appliance opened and hit the ramp pillar.
	1283 - 1 relates to a vehicle accident. When opening their car door the firefighter caught the appliance causing a small dent.
	1296 - 1 relates to a vehicle accident. A firefighter reversed the appliance without using a banksman and ended up colliding with the appliance bay door.
1 event was during training activities	1267 - 1 relates to a vehicle accident. The USAR bobcat collided with the side of another appliance during training.
4 events were during operational activities	1249 - 1 relates to a vehicle accident. Whilst driving up a private road the appliance caught a boulder.
	1265 - 1 relates to a vehicle accident. The water rescue vehicle became stuck in flood water during a rescue.
	1272 - 1 relates to a vehicle accident. Whilst driving to an incident on blue lights the appliance pulled out to pass a parked vehicle. The wing mirror hit a low hanging tree branch, causing the back on the wing mirror to crack. EMERGENCY RESPONSE
	1304 - 1 relates to a vehicle accident. The top of the appliance caught a telegraph pole.
3 events were non service related	1256 - 1 relates to a vehicle accident. Whilst manoeuvring in a car park the car scraped a wall causing damage to the paintwork.
	1286 - 1 relates to a vehicle accident. A wheelie bin hit a Service car resulting in a cracked light cover.
	1299 - 1 relates to a vehicle accident. Whilst reversing out of a parking space, the officer's car collided with another vehicle's tow bar.
	Totalling 13 vehicle collisions

Table A2: Vehicle Collisions Reported during Q4 2020 - 2021

A3. Property or Equipment Damage

Of the 55 H&S events, 4 relate to the category of Damage to Property or Equipment.

Sub-Categories	Break-down of Property or Equipment Damage in Each Sub-Category
4 events were during training activities	1285 - 1 relates to property/equipment failure. Whilst in use the LDV on the BA set went into free flow and couldn't be turned off, causing rapid air loss. No harm was caused to the wearer. BASIC SI
	1287 - 1 relates to property/equipment failure. Whilst being used in training there was rapid and uncontrolled air loss through the LDV of the BA set. BASIC SI
	1290 - 1 relates to property/equipment failure. Whilst being worn during training a BA set failed and the mask went into supplementary supply without being activated. BASIC SI
	1293 - 1 relates to an equipment failure. Whilst undertaking water training, a deployed throw bag was found to detached from its line resulting in a firefighter having to self-rescue
	Totalling 4 property/equipment damage events.

A4. Near Hits or Causes for Concern

Of the 55 H&S events, 15 relate to the category of Near Hits or Causes for Concern - these are further described in Table A4 below.

Sub-Categories	Breakdown of Near Hits or Causes for Concern in Each Sub-Category
3 events were during training activities	1252 - 1 relates to a near hit / cause for concern. Whilst undertaking water safety training the self inflating life jacket did not fully deploy.
	1278 - 1 relates to a near hit / cause for concern. Whilst using some concrete slabs during training, the slabs became unfit for purpose after they broke.
	1292 - 1 relates to a near hit / cause for concern. Whilst carrying out BA training the recruit suffered a panic attack and had to withdraw from training.
8 events were during operational activities	1253 - 1 relates to a near hit / cause for concern. A firefighter tested positive for CV19.
	1269 - 1 relates to a near hit / cause for concern. Whilst removing the roof during an RTC incident the gas strut on the boot of the vehicle turned into a projectile and travelled around 10m from the vehicle.
	1271 - 1 relates to a near hit / cause for concern. The locker lights on the appliance had caught fire.
	1273 - 1 relates to a near hit / cause for concern. Whilst attending a garage fire it was discovered that the mains electric supply to the garage had not been isolated and was still live.
	1275 - 1 relates to a near hit / cause for concern. Whilst supplying the ALP with water the hose coupling and hose became separated.
	1281 - 1 relates to a near hit / cause for concern. Whilst driving to an incident the driver applied the brakes. The overhead locker opened and the contents fell out, hitting the firefighter on the head.
	1297 - 1 relates to a near hit / cause for concern. There was an uncontrolled loss of air from the LDV of the BA set.
	1303 - 1 relates to a near hit / cause for concern. Whilst driving to an incident the pump bay door of the appliance opened which could have resulted in equipment falling out.
2 events were during routine activities	1277 - 1 relates to a near hit / cause for concern. A firefighter tested positive for CV19
	1298 - 1 relates to a near hit / cause for concern. A member of staff was able to access electronic personal information on the F drive for a member of a different team.
2 events were non service related	1248 - 1 relates to a near hit/cause for concern. A firefighter tested positive for CV19
	1268 - 1 relates to a Near hit / cause for concern. A firefighter tested positive for CV19.
	Totalling 15 near hits or causes for concern

Table A4: Near Hits or Causes for Concern Reported during Q4 2020/21

A5. Violence or Aggression

Of the 55 H&S events, 3 relate to the category of Violence or Aggression.

Sub-Categories	Breakdown of Violence/Aggression in Each Sub-Category
3 events were during operational activities	1251 - 1 relates to an act of violence/aggression. Whilst attending an incident the casualty started throwing objects in the area the crew were in.
	1258 - 1 relates to an act of violence/aggression. While attending to a HGV that had become stuck in flood water, the driver of the HGV became aggressive. He accelerated away creating a bow wave which went towards fire service personnel who were forced to take safety action.
	1274 - 1 relates to an act of violence/aggression. Crews were subjected to verbal abuse when attending an incident.
	Totalling 3 violence/aggression events.

A6. Exposure or Contamination

Of the 55 H&S events, 3 relate to the category of Exposure or Contamination.

An exposure event will be investigated where a harmful substance has entered the body through a route e.g. by inhalation, ingestion, absorption, by injection or when the body is irradiated. Where there is uncertainty as to whether any exposure has taken place, or this is negligible, then this would be

recorded as a potential exposure and an investigation would not normally be instigated, unless related symptoms develop.

A contamination event occurs where a substance has adhered to or is deposited on people, equipment or the environment, creating a risk of exposure and possible injury or harm.

Sub-Categories	Breakdown of Exposure or Contamination in Each Sub-Category
1 event was during routine activities	1282 - 1 relates to an exposure. Four further firefighters tested positive for CV19 following contact with another colleague.
2 events were during training activities	1280 - 1 relates to an exposure. Firefighters LDV was pulled out whilst in a contaminated area. BASIC SI
	1288 - 1 relates to an exposure. During river training the firefighter ingested some river water and later suffered from sickness and blood test confirmed bacterial infection. RIDDOR
	Totalling 3 exposure or contamination event

Table A6: Exposure or Contamination Reported during Q4 2020/21

There were three reports of skin reddening during Q4. Skin reddening is recorded following training or incidents where immediately following exposure to high temperatures there is some skin discolouration which may be a result of this exposure. These occurrences are recorded and if they continue past 24 hours these are reported as a Personal Injury Safety Event.

35 potential exposure/contamination incidents were recorded during Q4, involving firefighters. Potential exposure/contaminations are where personnel have been exposed (during training or incidents) to hazardous environments but where appropriate control measures were implemented.