

Health and Safety Quarterly Report Quarter 2 (July 20 - Sept 20) Event Reporting and Summary

1. Overview

In the period of July 2020 to September 2020 a total of **44** Health and Safety (H&S) events were reported. They fall into the categories of:

- 14 Personal Injury
- 12 Vehicle Collisions
- 0 Property or Equipment
- 17 Near Hits or Causes for Concern
- 0 Violence or Aggression
- 1 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 Q2, personal injuries and near hit / cause for concerns were the most frequently reported incidents. Personal injuries tended to occur during operational activities. The majority of the near hit / cause for concerns tended to happen during both routine and operational activities. Events that occurred during training and routine activities increased during Q2, whilst operational incidents decreased.

	Total	Training	Operational Activities	Routine Activities	Non-Service Related Activities
Total H&S Events Q2	44	6	17	21	0
Personal Injury	14	4	5	5	0
Vehicle Collision	12	0	4	8	0
Property or Equipment Failure	0	0	0	0	0
Near Hit or Cause for Concern	17	2	7	8	0
Exposure or Contamination	1	0	1	0	0
Violence or Aggression	0	0	0	0	0

Table 1: Safety Event Breakdown Q2 2020-2021

By Injury Type

Table 2 identifies manual handling as the predominant cause of personal injuries reported. The manual handling injuries mostly resulted in minor pulled muscle strains, whilst the other category covered various issues including shoulder pain, smoke inhalation and a cut finger.

Total Personal Injuries	14
Manual Handling	5
Slips, Trips & Falls	1
Hit by Moving Object	3
Hit Stationary Object	0
Burns – Operational	2
Burns – Training	0
Other	3

Table 2: Personal Injury Breakdown Q2 2020-2021

By Vehicle Type

Table 3 highlights that vehicle collisions involving fire engines are all 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	0	8	0	4	0

Table 3: Vehicle Breakdown Q2 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 4 white fleet safety events out of approximately 213,911 miles driven, which equates to 1 event for every 53,477 miles driven. The 8 safety events involving red fleet vehicles were out of approximately 52,024 miles driven, which equates to 1 event for every 6,503 miles driven.

Fleet	Total Mileage 2019-2020	Predicted Mileage Q2 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 Q2 2020-2021

3. Events Requiring Investigation during Quarter 2 (July 20 - Sept 20)

Tier One Investigations

A Tier One standard investigation is required for all safety events reported during the reporting period, usually by the on-duty or line manager present at the time of the event, and is usually minor in nature (see section 1).

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.

Two safety events reported during Q2 required a Tier Two Basic Specialist Investigation:

- 1) Whilst replacing battery acid on an appliance, the battery acid splashed into the face and eye of the mechanic. Water was applied to the mechanic's face and they were checked at hospital.
- 2) Whilst fighting a well developed first floor fire, water supplies were lost, causing the BA team to withdraw from the building, as per normal practice.

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 Q2 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 on behalf of HWFRS.

No safety events during Q2 required a Tier Three Specialist Investigation.

RIDDOR Events for Quarter 2 (July 20 – Sept 20)

During quarter 2, 1 RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) report was submitted to the Health and Safety Executive (HSE). This was reported under the time lost requirements for two individuals resulting in over 7 calendar days' absence from the date of the occurrence.

- 1) When trying to start the out-board motor, the pull cord did not retract, it then swung round and hit two members of staff.

4. Comparison Between Quarters and Trend Analysis

Comparison of Events Reported Showing Differences Q2 2019-20 & Q2 2020-21

Table 4 below compares the number of events reported in Q2 2019-20 and Q2 2020-21 for the different categories. For events over the last 12 months, 4 of the categories experienced a decrease and 1 increased.

Overall, event reporting as a whole decreased by 9 over the period with 44 reports in Q2 2020-21 compared to 53 in Q2 2019-20. The decrease was driven by Vehicle Collisions and Personal Injuries.

Event Type	Q2 2019-20	Q2 2020-21	Increase / Decrease
Personal Injuries	19	14	-5
Vehicle Collisions	17	12	-5
Property or equipment	4	0	-4
Violence & Aggression	3	0	-3
Near Hits	9	17	+8
Exposure / contamination	1	1	+/-
Overall	53	44	-9

Table 4: Quarterly Events Reported Q2 2019-20 and Q2 2020-21

Trend Analysis

In summary compared with the previous year, there was a decrease in the number of events reported during Q2 (-9). The main decreases were Vehicle Collisions (-5) and Personal Injuries (-5). The main increase was Near Hit / Cause for Concerns (+8).

All events that occurred during the quarter have had a minimum of a Tier One local level investigation to identify preventative control measures, to help in reducing the likelihood of similar occurrences.

12 Month Trend Analysis

Table 5 below breaks down the latest 4 quarters by reported accident type. Q2 figures are in line with the four previous quarters.

Personal Injuries have slowly decreased over the last three quarters; whereas Near Hit / Cause for Concerns have increased. Vehicle Collisions increased this quarter, compared to last. Four of the categories showed a decrease and two an increase, based on last quarter.

	Q3 19/20	Q4 19/20	Q1 20/21	Q2 20/21
Total H&S Events	39	54	43	44
Personal Injury	15	21	15	14
Vehicle Collision	11	18	5	12
Property or Equipment Failure	1	3	4	0
Near Hit or Cause for Concern	8	7	11	17
Exposure or contamination	1	3	6	1
Violence or Aggression	3	2	2	0

Table 5: 12 Month Trend Analysis Q3 2019 - 2020 to Q2 2020 - 2021

Brief Description of all Safety Events

A1. Personal Injury

Of the **44** H&S events reported, **14** relate to the category of Personal Injury. These are described in Table A1 below:

Sub-Categories	Break-down of Injuries in Each Sub-Category
4 events/injuries were during training	1163 - 1 relates to a personal injury. A firefighter pulled a muscle in their left forearm whilst moving equipment.
	1195 - 1 relates to a personal injury. A firefighter bruised their thumb when a piece of equipment fell over landing on their hand.
	1202 - 1 relates to a personal injury. The firefighter pulled a muscle in their forearm whilst pulling on a rope during a drill tower exercise.
	1209 - 1 relates to a personal injury. A firefighter received bruising to their leg during an RTC exercise. Whilst spreading the door of a vehicle, the door spread open making contact with their shin.
5 events/injuries were at or during operational incidents	1157 - 1 relates to a personal injury. Whilst lifting a patient at an incident, the firefighter experienced a pulled muscle in their back.
	1167 - 1 relates to a personal injury. Whilst moving some logs at an incident to gain entry, the firefighter sustained a pulled muscle on their back.
	1178 - 1 relates to a personal injury. Whilst attending an incident the firefighter inhaled smoke whilst trying to rescue an elderly lady from a smoke filled room.
	1198 - 1 relates to a personal injury. Whilst using a hammer to break a window in order to gain access to a fire, some glass got stuck in the firefighter's glove and cut their finger.
	1201 - 1 relates to a personal injury. The firefighter lost their footing whilst rescuing an animal from the river. They fell backwards and upon landing, jolting their shoulder.
5 events/injuries were during routine activities	1162 - 1 relates to a personal injury. The staff member was suffering from muscular pain in their left shoulder. Their display screen equipment assessment was reviewed and changes were made to their workstation setup.
	1168 - 1 relates to a personal injury. Whilst replacing the battery acid on the appliance the battery acid splashed into the face and eye of the mechanic. Water was applied to the mechanic's face and they were transported to hospital. Mechanics were reminded to wear the PPE provided. SI
	1185 - 1 relates to a personal injury. The firefighter caught the back of his hand on the LPP exhaust shortly after it had been turned off. Crews reminded to wear gloves when handling equipment.
	1189 - 1 relates to a personal injury. When trying to start the motor, the pull cord of the water rescue vehicle did not retract. It then swung round and hit the operator. RIDDOR SI
	1189 - 1 relates to a personal injury. When trying to start the motor, the pull cord of the water rescue vehicle did not retract. It then swung round and also hit a mechanic who was observing the motor test. RIDDOR SI
	Totalling 14 personal injuries
	24 Calendar Days / 17 Working days lost.
	Totalling 1 RIDDOR event / 2 individuals

Table A1: Personal Injuries Reported during Q2 2020 - 2021

A2. Vehicle Collisions

Of the **44** H&S events, **12** relate to the category of Vehicle Collisions which are further described in Table A2 below. **8** 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.

Sub-Categories	Breakdown of Vehicle Collisions in Each Sub-Category
4 events were responding to operational incidents	1177 - 1 relates to a vehicle accident. Whilst driving down a narrow road the appliance made contact with a parked vehicle, causing damage to a wing mirror.
	1176 - 1 relates to a vehicle accident. Whilst responding to an incident, the car in front of the appliance stopped suddenly. The firefighter driving the appliance had to turn suddenly to avoid driving into the back of the car. This resulted in a scrape to the rear offside locker of the appliance and the offside rear of another vehicle.
	1186 - 1 relates to a vehicle accident. Whilst driving down a crescent the appliance caught the wing mirror of a parked car.
	1199 - 1 relates to a vehicle accident. On responding to a fire call, the lighting bar on the top of the fire engine collided with the partly closed bay door. Drivers reminded to ensure doors are fully open.
8 events were during routine activities	1159 - 1 relates to a vehicle accident. Whilst driving a station car the driver hit a deer causing damage to the front of the vehicle.
	1164 - 1 relates to a vehicle accident. Whilst driving along a newly laid road surface, a chipping hit the windscreen and cracked it.
	1170 - 1 relates to a vehicle accident. Whilst driving along a narrow lane, an approaching tractor caught the wing mirror of the stores van.
	1172 - 1 relates to a vehicle accident. Whilst parking, the service vehicle made contact with another car, scuffing the bumper.
	1174 - 1 relates to a vehicle accident. Whilst reversing the appliance, it made contact with the front near side bumper of another parked car. Reminder for bondspersons to use radios to support communications
	1179 - 1 relates to a vehicle accident. Whilst manoeuvring into a tight car park the appliance rocked after hitting a dip in the roadway, which resulted in the offside high level lens touching a wall and cracking..
	1194 - 1 relates to a vehicle accident. Whilst moving forwards at a set of traffic lights, another vehicle cut across the fire engine collided with the engine's wing mirror, knocking it off.
	1197 - 1 relates to a vehicle accident. A truck travelling on the other side of the road hit the fire engine's wing mirror.
	Totalling 12 vehicle collisions

Table A2: Vehicle Collisions Reported during Q2 2020 - 2021

A3. Property or Equipment Damage

Of the **44** H&S events, **0** relate to the category of Damage to Property or Equipment.

A4. Near Hits or Causes for Concern

Of the **44** H&S events, **17** relate to the category of Near Hits or Causes for Concern - these are further described in Table A4 below.

Sub-Categories	Break-down of Near Hits or Causes for Concern in Each Sub-Category
2 events were during	1171 - 1 relates to a near hit/cause for concern. Whilst undertaking some rope rescue training, the crew discovered that a piece of safety

training activities	equipment was missing from the appliance, if this occurred at an incident the equipment couldn't have been used.
	1196 - 1 relates to a near hit/cause for concern. Whilst on the third floor of the drill tower the hose reel became detached from the branch, causing it to fall to the ground from height. Equipment checked and not defective.
8 events were during routine activities	1184 - 1 relates to a near hit/cause for concern. During check crews found that part of the ladder gantry on the compact appliance had sheared off. Repaired by workshops.
	1188 - 1 relates to a near hit/cause for concern. The plug of an electrical appliance was left on the floor. Water was spilled from a hose onto the plug. Taken off the run until tested.
	1200 - 1 relates to a near hit/cause for concern. Inappropriate emails received from member of public following attendance at an incident. Passed on for further investigation.
	1204 - 1 relates to a near hit/cause for concern. Chemgene trigger bottles were refilled with concentrated solution, without it being diluted. The bottles were then used by staff for hand sanitising. On realising the mixture was not diluted the Chemgene was disposed of safely. Crews reminded of the correct dilution ratios dependent on the purpose.
	1205 - 1 relates to a near hit/cause for concern. Contractors were painting the appliance bay ceiling and drove their cherry picker into the appliance bay boarded pit. No injuries were sustained.
	1206 - 1 relates to a near hit/cause for concern. Whilst responding to an incident, the fire engine left the station and was then cut up by two oncoming vehicles, causing the driver to brake suddenly.
	1207 - 1 relates to a near hit/cause for concern. Whilst carrying out routine tests on the BA equipment the firefighter heard a leak from one of the cylinders which had not been attached to the BA set correctly.
	1208 - 1 relates to a near hit/cause for concern. During routine checks the firefighter discovered that one of the PC terminals was not working on the Command Support Unit. On checking they discovered that the power cable supplying the PC terminal had begun to melt. Repair and checks undertaken by workshops.
7 events were during operational activities	1161 - 1 relates to a near hit/cause for concern. Whilst attending an incident, a tractor tyre exploded causing sound percussion shock to the firefighter's left ear. Returned to normal duties.
	1165 - 1 relates to a near hit/cause for concern. Whilst driving to an incident the rear pump bay door sensor started to flash. The crew pulled over to check the pump bay door. They found that the pump bay door had released therefore becoming loose and unsecure. Checked by workshops.
	1182 - 1 relates to a near hit/cause for concern. Whilst settling into a hydrant water supply, a hypodermic needle was found, by a firefighter, in the silt that had built up at the base of the hydrant.
	1183 - 1 relates to a near hit/cause for concern. The locking bolt which holds the equipment tray behind the cab, failed resulting in the appliance being taken off the run until repaired.
	1187 - 1 relates to a near hit/cause for concern. Whilst attending an incident in bad weather, a lightning strike touched down around 10 metres from where operational staff were standing.
	1191 - 1 relates to a near hit/cause for concern. Whilst fighting a well developed first floor fire, all water supplies were lost, causing the BA team to nearly be engulfed by the fire. The BA team had to withdraw from the building. SI
	1203 - 1 relates to a near hit/cause for concern. Rear pump bay doors opened whilst returning from a fire call. This was due to a lock failure.
Totalling 17 near hits or causes for concern	

Table A4: Near Hits or Causes for Concern Reported during Q2 2020/21

A5. Violence or Aggression

Of the **44** H&S events, **0** relate to the category of Violence or Aggression.

A6. Exposure or Contamination

Of the **44** H&S events, **1** relates 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	Break-down of Exposure or Contamination in Each Sub-Category
1 event was during operational activities	1180 - 1 relates to an exposure. Two firefighters inhaled fumes from a boat motor whilst attending an incident.
	Totalling 1 exposure or contamination event

Table A6: Exposure or Contamination Reported during Q2 2020/21

There were **0** reports of skin reddening during Q2. 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.

29 potential exposure / contamination incidents were recorded during Q2, 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.