1. Overview

In the period April to June 2021 a total of **46** Health and Safety (H&S) events were reported. They fall into the categories of:

- 18 Personal Injury
- 14 Vehicle Collisions
- 2 Property or Equipment
- 9 Near Hits or Causes for Concern
- 2 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 Q1, personal injuries and vehicle collisions were the most frequently reported incidents. Personal injuries occurred mostly during training activities. The majority of vehicle collisions occurred during operational activities, however only 3 were during emergency response phase.

	Total	Training	Operational Activities	Routine Activities	Non- Service Related Activities
Total H&S Events Q1	46	13	16	13	4
Personal Injury	18	10	3	3	2
Vehicle Collision	14	0	7	5	2
Property or Equipment Failure	2	0	1	1	0
Near Hit or Cause for Concern	9	3	3	3	0
Exposure or Contamination	1	0	1	0	0
Violence or Aggression	2	0	1	1	0

Table 1: Safety Event Breakdown Q1 2021-2022

By Injury Type

Table 2 identifies manual handling as being the main cause of personal injuries. The incidents classified as 'other' related to a firefighter trapping their finger in a piece of equipment, and another suffering from a muscle strain.

Total Personal Injuries	18
Manual Handling	7
Slips, Trips & Falls	3
Hit by Moving Object	2
Hit Stationary Object	3
Burns – Operational	0
Burns – Training	1
Other	2

Table 2: Personal Injury Breakdown Q1 2021-2022

By Vehicle Type

Table 3 highlights that vehicle collisions during this quarter have mostly involved cars or vans whilst off blue lights.

Vehicle Collisions		re ines	Cars Var	-	Non-Service related
	On	Off	On	Off	
	blue	blue	blue	blue	
	lights	lights	lights	lights	
Total Collisions	3	3	0	7	1

Table 3: Vehicle Breakdown Q1 2021-2022

Vehicle Mileage Statistics

Vehicle mileage statistics for the year 2020-2021 were provided by the Operational Logistics Fleet Department and have been used to predict vehicle mileage for 2021-22. These are summarised in Table 3A below. It can be seen that there were seven white fleet safety events out of approximately 74,095 miles driven, which equates to one event for every 10,585 miles driven.

The six safety events involving red fleet vehicles were out of approximately 52,933 miles driven, which equates to one event for every 8,822 miles driven.

Fleet	Total Mileage 2020-2021	Predicted Mileage Q1 2021-2022
White Fleet	296,381	74,095
Red Fleet	211,732	52,933
	Totalling 508,113 miles	Totalling 127,028 miles

Table 3A: Vehicle Mileage Statistics Q1 2021-2022

3. Events Requiring Investigation during Quarter 1 (April – June 21)

Tier One Investigations

A Tier One standard investigation is required for all safety events and is usually conducted by the onduty / 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.

One safety event reported during Q1 required a Tier Two Basic Specialist Investigation:

 1313 - 1 relates to a personal injury. Whilst tightening a suction hose onto the pump the firefighter trapped their finger between the collar and the equipment underneath. Trip to A&E required. BASIC SI. Over 7 day injury.

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 Q1 that required a full Specialist Investigation.

<u>Tier Three MERP Specialist Investigations</u>

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 Q1 required a Tier Three Specialist Investigation.

RIDDOR Events for Quarter 1 (April – June 21)

During Q1, two RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reports were submitted to the Health and Safety Executive (HSE). Both were over seven day injuries. One related to a trapped finger, with the second being a twisted ankle.

4. Comparison between Quarters and Trend Analysis

Comparison of Events Reported Showing Differences: Q1 2020-21 & Q1 2021-22

Table 4 below compares the number of events reported in Q1 2020-21 and Q1 2021-22 for the different categories. For events over the last 12 months, three of the categories experienced a decrease, while two reported an increase, one quite significantly.

Overall, event reporting as a whole increased by three over the period, with 46 reports in Q1 2021-22 compared to 43 in Q1 2020-21. The increase was driven by a significant rise in Vehicle Collisions.

Event Type	Q1 2020-21	Q1 2021-22	Increase/Decrease
Personal Injuries	15	18	+3
Vehicle Collisions	5	14	+9
Property or equipment	4	2	-2
Violence & Aggression	2	2	-/+
Near Hits	11	9	-2
Exposure / contamination	6	1	-5
Overall	43	46	+3

Table 4: Quarterly Events Reported Q1 2020-21 and Q1 2021-22

Trend Analysis

In summary, compared with the previous year, there was an increase in the number of events reported during Q1 (+3).

The main decrease was Exposure/Contamination (-5). The main increase was Vehicle Collisions (+9).

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.

Table 5 below breaks down the latest 4 quarters by reported accident type. Q1 figures for 2-21-22 are above Q2 and Q3 figures for 2020-21 and below Q4 figures for 2020-21.

Near hits/cause for concerns have significantly decreased over the last quarter, while personal injuries and vehicle collisions have risen by just one. All others have seen a decrease.

	Q2 20/21	Q3 20/21	Q4 20/21	Q1 21/22
Total H&S Events	44	34	55	46
Personal Injury	14	4	17	18
Vehicle Collision	12	12	13	14
Property or Equipment Failure	0	2	4	2
Near Hit or Cause for Concern	17	12	15	9
Exposure or contamination	1	1	3	1
Violence or Aggression	0	3	3	2

Table 5: 12 Month Trend Analysis Q2 2020 – 2021 to Q1 2021 – 2022

Brief Description of all Safety Events

A1. Personal Injury

Of the $\underline{\textbf{46}}$ H&S events reported, $\underline{\textbf{18}}$ relate to the category of Personal Injury. These are described in Table A1 below:

Sub- Categories	Break-down of Injuries in Each Sub-Category
3 events were	1309 - 1 relates to a personal injury. At the end of an incident the firefighter was removing the hose from the hydrant. They hit the bar to loosen the hose and it came off quickly, hitting them in the eye and causing a cut. 1313 - 1 relates to a personal injury. Whilst tightening a suction hose onto the
during routine activities	pump the firefighter trapped their finger between the collar and the equipment underneath. Trip to A&E required. BASIC SI . Over 7 day injury
	1330 - 1 relates to a personal injury. Whilst opening the BA cylinder the firefighter experienced severe cramping of their right forearm.
	1306 - 1 relates to a Personal Injury. Whilst making up a length of hose the firefighter bent down and pulled a muscle in their lower back.
	1316 - 1 relates to a personal injury. A firefighter's foot slipped off a ladder and aggravated an old ankle injury.
	1319 - 1 relates to a personal injury. A piece of glass went into the firefighter's eye. Full PPE was being worn.
	1320 - 1 relates to a personal injury. The firefighter felt lower back pain whilst carrying out an RTC technique.
10 events were during	1329 - 1 relates to a personal injury. Whilst carrying out CPR training a shard of glass penetrated the palm of the firefighter's hand.
training activities	1339 - 1 relates to a personal injury. Whilst defensive swimming during training a firefighter struck a rock with their hand resulting in an injury to their hand.
	1342 - 1 relates to a personal injury. During water training a firefighter sustained an injury to their upper leg/groin area.
	1349 - 1 relates to a personal injury. Whilst wearing BA equipment the firefighter experienced back pain.
	1352 - 1 relates to a personal injury. Whilst undertaking RTC training and cutting a car, the firefighter got their finger trapped between the cutting tool and the car resulting in a bruised finger.
	1354 - 1 relates to a personal injury. Whilst extinguishing a fire during BA training, the firefighter knelt on the ground and sustained reddening and blistering to their lower leg.
3 events were	1321 - 1 relates to a personal injury. Whilst shovelling debris at an incident the firefighter banged their hand against the handle of another folk being held by another firefighter.
during operational	1333 - 1 relates to a personal injury. A firefighter damaged their right ankle whilst climbing on the appliance to check a locker was secured. Over 7 day injury
activities	1353 - 1 relates to a personal injury. Whilst carrying the boat during an incident the firefighter experienced pressure on their left shoulder, resulting in muscle strain.
2 events were non service	1305 - 1 relates to a personal injury. A firefighter fell over and landed on their hands, bending their thumb backwards.
related	1322 - 1 relates to a personal injury. Staff member cut their thumb on a Perspex sheet whilst installing CV19 protection screens.
	Totalling 18 personal injuries
	69 Calendar Days / 42 Working days lost.

Table A1: Personal Injuries Reported during Q1 2021 – 2022

A2. <u>Vehicle Collisions</u>

Of the $\underline{46}$ H&S events, $\underline{14}$ relate to the category of Vehicle Collisions, which are further described in Table A2 below. 11 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 Service Bulletin item for crews to familiarise themselves with the 'Bankperson' 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
	1312 - 1 relates to a vehicle accident. Whilst driving around a sharp bend at low speeds the back of the appliance clipped the oncoming cars wing mirror.
	1328 - 1 relates to a vehicle accident. Whilst routine driving the appliance caught a protruding branch resulting in a broken wing mirror.
5 events were during routine activities	1340 - 1 relates to a vehicle accident. A vehicle rolled forwards and dented another cars rear passenger wing.
	1350 - 1 relates to a vehicle accident. An officer's car sustained some minor scratches whilst driving through a partially opened gate.
	1356 - 1 relates to a vehicle accident. Whilst waiting at a junction the van was struck from behind by a third party. Damage to the bumper and rear door.
	1307 - 1 relates to a vehicle accident. Whilst reversing the appliance made contact with a stand pipe and bar.
	1310 - 1 relates to a vehicle accident. Whilst manoeuvring a trailer it hit a concrete gate post.
	1318 - 1 relates to a vehicle accident. Whilst driving to an incident there was a collision of wing mirrors, with no damage.
7 events were during operational activities	1324 - 1 relates to a vehicle accident. Whilst attending a house fire in a congested area the hose had to be deployed over a car bonnet, resulting in minor scratches. EMERGENCY RESPONSE
	1335 - 1 relates to a vehicle accident. Whilst driving down a narrow lane, the tarmac at the edge of the road gave way resulting in the appliance getting stuck in a ditch. EMERGENCY RESPONSE
	1343 - 1 relates to a vehicle accident. Damage was sustained to the appliance whilst driving down a very narrow lane. EMERGENCY RESPONSE
	1347 - 1 relates to a vehicle accident. Whilst attending an incident the appliance made contact with some parked cars on a narrow lane and then got wedged between a wall and a car. EMERGENCY RESPONSE
2 events were non service related	1314 - 1 relates to a vehicle accident. During the night the rear window of a service vehicle was smashed in an act of vandalism.
	1336 - 1 relates to a vehicle accident. Whilst parked at their home address an officer noticed that their rear light cluster and bumper had been damaged.
	Totalling 14 vehicle collisions

Table A2: Vehicle Collisions Reported during Q1 2021 – 2022

A3. Property or Equipment Damage

Of the 46 H&S events, 2 relate to the category of Damage to Property or Equipment.

Sub-Categories	Break-down of Property or Equipment Damage in Each Sub- Category
1 event was during operational activities	1337 - 1 relates to a property or equipment failure. The hose became detached from the connector underneath the appliance resulting in a loss of water onto the floor.
1 event was during routine activities	1351 - 1 relates to property/equipment damage. The boom on the ALP sustained damage whilst in use.
	Totalling 2 property or equipment damage events

Table A3: Property or Equipment Damage Reported during Q1 2021 - 2022

A4. Near Hits or Causes for Concern

Of the $\underline{\textbf{46}}$ H&S events, $\underline{\textbf{9}}$ 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	1325 - 1 relates to a near hit / cause for concern. A firefighter fell over whilst wearing full BA kit. 1327 - 1 relates to a near hit / cause for concern. Whilst travelling across a mini roundabout another car entered the roundabout and did not reduce their speed or acknowledge the fire appliance, causing the driver to carry out an emergency stop. 1332 - 1 relates to a near hit / cause for concern. Whilst practising with a BA set, there was a loss of air to the hose connector.
3 events were during operational activities	1326 - 1 relates to a near hit / cause for concern. Whilst exiting the station on blue lights a car approached from the right causing the appliance driver to brake suddenly. EMERGENCY RESPONSE 1344 - 1 relates to a near hit / cause for concern. Whilst at an incident the carabiner clip, used to attached the TIC to the firefighter, did not close fully resulting in the TIC falling on the floor. 1346 - 1 relates to a near hit / cause for concern. Whilst fighting a fire the nebula hose failed due to a lack of pressure.
3 events were during routine activities	1308 - 1 relates to a Near hit/cause for concern. An appliance room door roller had fallen out which could have fallen on someone walking underneath. 1323 - 1 relates to a near hit / cause for concern. The pump doors on both sides of the appliance came open whilst in transit. No equipment was lost. 1338 - 1 relates to a near hit / cause for concern. Some new equipment was delivered and was found to have sharp metal burs externally and internally. A member of staff noticed when they cut their glove whilst manoeuvring the equipment.
	Totalling 9 near hits or causes for concern

Table A4: Near Hits or Causes for Concern Reported during Q1 2021 - 22

A5. <u>Violence or Aggression</u>

Of the 46 H&S events, 2 relate to the category of Violence or Aggression.

Sub-Categories	Breakdown of Violence or Aggression in Each Sub- Category
1 event was during operational activities	1341 - 1 relates to an act of violence/aggression. Whilst attending an incident the crew were verbally abused and threatened with a firearm. They withdrew from the scene immediately.
1 event was during routine activities	1311 - 1 relates to an act of violence/aggression. An intoxicated male entered the RTC compound on station and refused to leave, becoming aggressive and hostile to crew staff.
	Totalling 2 violence or aggression events.

Table A5: Violence or Aggression Reported during Q1 2021 - 22

A6. Exposure or Contamination

Of the 46 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	Breakdown of Exposure or Contamination in Each Sub- Category
1 event was during operational activities	1345 - 1 relates to an exposure. Firefighting in a building containing Asbestos.
	Totalling 1 exposure or contamination event

Table A6: Exposure or Contamination Reported during Q1 2021 - 22

There were two reports of skin reddening during Q1. 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.

38 potential exposure or contamination incidents were recorded during Q1, involving firefighters. Potential exposure or contamination is where personnel have been exposed (during training or incidents) to hazardous environments but where appropriate control measures were implemented.