

## **Report of the Deputy Chief Fire Officer**

### **Health and Safety Committee Update**

#### **Purpose of report**

1. To provide the Policy and Resources Committee with an update on the activities and items of significance from the Service's Health and Safety Committee.

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#### **Recommendation**

*It is recommended that the following issues, in particular, be noted:*

- (i) *Health and Safety performance information recorded during July 2016 to September 2016 (Quarter 2); and*
- (ii) *The involvement of the Service in a number of Health and Safety initiatives.*

#### **Introduction**

2. Hereford & Worcester Fire Authority's aim is to ensure the safety and wellbeing of its employees and to reduce and prevent accidents and injuries at work.
3. The Health and Safety Committee (the Committee) is established to provide effective arrangements for the liaison and review of matters of a common interest with regard to Health and Safety (H&S), and to act as a forum for liaison on all matters relating to H&S for key stakeholders and departments. The Committee provides the opportunity for the Service to discuss general H&S matters on which it must consult the workforce via employee representatives.
4. The Committee has the facility to task work to the Health & Safety Working Group, which sits beneath it and is chaired by the Area Commander Operations Support. The group meets as and when required but at least every six months (see section 15. for current work package update).

#### **Update**

5. The Committee last met on 8 December 2016 and is due to meet next on 15 March 2017.
6. A review of quarterly performance for the relevant period was discussed in detail. Whilst this shows an increase in total number of reported events, the severity levels remain relatively low. The report is included at Appendix 1.

## **Significant Activities**

### Research Project - Moisture Content in BA

7. Nationally, the Chief Fire Officers Association (CFOA) commissioned the Health and Safety Laboratory (HSL) to investigate the potential for water freezing in Breathing Apparatus (BA) set components (leading to set failure) when cylinder contents are within normal moisture content tolerances. The findings of this investigation have been forwarded to all Fire and Rescue Services (FRSs) via a CFOA circular.
8. Following an internal HWFRS review of the CFOA circular, a report has been produced and discussed at the Committee. Whilst the Service is in a strong position in relation to the control measures that are already in place, there is still a low level risk of moisture ingress in relation to the issues highlighted in the circular. The Service has therefore implemented a number of additional remedial actions to address this risk. It is worthy of note that HWFRS has not had any reported incidents of this nature and cylinders are routinely tested for moisture levels.
9. The Committee agreed the actions and recommendations were suitable and sufficient in controlling the risks identified.

### Breathing Apparatus (BA) upgrade for CBRNe Events

10. In early 2016, a letter was sent to all CFOs highlighting an issue relating to a component failure in the Draeger BA sets manufactured in 2012 when exposed to a very specific contaminant linked to the Chemical Biological Radiological and Nuclear explosive (CBRNe) type incidents. Initially this issue did not directly impact on HWFRS as the Service's Draeger BA sets were manufactured some time prior to this date. However, following further nationally led discussions, the manufacturer (Draeger) decided to replace the component part on all its BA sets of that type regardless of manufacture date which now includes HWFRS BA sets.
11. The replacement part that has not yet been fitted to HWFRS BA sets has proven in other FRSs to have had reliability issues, therefore the replacement programme for HWFRS has been deferred. It is hoped the manufacturer will replace the component in 2017 once its reliability has been proven. In the meantime measures have been implemented to ensure that in the very remote possibility that HWFRS BA sets are exposed to the CBRNe linked contaminant, additional protocols are in place. It should also be noted that this contaminant causes longer term degradation to the component and does not pose a risk of immediate failure.

### PPE ('Think Contaminants')

12. The CFOA National Health and Safety Committee are looking into a number of international reports examining the apparent increased likelihood of cancers in operational firefighters. These reports suggest that firefighters may be more vulnerable due to carcinogens present in the firefighting environment, despite the high levels of personal protective equipment and control measures in place.

13. The research is being reviewed nationally and in discussion with other interested parties it has been noted that many of these reports were not supported by any tangible data, nor was there any UK research to support the thesis. This has led to the commissioning of a UK led literature review to determine the validity of all available reports. Discussions are currently underway with the Home Office's Centre for Applied Science and Technology (CAST) who have expressed an interest in developing this work.
14. At this time the national CFOA H&S group do not recommend FRSs take any additional actions or measures associated with this matter until it has been thoroughly examined and an evidence led report for the UK is published.

## **HWFRS H&S Update**

### HWFRS Working Group

15. The Committee has tasked the H&S Working Group to conduct a full review into the risks associated with Occupational Road Risk in HWFRS following a number of notable incidents that have occurred over recent years across UK.
16. The Group have produced a terms of reference document which highlights eight key work packages to be completed during 2017. The work packages will be monitored by the Committee until completion.

### CFOA Health and Safety West Midlands Group

17. A new H&S Statement of Intent has been produced which all FRSs within the region will use as agreed by CFOs. This will be displayed at all HWFRS premises as well as the HWFRS H&S Intranet page.
18. Two regional audits have taken place recently (not in HWFRS) and the findings of these audits will be discussed at the next regional H&S meeting where notable practices and learning will be shared.

### Risk Assessment Database

19. The new Risk Assessment database was launched across HWFRS on 1st October 2016. The system is being continually reviewed to enhance the effectiveness of its use. The system has now replaced all paper copy risk assessments and provides up to date electronic information and control measures to all HWFRS staff.
20. The system is now being used regularly by employees and since launched employees have:

|                       |      |
|-----------------------|------|
| Created New RAs       | 26*  |
| Reviewed existing RAs | 112* |

*\*data as of November 2016*

## Conclusion

21. This report provides Members with an update on the health and safety issues discussed at the previous Health and Safety Committee and draws Members' attention to key areas of work currently being undertaken by the Service.
22. In addition, the report provides information on quarterly health and safety performance, which demonstrates a positive culture.

## Corporate Considerations

|   |  |
|---|--|
| <b>Resource Implications</b><br>(identify any financial, legal, property or human resources issues)   | N/A  |
| <b>Strategic Policy Links</b><br>(identify how proposals link in with current priorities and policy framework and if they do not, identify any potential implications). | Corporate strategy – Ensuring firefighter safety   |
| <b>Risk Management / Health &amp; Safety</b> (identify any risks, the proposed control measures and risk evaluation scores).  | Reduces the overall impact for health and safety management in the areas identified and safeguards the Services legal requirements |
| <b>Consultation</b> (identify any public or other consultation that has been carried out on this matter)  | None   |
| <b>Equalities</b> (has an Equalities Impact Assessment been completed? If not, why not?)  | N/A  |

## Supporting Information

Appendix 1: Quarter 2 of year 2016/2017 (July – September 2016) Health & Safety Performance Report

### Contact Officer

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## APPENDIX 1

**Title:** Quarter 2 Performance Report (July - September 2016)

### Personal Injury

Of the **50** H&S events reported, **22** were related to the category of Personal Injury. These are described in Table 1 below:

| Sub-Categories   | Break-down of Injuries in Each Sub-Category  |
|--|--|
| 12 incidents relate to accidents/injuries occurring during training. | 1 relates to a manual handling injury when moving vehicles during the preparation of a training exercise. <i>Significant Event 63 calendar days lost</i>                   |
|  | 1 relates to a candidate becoming faint from over exertion, whilst undertaking the National FF selection tests.  |
|  | 1 relates to a candidate over exerting themselves and vomiting undertaking the National FF selection tests.  |
|  | 1 relates to a manual handling injury during extending a ladder.   |
|  | 1 relates to a pain in left forearm elbow area whilst climbing a ladder.   |
|  | 1 relates to an injury whilst re-stowing equipment following water awareness training, which resulting in a cut to nose.   |
|  | 1 relates to an injury during a Road Traffic Collision training exercise. A piece of hydraulic equipment ejected while under pressure, making contact with the FF kneecap. |
|  | 1 relates to an injury during a Compartment Fire Behaviour Training Refresher, skin reddening just above left eye had turned into blister.                                 |
|  | 1 relates to an injury during a BA refresher whilst attempting to un snag a hose reel which resulting in a strained shoulder.  |
|  | 1 relates to a heat induced minor blister on left wrist during Compartment Fire Behaviour Training refresher.  |
|  | 1 relates to an injury while undertaking hose running. Injury aggravated a pre-existing fore arm injury. <i>Significant Event 31 calendar days lost</i>                    |
|  | 1 relates to an injury whilst opening an entrance gate at a training facility. The gate made contact with a kerbstone which caused a pain to the shoulder                  |
| 6 accident/injuries were at operational incidents                    | 1 relates to slipping on the appliance bay floor whilst responding to an incident.   |
|  | 1 relates to opening a hydrant, the valve opened suddenly and the hydrant bar struck behind the knee of left leg.  |
|  | 1 relates to operating a Tirfor winch handle, the lever struck the persons face. No head protection worn due hot weather conditions and strenuous activity.                |
|  | 1 relates to an injury during post fire investigation caused by piece of dirt in right eye. Eye cleaned out using water  |
|  | 1 relates to an injury during a vehicle accident, the fragments of a broken mirror entering passenger compartment into the face of the person.                             |
|  | 1 relates to an injury whilst using a Hydrant, FF cut their knuckle of right hand on the top of the standpipe.   |

|  |  |
|--|--|
| 3 accident/injuries were during routine activities | 1 relates to a member of support staff tripping over a small step outside the office.  |
|  | 1 relates to sustaining a small cut to head after walking into a door.   |
|  | 1 relates to an injury whilst exiting rear of the fire engine. Person caught their ribs on a retaining bracket of the rear doors.<br><i>3 calendar days lost</i> |
| 1 accident/injuries were non-work accident/injury  | 1 relates to an injury sustained to their arm whilst getting up from the floor level.  |
| Totalling <b>22</b> personal injuries              |  |
| Totalling 2 RIDDOR events                          |  |
| Totalling 97 calendar days lost                    |  |

*Table 1: Personal Injuries Reported during Quarter 2*

## Vehicle Accidents

Of the **50** H&S events **11** are related to the category of Vehicle Accidents - these are further described in Table 2 below. Only 5 of these events could be attributed to the FRS driver these events are highlighted in grey.

| Sub-Categories                                | Breakdown of Injuries in Each Sub-Category   |
|---|--|
| 7 accidents were during routine activities    | 1 relates to a stationary fire engine struck by a broken down third party vehicle rolling into the road and impacting the near side rear wheel arch.   |
|   | 1 relates to a fire engine being driven through a very narrow gateway, the rear nearside wheel arch caught an upright wooden post and broke a small section of the wheel arch.   |
|   | 1 relates to an unknown incident with support vehicle damage found during weekly routines.   |
|   | 1 relates to a Service car struck by a bird.   |
|   | 1 relates to a Service car being struck by fence panels. Damage discovered on collecting the vehicle in the morning.   |
|   | 1 relates to an unknown incident with fire engine front wing body panel damage found during weekly routines.   |
|   | 1 relates to a fire engine contacting a stationary vehicle during a response training course. The nearside front came into contact with a vehicle.   |
| 3 accidents were responding to incidents      | 1 relates to a fire engine struck by a third party impacting the near side and then driving off.   |
|   | 1 relates to the fire engine striking a tree branch whilst travelling down a road.   |
|   | 1 relates to a fire engine contacting a bank whilst manoeuvring using two bankspersons, which resulted in cracking the front nearside bumper.  |
| 1 accident was a non-service related accident | 1 relates to a service car making minor contact with a dog, At the time of impact the driver did not see either the man or the dog stood on the side of the roadway due to the glare from the sun reducing visibility. |
| Totalling <b>11</b> vehicle accidents         |  |

*Table 2: Vehicle Accidents Reported during Quarter 2*

Vehicle mileage statistics for the year 2015-2016 have been provided by the Operational Logistics Fleet Department and have been used to predict vehicle mileage for Q2 2016. These are summarised in Table 2A below. It can be seen that the 3 white fleet accidents out of approximately 254,500 miles driven, equates to 1 accident for every 84,838 miles driven. The 8 accidents by red fleet vehicles were out of approximately 69,600 miles driven, which equates to 1 accident for every 8,702 miles driven.

| Fleet                            | Total Mileage 2015-2016 | Predicted Mileage Q2 2016      |
|----------------------------------|-------------------------|--------------------------------|
| White Fleet                      | 1,018,054               | 254,514                        |
| Red Fleet                        | 278,464                 | 69,616                         |
| Totalling <b>1,296,518</b> miles |                         | Totalling <b>324,130</b> miles |

*Table 2A: Vehicle Mileage Statistics*

## **Property or Equipment Damage**

Of the **50** H&S events **2** related to the category of Damage to Property or Equipment, this is further described in Table 3 below:

| <b>Sub-Categories</b>                           | <b>Break-down of Injuries in Each Sub-Category</b>   |
|---|--|
| 2 property or equipment failure during training | 1 relates to an appliance bay door being closed whilst a fire engine was underneath it, damage to appliance bay door only. |
|   | 1 relates to extensive damage to boundary wall outside Bromyard Fire Station, struck by third party vehicle.               |
|   | Totalling <b>2</b> property or equipment damage  |

*Table 3: Damage to Property or Equipment Reported during Quarter 2*

## **Near Hits or Causes for Concern**

Of the **50** H&S events **13** related to the category of Near Hits or Causes for Concern - these are further described in Table 4 below:

| <b>Sub-Categories</b>                 | <b>Break-down of Injuries in Each Sub-Category</b>  |
|---------------------------------------|---|
| 3 were whilst responding to incidents | 1 relates to a near collision between a fire engine and other vehicles. <i>Significant Event</i>  |
|                                       | 1 relates to a near collision between a fire engine and other vehicles whilst responding to a fire call. <i>Significant Event</i>   |
|                                       | 1 relates to a near hit. Locker doors were open on arrival at incident, lockers checked by driver, light showing doors open did not illuminate.   |
| 4 were at operational incidents       | 1 relates to near hit with a vehicle airbag whilst attending an RTC. Whilst cutting the cables which attached the driver's side door to the main chassis, there was an airbag activation. |
|                                       | 1 relates to a cause for concern whilst delivering CAFS for Firefighting. The CAFS system lost pressure- initial investigation found the compressor light was not illuminated.            |
|                                       | 1 relates to a near hit of exposure. Gathering details and administering care to elderly lady later identified as having Tuberculosis.  |
|                                       | 1 relates to a near hit. Failure of hydraulic combination tool (tip of jaws snapped off) whilst opening hay baler rear chamber door, causing door to close immediately.                   |
| 1 was during routine activities       | 1 relates to a cause for concern. FF was removing the standpipe and bar from the rear locker when the bar fell from the centre of the standpipe and hit FF on the right foot.             |
| 5 were during training exercises      | 1 relates to a cause for concern. During SRT / WFR training FF became unwell. He stated that he felt ill and had chest pains.   |
|                                       | 1 relates to a cause for concern. Whilst carrying out an RTC training session FF trapped hand in a closing door.  |
|                                       | 1 relates to a near hit on route to training. The rear pump bay door opened and a stray bottle of water fell out the pump bay.  |
|                                       | 1 relates to a near hit. A door came off its hinges and fell towards a BA wearer.   |



|  |  |
|--|--|
|  | 1 relates to a near hit. Whilst undertaking RTC hydraulic spreaders were used to remove the wing of a training vehicle, the spreaders contacted an air conditioning system pipe; the pipe failed and allowed an uncontrolled release of high pressure refrigerant and oil. |
|  | Totalling <b>13</b> near hits or causes for concern  |

*Table 4: Near Hits or Causes for Concern Reported during Quarter 2*

## **Exposure to Violence or Aggression**

Of the **50** H&S events **2** related to the category of Exposure to Violence or Aggression, this is further described in Table 5 below:

| <b>Sub-Categories</b>                | <b>Break-down of Injuries in Each Sub-Category</b>   |
|--------------------------------------|--|
| 2 Exposure to violence or aggression | 1 relates to items being thrown from window at FF's while carrying out FF duties, Police informed and attended incident. |
|                                      | 1 relates to attendance at HMP during inspection of a fire all out, abuse from inmates en route to cell.                 |
|                                      | Totalling <b>2</b> exposure to violence or aggression  |

*Table 5: Exposure to Violence or Aggression Reported during Quarter 2*

## **Significant/Serious Events during Quarter 2 (Jul 16 – Sept 16)**

- The first incident relates to a manual handling injury whilst an operational member of staff was moving vehicles in preparation for a training exercise. A full investigation has been undertaken where further recommendations are being considered (found in personal injury category).
- The second Specialist Investigation relates to a reoccurrence of a pre-existing injury during hose running on a recruitment course (found in personal injury category).
- The Service has procured new fire appliances which are fitted with an electronic stability programme (ESP) in line with legal requirements and as is now industry standard. Due to this safety feature these new vehicles require a different style of driving to that of previous fire appliances, which was included in the driver training when the vehicles were launched. Following a near hit report when the ESP system activated whilst responding to an incident a detailed investigation was undertaken. Fire appliances were mechanically inspected by the manufacturer, and data has been downloaded, which demonstrated that the system and vehicles operated as expected. Whilst no fault is attributed to the drivers, additional training and time for familiarisation has been offered to all crews and subsequently there have been no further reports of this nature. (This event is found in near hits or causes for concern category).

## **Summary for Quarter 2 (Jul 16 – Sept 16)**

Two RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reports were submitted to the Health and Safety Executive (HSE). These relate to personal injuries where operational personnel were absent from work for 94 days of Quarter 2.

## **Comparison Between Quarters**

### **Comparison of Events Reported Showing Differences Q2 2016 and Q2 2015**

Table 6 below, compares the number of events reported in Q2 2015-16 and Q2 2016-17 for different categories. It can be seen that in Q2 2016-17, the number of Vehicle Accidents reported were less than in Q2 2015-16. Conversely, Personal Injuries reported reports of Violence and Aggression, Near Hit reports and reports of Damage to Property or Equipment in Q2 2016-17 have increased compared to Q2 2015-16. Overall, this demonstrates that event reporting as a whole has increased during Q2 2016-17 compared with Q2 2015-16.

| Event Type            | Q2 2015-16 | Q2 2016-17 | Increase/Decrease |
|-----------------------|------------|------------|-------------------|
| Personal Injuries     | 13         | 22         | <b>+9</b>         |
| Vehicle Accidents     | 16         | 11         | <b>-5</b>         |
| Property or Equipment | 1          | 2          | <b>+1</b>         |
| Violence & Aggression | 0          | 2          | <b>+2</b>         |
| Near Hits             | 3          | 13         | <b>+10</b>        |
| Overall               | 33         | 50         | <b>+17</b>        |

*Table 6: Quarterly Events Reported Q2 2015-2016 and Q2 2016-2017*

Table 6 above, compares Q2 2015-16 to Q2 2016-17 reports the service has had:\*

- Nine additional Personal Injury reports
- Five **fewer** Vehicle Accidents
- One additional report of Damage to Property or Equipment
- Two additional reports of Violence or Aggression against service personnel
- Ten additional reports of Near Hits or Causes for Concern were made

\*Specific details of these can be provided upon request to the Health and Safety advisor.

## **Trend Analysis**

In summary, whilst there has been an increase in personal injuries reported, overall they have been of a minor nature. However the increased number of near hits demonstrates an increasingly positive reporting culture, which contributes to preventative control measures being implemented to help reduce injuries and accidents.