Incident Report

Area: Scientific Services - Pathology and Animal Sciences

Incident ID:



Туре

Full name

Occupation

Contact telephone number

Activity being carried out

Employee



Laboratories/Scientific

Incident area

Scientific Services - Pathology and Animal Sciences

Location - Where did the incident occur?

Laboratory

Line manager

Please select the appropriate line manager (eg of the person affected)

Type of Injury

Type of Incident Injury: MSD / Manual Handling Subtype of incident: Repetitive

Type of injury (please select at least one)

• Other

Injured body parts

Right wrist

•



FRONT VIEW

Face injuries

None selected

Hand injuries

None selected

Foot injuries None selected

Type of Occupational ill-health / Stress incident

None selected

Type of disease

Tendonitis

Treatment category

None

Type of Incident / Near Miss

Type of Hazard observation / improvement incident

Investigation level

Low

Investigation team

Lead Investigator: Investigation Team:



Location of incident

Summary of incident

While cleaning out aggravated a wrist injury which AP has had for a while.

Incident investigation

On 18/7/22, 4/8 and 5/8/22 the AP while working in an animal facility in showelling and removing waste and bedding produced by cattle and aggravated a pre-existing condition to their wrist. The AP can't remember the exact date it started hurting but was knows it was when working in this facility which is hadn't done for a while. The AP continued to work for the next few weeks and didn't report it to their line manager. The AP did contact their GP who advised the AP to continue taking over counter medication and to contact them again if it doesn't improve. As the injury didn't improve the AP contacted their GP again and was referred to a physiotherapist. On 9th August the AP spoke to the physiotherapist who diagnosed Tendonitis and advised the AP to take time of work to rest the wrist and allow it to recover. The AP was then off work from 10th August returning to work on 31st August. The AP has returned to work and has been referred by their line manager to occupational Health.

Health. The AP has had intermittent problems with their wrist for a number of years but has never reported it to their manager as an issue. Their line manager was aware that sometimes the AP had a sore wrist and wore a wrist support on these occasions but wasn't aware that there was any issue with the work the AP was performing. The AP themselves in fact doesn't want to be moved to lighter duties and hasn't reported it as an issue. The AP's line manager has referred the AP to occupational health. Currently, as of 6/9/2022, the AP is continuing to see the Physiotherapist weekly and reports the wrist to be improved Managers were aware on 9th August that the AP was off due to issues with their wrist, but believed it was a pre-existing condition. The departments Safety Officer was aware that the AP was off with an injury but was not aware of the details they were then on leave on 12th August (returning 27th August) at which point the AP had only been off for two days. The injury wasn't reported as an incident until 5/9/2022. The reason for not reporting prior to this is appears to be that manager believed that as there was a per-existing condition it wasn't an injury at work so didn't need reporting. On rot we to write to write the performed to perform the performance of the details they

On return to work **been** has been kept off heavier tacks and is not being currently being sent into **being** as the work in this building was trigger for aggravating the injury.

RIDDOR Reporting

Check this box if the incident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)?: Yes

•

Type of RIDDOR

Accident + 7 days

Root cause / contributory factors

Immediate cause:

The people involved

Root cause(s) - Please do not select more than three:

• Inadequate reporting of hazards / conditions

Poor risk appreciation (risk perception)

Error or Violation

Error or Violation:

Related actions

None

Recommendations

Recommend that the AP is referred for an occupational health review, this has already been completed. Manager reviews with the APs the APs workload with a view to implementing reasonable adjustments based on the AP's condition.

Witness statements

There are currently no witness statements for this incident.

Lost time		
First day of absence	Return to work	Calculated number of lost days
10 August 2022	31 August 2022	15*

Total lost days: 15*

* Calculated to date: 09 May 2023

Modified duties

First day of modified duties	Return to normal duties	Calculated number of modified duties
31 August 2022	Not set	179*

Total days of modified duties: 179*

* Calculated to date: 09 May 2023

Lessons learnt issues

Was there any lessons learnt issued? Non

None selected

Incident sharing

The person(s) involved in the incident has/have given their permission to share with the Trade Union: No

Related documents - Please ensure all related documents are attached

Filename	Date uploaded
SHWF043 (9).docx	15 September 2022
Injury-1691101251 RIDDOR Animal Sciences 13 September 2022.pdf	15 September 2022
RE_ RIDDOR Report .msg	15 September 2022

Investigation approver

None selected

Workflow status

Date/Time	User	Status	Notes
05 September 2022 11:52		Draft	
15 September 2022 14:19		Closed	
15 September 2022 15:06		Draft	
15 September 2022 15:10		Closed	

Related incidents

Are there any related incidents?

None selected

Incident Report

Area: Service Delivery - Field Delivery - England - South

Incident ID:

Incident number

What is being investigated?

What is being reported?

• Injury

Who is reporting



About the incident

Date: 15 February 2023 Time: 17:00

Person harmed

Type Full name

Occupation

Contact telephone number

Activity being carried out





Office/Admin

Home address

Incident area

Service Delivery - Field Delivery - England - South

Location - Where did the incident occur?

Office

Line manager

Please select the appropriate line manager (eg of the person affected)

Type of Injury

Type of Incident Injury: MSD / Manual Handling Subtype of incident: Other

Type of injury (please select at least one)

Fracture

Injured body parts

Right wrist

•



FRONT VIEW

Face injuries

None selected

Hand injuries

None selected

Foot injuries None selected

Type of Occupational ill-health / Stress incident

None selected

Type of disease

Broken Wrist

Treatment category

Hospital - A&E

Type of Incident / Near Miss

Type of Hazard observation / improvement incident

Investigation level

Medium

Investigation team

Lead Investigator: Investigation Team: None selected

Location of incident

Summary of incident

Fell due to door handle breaking off

Incident investigation

This action has the ID:

I received this incident on Friday 17th February 2023. In the email from the AP states that would only like to be emailed at this time due to issues with mobile/ call devices and not working due to the accident. I ensure to talk all the details and follow wishes so I replied to original incident email to ask additional questions.

At 'second and the 15th February 2023 at 17:00 the AP had been working in in the office area (this is usual office base) responding to emails. The AP had started work at 14:00pm (this is when shift starts). Whilst working in this area the AP could hear a rattling noise which turned out to be the fire exit door, it was being moved slightly by the wind. This fire exit door leads out in the garden area outside the building.

It seemed that the door was loose and was rattling against the door frame so the AP got up to see if could close/ secure it better to stop the noise. The AP pulled the horizontal door handle and it snapped off the door completely and as it did the AP fell backwards onto the concrete flooring. The AP explains that the right wrist took the full impact of the floor and even a few days later there appeared to be no other injuries apart from on wrist.

After the fall the AP stood up and assessed the damage, believing straight away that she had broken her wrist due to it being 'distorted'

There were no other members of staff present when this incident occurred, no witnessed to the event. The AP was covering the late shift with a veterinary colleague, the second in addition to the second (known as the second were also still present in the building. The building offered to drive the AP to the second se

Whilst at the hospital the AP had wrist X-rayed before and after having it manipulated back into place and having it set in a temporary plaster cast. The AP was also told after the manipulation to put the wrist back in place & second round of X-rays, that they showed significant improvement. The AP was also told, that it is quite badly broken in several places and that was need an operation. The AP now has to go to a fracture clinic over the course of the next week and will find out more about the injuries sustained then.

Discharge form from the hospital reads- 'closed fracture of distal radius'.

As above I contacted the AP asking for additional information and contacts at the office as I would like to ensure the door is secured and safe. The AP explained that manager would be contacting to get the door fixed (I have emailed 21st February 2023 to confirm). Will be taking photos of the area which I will request.

Additional information: My wrist is badly broken. I have a temporary cast, which allows for swelling of the arm etc. As per my original report, I have to go to a fracture clinic; possibly have an operation before having a proper plaster cast put on, that will extend to the elbow. It usually takes at least six-eight weeks for broken bones to heal but I have been told mine might take a little while longer. I can't drive & have to do everything with my left hand. I am likely to be off work around a couple of months. I want to get return to work & my usual life as soon as I can.

21/02/23 - I have requested a call with AP's manager and requested photos be sent over of the incident area.

Information from line manager (**Construction**)-'I can confirm that the door has now been fixed by **Construction**. I will also be sending an email round to my team and the team at the **Construction** to ensure that the door is not used – except for in the case of a fire or fire drill exercise.'

AP has provided manager with a sick note from the doctors and has been signed off until 7th April 2023.

RIDDOR Reporting

Check this box if the incident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)?: Yes

Type of RIDDOR

Accident + 7 days

Root cause / contributory factors

Root cause(s) - Please do not select more than three:

• Inadequate maintenance

Error or Violation

Error or Violation:	
Error:	

Related actions

None

Recommendations

Error Slip

Witness statements

There are currently no witness statements for this incident.

Lost time				
First day of absence	Return to work	Calculated number of lost days		
16 February 2023	Not set	58*		

Total lost days: 58*

* Calculated to date: 09 May 2023

Modified duties

This incident has not resulted in modified duties

Lessons learnt issues

Was there any lessons learnt issued? No

Incident sharing

The person(s) involved in the incident has/have given their permission to share with the Trade Union: Yes

Related documents - Please ensure all related documents are attached

Filename	Date uploaded
RE RIDDOR - Fractured wrist.msg	08 March 2023
Door photos.msg	24 February 2023

Investigation approver

Workflow status

Date/Time	User	Status	Notes
21 February 2023 10:50		Draft	

Related incidents

Are there any related	incidents?	No
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Incident Report

Area: Safety Health and Wellbeing

Incident ID:

Incident number

What is being investigated?

What is being reported?

Incident / Near miss

Who is reporting

Full Name:		
Occupation:		
Contact number:		
Contact email address:		

About the incident

Date: 16 November 2022 Time: 09:45

Person harmed

Туре	None selected
Full name	
Occupation	
Contact telephone number	
Activity being carried out	None selected

Home address

Incident area

Safety Health and Wel being

Location - Where did the incident occur?

Field

Line manager

Please select the appropriate line manager (eg of the person affected)

Type of Injury

Type of injury (please select at least one) None selected

Injured body parts

None selected

Face injuries

None selected

Hand injuries
None selected

Foot injuries

None selected

Type of Occupational ill-health / Stress incident

None selected

Type of disease

Treatment category

None selected

Type of Incident / Near Miss

Incident / Near Miss - type of incident: Medical Emergency Incident / Near Miss - subtype of incident: Taken unwell during working hours Incident / Near Miss - type of incident: Medical Emergency

Type of Hazard observation / improvement incident

Investigation level

Low

Investigation team

Lead Investigator:



Investigation Team:

Location of incident

Summary of incident

advice

- had a medical episode of diabetes whilst in the sheds - walked off by and took medical

Incident investigation

I was working on this IP and the and and and were from

This was the 1st day of the cull and I undertook a safety brief with all the process on how to wear PPE and RPE. Names, mobile numbers, DOB and home postcodes were taken for UKHSA. some of these process were experienced and for some it was their first time working on an IP. I made sure all understood the safety brief and I asked if everyone was fit and well this morning, to which all said they were.

I was standing om the Biosecurity line watching the cull and pick up activities as is part of my role

The AP walked out of the sheds to the bioline and said that the felt unwell. The told me that the wanted to leave and could not go back into the shed so took of the RPE and PPE. The went and sat in the welfare van and told me that the had been diagnosed the day before with diabetes - I gave the some water, the chose to eat some sweets and injected the with insulin, the called took to asked the day before with diabetes - I gave the some water, the chose to eat some sweets and injected the with insulin, the called took to be to be asked the day before with diabetes - I gave the some water, the chose to eat some sweets and injected the with insulin, the called took to be to be asked to be asked to attend the drop in Clinic with the day. The AP called the day before with be asked to be asked to attend the drop in Clinic with the day. The AP called the day before with be asked to be asked to attend the drop in Clinic with the day. The AP called the day be asked to attend the drop in Clinic with the day. The AP called the day are to be asked to be aske

RIDDOR Reporting

Check this box if the incident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)?: Yes

Type of RIDDOR

None selected

Root cause / contributory factors

Immediate cause: The people involved

Root cause(s) - Please do not select more than three:

- 3rd parties contractors / subcontractors only
- Poor attitude to health and safety

Error or Violation

Error or Violation: Error - 3rd Party: Error - 3rd Party Slip

Related actions

None

Recommendations

Advised to take medical advice

Witness statements

There are currently no witness statements for this incident.

Lost time

This incident is not an LTI

Modified duties

This incident has not resulted in modified duties

Lessons learnt issues

Was there any lessons learnt issued? No

Incident sharing

The person(s) involved in the incident has/have given their permission to share with the Trade Union: Yes

Related documents - Please ensure all related documents are attached None uploaded

Investigation approver

None selected

Workflow status

Date/Time	User	Status	Notes
29 November 2022 11:57		Draft	
12 December 2022 14:59		Closed	

Related incidents

Are there any related incidents? No

Incident Investigation: Fumigation and Evacuation

Executive Summary

This report provides the background and circumstances that resulted in a number of APHA employees being exposed and some potentially being exposed to formaldehyde while working in **Consequence** on the morning of 20 October 2022. As a consequence, nine APHA employees attended **Consequence** Hospital **Consequence** later in the day. All employees once examined were discharged from A&E and no long-term health effects were suffered.

This is one of two reports, the other being provided by Defra (

(TS)) following their investigation into the engineering and building related aspects. is a small and medium animal facility built in the 1990s. The source of the formaldehyde was from the adjacent building which was being decontaminated using formaldehyde fumigant. If is an large animal facility that is approximately twenty five years old and mainly houses cattle or pigs.

There is a need periodically to decontaminate the facility including ahead of planned preventative maintenance (PPM). was fumigated with formaldehyde according to the validated process on Wednesday 19 October 2022 ahead of planned preventative maintenance (PPM). After the validated dwell time of at least twelve hours, the system was purged, which results to venting of fumigant via a venting system with final exit at the top of the building. The vents can be directed towards and and on this occasion were towards . On the day of the incident (day after fumigation), the weather was particularly cold and damp. Fumigant was detected (by smell) outside and was entrained into via the air intake system along the top of the building. A full evacuation took place. just completed in **and**, and persons involved with that work left the facility according work and to standard procedures. Other people were undertaking evacuated under emergency conditions. Circumstances on the day, including lack of radios that had been sent for servicing, made communication difficult and two people re-entered to look for a person that didn't turn up at the evacuation point. Following these events, one person reported symptoms consistent with exposure to formaldehyde and following advice from NHS111, nine APHA employees were taken to Hospital where a major incident was declared. All APHA employees attending hospital were assessed and all discharged with no further action or medical interventions required.

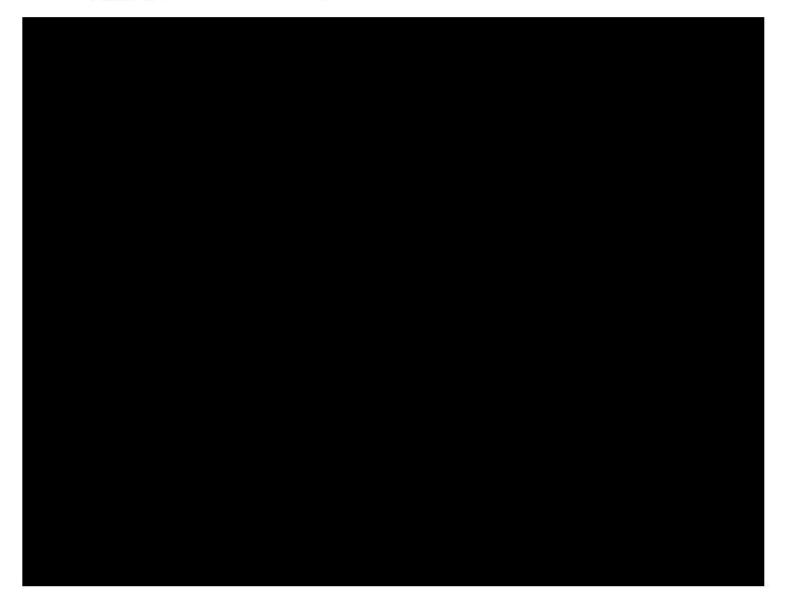
This incident was reported to the Health and Safety Executive (HSE) under both the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) and the Specified Animal Pathogens Order 2008 (SAPO) although early on in the investigation it became clear that this was not a SAPO reportable incident. At the time of writing this report, the HSE investigation has not been completed.

Investigation

The RIDDOR and SAPO notifications are provided in Appendices 1 and 2.

at APHA **and the set of the set o**

Figure 1.



underwent a planned fumigation using formaldehyde on Wednesday 19 October 2022 ahead of planned preventative maintenance (PPM). Staff are fully trained and competent. Use of formaldehyde is risk assessed as per

and the fumigation process is described in standard operating procedure The cycle was started at 15:30 and after the validated dwell time of at least twelve hours had elapsed, the purge cycle was started at 09:46 following formaldehyde level checks in the plant space at 08:40. The detail of the events and affected persons is described in Appendices 1 and 2. In summary, detected formaldehyde outside of and following checks with a calibrated formaldehyde meter, was also detected inside were a number of staff were working. The instruction to evacuate was given and staff mustered in facility). At this point, one person was found to be missing and two people re-entered without respiratory protective equipment to find the missing person who then evacuated with the two other employees. Early in the afternoon, one person reported symptoms of exposure to formaldehyde and on the advice of NHS111, everyone who had been potentially exposed was taken to the Accident and Emergency Department at Hospital, Hospital, where a major incident was declared. All employees were assessed and discharged after a short while and returned to APHA

Figure 2. Evacuation Routes from



The evacuation routes taken from are shown in Figure 2. The team did not use the main entrance as that would have taken them directly to where the formaldehyde had been detected. The team evacuated along the route shown by the red line from the events. The team evacuated as it was not known early in the events if their facility was also full of formaldehyde. Their usual muster points are points but as it was raining, this team were instructed to muster in by

Various work activities were being undertaken in **and** at the time of the incident. The work being undertaken and the staff involved are shown in Figure 3. **Constant** work involving **constant** had just completed and all remaining inocula safely disposed of into disinfectant. Those staff exited and showered via the standard procedure. A number of other staff were working with **constant** (**constant** agent) and exited as shown. One member of staff did not hear the instruction to evacuate.

Figure 3. Location of staff and evacuation routes taken from

Staff were working in the rooms shown. Containment boundary indicated by green line.



At the muster in	, it was realised that	was unaccounted for.
		returned
to and re-entered	to look for	. They were not wearing respiratory
protective equipme	ent and their route taken in	to locate is shown in
Figure 4.		

68 69 69			10
Incide	ant inv	estigat	ion:
menue	SILC IIIV	estigat	UT.

Figure 4. Re-entry to To Locate Person Unaccounted For

A. and and re-entered via the pig run (see Figures 5 and 6) door in order to locate

B. continued along the red path to the observation window of room continued along the blue line to check the CCTV cameras in the office.

C. Located located who exited, without showering, via the female shower waited for waited for at the emergency exit at the end of the observation corridor.

D. checked the CCTV but could not locate , so followed the blue line and left via the pig run exit.

All mustered in

1	neid	ant	inv	estig	atio	n ·
ļ	nciu	ent	IIIV	esug	gatio	п.

Figure 5. Building Interior Evacuation Routes.



Incident investigation:

Figure 6. Exterior of

The evacuation from was challenging. Communication was poor and made more difficult by the fact that the radios that the second was poor and made being serviced. Although the teams working inside the animal pens do not carry radios, there is usually a radio in the corridor area where the runner was located. Evacuation procedures for are described in

However, this SOP does not describe the process for evacuation when the fumigant is outside of the building as was the case in this incident. Is a highly trained and competent member of the team who was assessed as competent on 16 September 2022. If is still in training. The team received contingency exercise training on 21, 22 and 27 June 2022 and formaldehyde vapour release is a topic for training. However, the precise nature of this incident was not covered as it was not foreseen. The training covered aspects such as formaldehyde release within and subsequent evacuation from the facility. While activation of the fire alarm would have alerted all occupants to a danger and would have lead to full evacuation, this was not deployed since it would have consequences that would have made the situation more hazardous. The FMP Security team would have deployed to the area and potentially exposed to formaldehyde vapour.

This incident was notified to HSE under both the SAPO and RIDDOR regulations. However, subsequent to the notifications, it was deemed that this was not a SAPO reportable incident and HSE confirmed this. APHA continue to cooperate with HSE as they investigate the RIDDOR notification.

Immediate Cause

The immediate cause of this incident was the discharge of formaldehyde vapour from towards which was then entrained into wia the air intake. The weather conditions on the day contributed to the incident being rainy with high humidity. As a result when the fumigant was discharged towards with the vapour, which is heavier than air, rolled down the curved roof of was and was pulled towards and into was by the air intakes along the top of the building.

Root Cause and contributory factors

There are a number of root causes and contributory factors:

- the positioning of the fumigation extract towards
- the poor design and location of the facilities being so close to one another;
- not identifying a foreseeable risk; and
- weather conditions

Emergency response considerations and actions

While we intend to mitigate and prevent any future similar event, we identified our emergency response was not as we would have wanted. We will separately deal with this and the wider aspects of emergency response including having clear communication systems, alerts and other alarms which may assist in future incidents across the site. In addition, drills did not include such a scenario and all high containment facilities will need to review and widen drills to include all foreseeable emergency incidents.

Recommendations

- Review risk assessment and controls for decontamination including fumigation using formaldehyde. As part of 'lessons learnt' to be produced, consider commissioning and undertaking research into decontamination and fumigation with alternatives to formaldehyde or how its use can be reduced so far as is reasonably practicable
- 2. Agree with **Example** in consideration of their investigation and findings, measures to prevent a recurrence including engineering solutions as well as practical ones such as timing for fumigations. Formalise actions and changes, monitor to completion and test new arrangements
- 3. Provide specific options for communication of staff in high containment including radios, pagers, helmet radios or anything else. Consider other means of communication (visual and audible alerts)
- 4. Develop a procedure for full building evacuation without activating the fire alarm.
- 5. Review scenarios that are drilled and ensure all foreseeable risks are included. System devised to manage high containment drills and emergency exercises across the site including performance measures for such

- 6. Review the rest of the site to see if there are other building where a similar event is possible.
- 7. Consider installation of formaldehyde sensors in buildings following a review of each high containment facility .
- 8. Produce a Lessons Learnt for publication. This may be include: one for APHA; a joint one for APHA / Defra (and to consider); and finally agree if DgPTS are producing one for themselves.

Appendix 1. HSE RIDDOR Notification.



Appendix 2. HSE SAPO2 Notification.

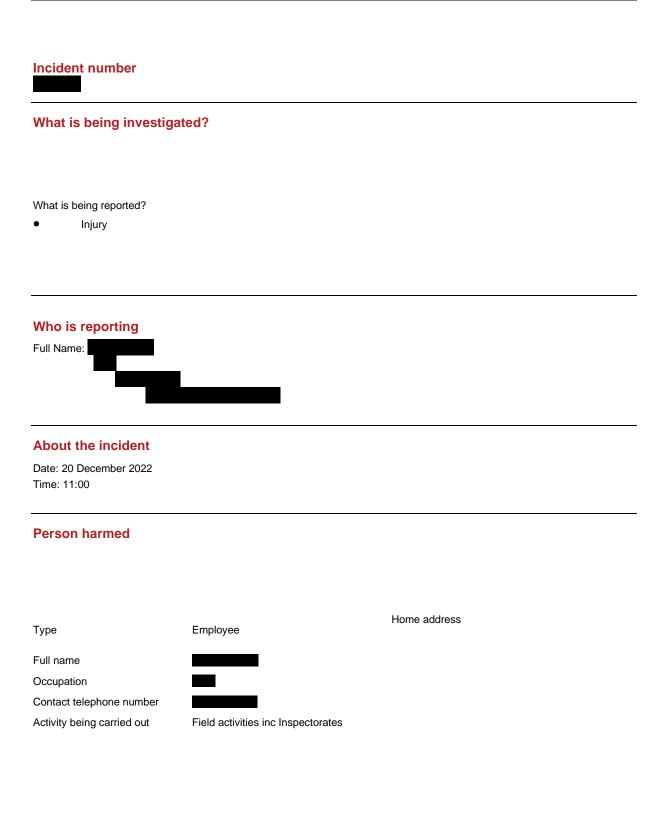




Incident Report

Area: Service Delivery - Field Delivery - Wales

Incident ID:



Incident area

Service Delivery - Field Delivery - Wales

Location - Where did the incident occur?

Field

Line manager

Please select the appropriate line manager (eg of the person affected)

Type of Injury

Type of Incident Injury: Animal / Insect Subtype of incident: Crush

Type of injury (please select at least one)

• Other

Injured body parts

Right hand • T FRONT VIEW **Face injuries** None selected Hand injuries Right thumb Right back of ٠ ٠ hand LEFT HAND **RIGHT HAND Foot injuries** None selected Type of Occupational ill-health / Stress incident None selected

Type of disease

Treatment category

Hospital - A&E

Type of Incident / Near Miss

Type of Hazard observation / improvement incident

Investigation level

Low

Investigation team

Lead Investigator: Investigation Team:

None selected

Location of incident

on farm.

Summary of incident

Hand crushed between cow and AI race crush facility causing small v chip to thumb bone.

Incident investigation

Incident occurred 20/12/22. Reported and allocated to 29/12/22 while travelling for IPs. A started the investigation en route to AI IP 29/12/22 with AP and LM called but both on leave until 3/1/23. Called both again 3/1/12 and 4/1/12 and awaiting responses.

Investigation discussion with AP confirms that during TB test of heifers in AI race familiar to them, one heifer unexpectedly shifted and caught hand against the race rail for some15 seconds when AP lifted her tail to draw blood. AP considered AI race suitable for the stock and test having attended APHA cattle handing e learning 2022.

AP felt pain in thumb area and stopped test momentarily to draw breath but felt manually able to continue and compete testing due to believing no permanent injury other than bruising and stiffness in the thumb joint area. The next day saw swelling in the area caught and while continued to work manager agreed light duties which coincided with Xmas leave period.

When swelling subsided and while continuing to feel mild pain in the top of the affected thumb bone area attended A&E for an xray which confirmed a small v chip to the hand to thumb bone. Medical advice confirmed that no supports etc were advised and that movement would aid and avoid over calcification in healing of the chip.

The AP has continued to work since Christmas and confirms that the is confident in its healing and notices bone regrowth in the direct area and comfortable in the driving and field work. AP was advised to return to A&E should continue to feel any increased pain in the area but confirms that this is currently not the case. AP advised to notify SHaW should need to return for any continued medical treatment for this injury.

RIDDOR Reporting

Check this box if the incident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)?: Yes

Type of RIDDOR

None selected

Root cause / contributory factors

Immediate cause:

The process/procedures

Root cause(s) - Please do not select more than three:

Animal Behaviour

Error or Violation

Error or Violation: Error: Error Slip

Related actions

None

Recommendations

n/a other that AP to notify SHaW should healing not continue and she feels the need to return for medical treatment for this injury.

Witness statements

There are currently no witness statements for this incident.

Lost time

This incident is not an LTI

Modified duties

This incident has not resulted in modified duties

Lessons learnt issues

Was there any lessons learnt issued? No

Incident sharing

The person(s) involved in the incident has/have given their permission to share with the Trade Union: No

Related documents - Please ensure all related documents are attached

Filename	Date uploaded
injury onmsg	04 January 2023

Investigation approver

None selected

Workflow status

Date/Time	User	Status	Notes
04 January 2023 12:00		Draft	
11 January 2023 10:29		Closed	

Related incidents

Are there any related incidents? No

Incident Report

Area: Scientific Services - Virology

Incident ID:

Incident number

What is being investigated?

What is being reported?

- Incident / Near miss
- Injury

Who is reporting



About the incident

Date: 28 October 2022 Time: 11:15

Person harmed

TypeEmployeeFull nameImployeeOccupationImployeeContact telephone numberImployeeActivity being carried outImployee



Incident area

Scientific Services - Virology

Location - Where did the incident occur?

Laboratory

Line manager

Please select the appropriate line manager (eg of the person affected)

Type of Injury

Type of Incident Injury: Chemical

Type of injury (please select at least one)

• Other

Injured body parts



Right eye Face

Left eye

•

•

Face injuries



- NoseRight eye
- Left eye

FRONT VIEW

Hand injuries

None selected

Foot injuries

None selected

Type of Occupational ill-health / Stress incident

None selected

Type of disease

Stinging and irritation in the eyes and nose

Treatment category

Followed advice from NHS 111

Type of Incident / Near Miss

Incident / Near Miss - type of incident: Chemical Exposure Incident / Near Miss - subtype of incident: Potential Incident / Near Miss - type of incident: Chemical Exposure

Type of Hazard observation / improvement incident

Investigation level

Low

Investigation team

Lead Investigator: Investigation Team:

None selected

Location of incident

B161 AI/ND

Summary of incident

The AP went into **Mathematical** while the AHU was still on, PPE was not required as the building was sterile for the 6 monthly PPM. The AHU was turned off and then the AP observed the MSCs to see if they went into recirculating mode, The AP was only in the laboratory for a couple of minutes before they started experiencing stinging and irritation in the eyes and nose.

Incident investigation

The Building Officer (BO) noted that the Microbiological safety cabinets (MSCs) in the

centre (pre-PPM) to the edge of the green/safe zone for airflow for an unknown reason while the building was operating in normal and expected parameters. DgP Technical Services recommended ruling out the AHU system as the reason for the issue. MSCs are under the control of APHA and not

and three MSCs on the Of the 13 MSCs in building , two MSCs on the were affected with the airflow issues. The affected MSCs were **Containment suite** in Al/ND containment suite and **Containment** (both in **Containment** suite and **Containment** (both in **Containment** suite. The MSCs, post-building fumigation had airflow gauge needles that had moved to the right-hand side, on the borderline of the safe/green and unsafe/red zone. Prior to shut down for the PPM, the MSCs were all displaying in the centre of the green/safe zone on the gauges that display the airflow.

and the facility management provider) could not carry out an investigation thoroughly on the MSCs as they are not assets and not in the man contract and so both parties offered to consult with APHA's MSC service contractor

and the facility management provider) could not carry out an investigation thoroughly on the MSCs as they are not assets and not in the second contract and so both parties offered to consult with APHA's MSC service contractor to try and identify the potential causes of the MSC airflow issues. The second many had some discussions with an undertook checks on the building ventilation system and associated controls to confirm all set points were correct, which they were, indicating it to be an issue local to the MSCs themselves. The second many also reviewed the MSC Operations and Maintenance manuals and provided the troubleshooting guide for the MSCs when exhibiting the reported issues, which included changing the High Efficiency Particular Air (HEPA) filters and to be careful about continually adjusting the MSC fan. However, as this was not a system under the second former responsibility, it was recommended to the BO to discuss this with the further and agree next steps. At that point, the second former directly.

A member of **second** had a face-to-face conversation with the BO to discuss the MSC airflow issues **second** recommended that the AHU system was turned off to check to see if the MSCs went into recirculating mode to help with the investigation of recommended the air flow issues.

the air flow issues. The recommendation was provided by as the lower fan and lower HEPA filter of an MSC are monitored via the red/green gauges and the top fan (main extract system) and top HEPA are monitored via the Building Monitoring System (BMS), and the HEPA has a gauge measuring in pascals. The BMS and pressure cascades in the room were both showing as good along with the HEPA reading, this was confirmed by . So, by isolating the lower portion of the cabinet to see how it responded to the loss of the main system i.e., putting it into re-circulation mode, they could establish more data to understand the engineering of the out of spec cabinets. This procedure is not covered by a SOP and not something that would be routinely done. The BO went forwards with this recommendation without further discussion with anyone else. This is not typical behaviour for the BO since then the Head of the Department has spoken with the BO and impressed upon the importance of behaviour for the BO. Since then, the Head of the Department has spoken with the BO and impressed upon the importance of not working in a silo.

The containment suites had been fumigated on the 7/10/22 for the PPM and the MSCs (Laboratory and laboratory) had been fumigated for fumigation validation on the 27/10/22. The MSCs were vented at 7am on the 28/10/22 and

laboratory) had been fumigated for fumigation validation on the 27/10/22. The MSCs were vented at 7 am on the 26/10/22 and then cleaned down with water and left running/on (The AP put up no entry signage to the containment suites before the AHU was turned off, as the AHU was to be off for over an hour for a scheduled PPM task and the BO did not want anyone entering the containment suite after the AHU was off for a period of 30 minutes. This time period was based off exit times for power failures and EBBT. The AP had dynamically risk assessed (but not recorded) that there was no reason to suspect any off gassing from the MSCs or containment suites as the formalin levels at two weeks post suite fumigation have previously been checked (Enhanced Black building to the total 2020).

building test 2020 (EBBT)) and fumigant/formalin levels were monitored for 45 minutes post shutdown of the AHU and levels were at 0.00 ppm.

sister building Also, in , there have been multiple times when the power/AHU has failed and in all those times all users had the time to make their work safe and reported no trace/exposure of fumigant/formalin. So based off this information there was no reason to think that there was a requirement to where RPE or use a formaldemeter.

The AP went into **the answer and a state of the answer and a state of** off and then the AP observed the MSCs to see if they went into recirculating mode, which they did.

The AP then photographed the MSC gauges once the AHU was turned off. While in recirculating mode the MSCs did not stay in the green/safe zone on the airflow gauges. All but had the airflow gauge needles move all the way to the right-hand side of the gauge, fully into the unsafe/red zone indicating a far greater draw of air than in normal functioning. The believe that this is due to the MSC having an easier time pushing air out of the bypass grill than forcing it through the bypass HEPA and out of the building. The BO never got a conclusive answer from (See attached emails)

The AP then moved from . The AP was only in the for a couple of minutes before they started experiencing stinging and irritation in the eyes and nose and could smell Formalin. They then exited containment immediately and washed their eyes in a sink. The stinging started to subside immediately. They had already taken the photos in **Section**. They were photographing **Section**, which was one of the recently fumigated MSCs, when they noticed the stinging. In total the AP estimated that they were present in the laboratories for less than 2 minutes.

At the time the AP did not seek a first aider as they are a first aider themselves. The AP said they were feeling stressed at the time due to other issues with the **DEP**PM (UPS going into repeated fault/MSC validation) and so their mind was on these issues rather than themselves

The AP said in hindsight they should have made themselves a priority and should have seen a first aider and contacted their line manager and SHaW, which they will do in the future.

The AP then worked for the rest of the day, when they subsequently checked the MSCs later that day, they wore a Sundstrom with an in-date formaldehyde A/B filter.

When they got home their eyes and nose were still a little irritated, so they rang NHS 111 at approximately 7pm. NHS 111 recommended they get checked out at A&E, so they did so that evening. The AP was given an ECG, blood pressure checks, bloods taken and an examination by the doctor. The doctor said the nasal passage looked a little pink but not burned. All other tests came back clear/good, and they went home.

As of the 31/10/22 the APs eyes and nose were still feeling a little irritated/sensitive and informed SHaW, and then the BRA had put in a request with the admin team to get them an appointment with the APHA Occupational Health Advisor (OHA). The BRA has also recommended if the AP feels worse to return to A&E. The AP attended a phone appointment with the OHA on the 3/11/22 at 11am and then a follow up in person appointment on the 8/11/22 at 14:30. The outcome was from the OHA was that their nasal passage looks fine, and it was healing.

The BRA recommended this type of scenario be added to the emergency/contingency drills and that if anyone has irritated eyes/nose/throat to get someone to call SHaW after seeking first aid.

On the 24th of October attended site to service the MSCs and the BO told them of the airflow issues. The adjusted the fan speed settings to bring them back in to the centre of the safe zone after the PPM was completed. The MSCs are now working as per the SOP apart from two of them (See attached email). The had given no conclusion for the issues. The BO then decided to go ahead with the second recommendation even though the MSCs had passed their service as the BO was not satisfied with the lack of explanation from

The BO is a competent and signed off for the role for **March** 2022.

RIDDOR Reporting

Check this box if the incident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)?: Yes

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Type of RIDDOR

Dangerous Occurrence

Root cause / contributory factors

Immediate cause:

The people involved

Root cause(s) - Please do not select more than three:

Inadequate planning

- Stress Demands
- Poor risk appreciation (risk perception)

Error or Violation

Error or Violation: Violation:

Violation Situational

Related actions

None

Recommendations

All recommendations (either verbal or in writing) that do not have a SOP/Risk assessment to be recorded and checked with a second appropriate person i.e., DSO, BRA, WGL.

No person is to work in a silo when undertaking any duties linked to fumigation.

This is included in the Lessons Learnt.

Witness statements

There are currently no witness statements for this incident.

Lost time

This incident is not an LTI

Modified duties

This incident has not resulted in modified duties

Lessons learnt issues

Was there any lessons learnt issued?	Yes
Please enter the lessons learnt issue date:	None specified

Incident sharing

The person(s) involved in the incident has/have given their permission to share with the Trade Union: No

Related documents - Please ensure all related documents are attached

Filename	Date uploaded
RE_SHWF043 - recirculating MSC formaldehyde exposure.msg	07 November 2022
SHWF043 - recirculating MSC formaldehyde exposure.msg	07 November 2022
BO SOP update.msg	07 November 2022
Building RIDDOR Reportable Incident.msg	07 November 2022
RE_OH appointment Thursday_ post-formaldehyde ongoing irritation.msg	07 November 2022
RE_ SHWF043 - recirculating MSC formaldehyde exposure.msg	07 November 2022
Recirculating MSC formaldehyde exposure 28_10_22 midday .msg	07 November 2022
Call outs for APHA for the last year.msg	14 November 2022
FW_MSC Concerns over MSC Function.msg	14 November 2022
Lab pictures.msg	14 November 2022

FW_MSC Concerns over MSC Function.msg	06 March 2023
161 AI sign off.msg	13 March 2023

Investigation approver

Workflow status

Date/Time	User	Status	Notes
07 November 2022 12:04		Draft	
07 March 2023 13:52		Investigation waiting for approval	
09 May 2023 16:17		Approved	

Related incidents

Are there any related incidents? No