

Person: Tina Johnson ([cjohnson@jlab.org](mailto:cjohnson@jlab.org))  
ORG: ESHDIV

Status: Approved  
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JSA  
THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY  
12000 Jefferson Avenue  
Newport News, VA 23606  
Phone: (757) 269-7100

### Notable Events 67003

See EH&S Manual Chapter 5200 Appendix T1 Event Investigation and Causal Analysis for Instructions

#### Title of event

##### Event Title \*

ENG-17-0419 Employee Falls and Injures their Leg  
which Results in Sutures

##### Response Owner \*

Nate Laverdure (nal)

##### Category \*

Personnel Safety

##### Date of Occurrence    Time of Occurrence

04/19/2017

00 : 00

##### Event Location

CHL

##### Date Notable Event Report is Due\*    Time Due

05/19/2017

00 : 00

\*The Notable Event Report is due to the ESH&Q Reporting Officer with 30 days of the Initial Fact Finding Meeting unless an extension is requested.

**Summary of Event and/or Injuries, including Initial Fact Finding Meeting information: determine the chain of events and timeline \***

Employees were tasked with changing the fuses on a solenoid which was located inside the CHL CTlist #3431. The CHL is an ODH 1 area and you must also wear hearing protection. An ODH 1 area requires that you maintain constant verbal communication or eye contact with their co-worker. Due to the requirement to wear hearing protection, visual contact is the only way to maintain your requirements for ODH-1 area in this building. After the work was complete the employee, gathered their tools in a small box which was about the size of a shoe box, and began to exit the building. He was carrying this small box of tools/ supplies and stopped near the raised pipe, to make eye contact with his co-worker. Once he made eye contact, he started to walk forward and tripped over a 4 inch guard vacuum line which ran across the walk-way. The guard vacuum pipe is appropriately marked with caution tape and this pipe has been in this location for more than 20 years.

The employee fell onto the pipe and his left arm and the side of his face landed on the steel grate approximately 5 feet from the pipe. His co- worker who was also his supervisor, immediately responded to the employee asking if he was alright. The employee felt the pain in their left leg (lower leg-shin) and discovered a laceration to his left shin upon pulling up his pant leg.

The supervisor immediately escorted the employee to Occupational Medicine. Due to an unrelated power outage, Occupational Medicine. was off-site. A phone call was placed to the ESH&Q Associate Director and the employee was referred to an urgent care facility for treatment. The urgent care facility cleaned the wound and placed sutures on the wound for closure.

The employee returned to work the following day with restrictions. These restrictions were evaluated by their supervisor and DSO and do not effect their routine job functions.

## Causal Analysis

### Root Cause

Failure to maintain eyes on path (fixed obstructions): Employee was exiting the building when he stopped right before crossing the fixed pipe that runs approximately 4-6 inches off of the ground to check on his co-worker. After making eye contact with his co-worker, he started to exit again, without re-evaluating his work space and tripped over the pipe located approximately 4-6 inches from the ground.

### Contributing Cause

Too many congruent tasks: Employee was exiting while holding a small box with tools in it. The manner in which the employee was holding this box may have impeded his visual of the ground.

### Contributing Cause

Ergonomics are LTA- The pipes run across walk way. \*The larger pipe is scheduled to be removed later in 2017.

### Contributing Cause

Environmental Conditions LTA: The work environment is very loud and also an ODH 1 area. This can be a challenge as workers must wear hearing protection and maintain communication, via visual contact, with their co-workers. The ODH hazard trumped the walking hazard.

Extent of Condition Check Not Applicable



**Extent of Condition Check \***

Extent of Condition: Remind the Safety Wardens to check their areas for permanent trip hazards and ensure that they are adequately identified and appropriately marked.

Evidence of completion: Email to safety wardens

JLab CATS Number

NE-2017-03

[Click here for CATS](#)

Target Date

06/16/2017

Action Owner

Tina Menefee (menefee)

Does this event involve failed equipment?\*

Yes  No

Is there similar equipment in other areas?\*

Yes  No

\* If yes, assign extent of condition check to the appropriate DSO(s).

**Corrective Action(s)**

**Corrective Action**

Share the lessons learned and circumstance surrounding this event with others that work in this area (be sure to encourage the use of a tool bag or to keep our hands free if possible).

Evidence of completion: Acknowledgement from Cryo work group(s) that this topic was discussed in Tool Box Meeting

JLab CATS Number

NE-2017-03

[Click here for CATS](#)

Target Date

06/16/2017

Action Owner

Will Oren (oren)

JLab CATS Number

NE-2017-03

[Click here for CATS](#)

Target Date

06/16/2017

Action Owner

Nate Laverdure (nal)

**Corrective Action**

Control the entry to this area with a chain and signage stating watch your step until the pipe is removed.

Evidence of completion: Pictures of the chain with signs

JLab CATS Number

NE-2017-03

**Corrective Action**

ISM poster concentrating on slips, trips and falls and keeping your eyes on the path. Action owner will receive information for the poster from the Reporting Officer.

Evidence of completion: Link to ISM Poster or copy of the poster

[Click here for CATS](#)

**Target Date**

06/30/2017

**Action Owner**

Mary Jo Bailey (mbailey)

**JLab CATS Number**

NE-2017-03

**Corrective Action**

Remove the LERF (formerly call FEL) vacuum pipe in the CHL.

Evidence of completion: Picture(s) of the removed pipe

[Click here for CATS](#)

**Target Date**

12/31/2017

**Action Owner**

Kelly Dixon (kdixon)

**Lessons Learned (Confer with Lessons Learned Coordinator)**

**Lesson Learned**

Employees should maintain situational awareness at all times, especially when working in an area that has multiple congruent hazards.

**Lessons Learned Number**

1010

[Click here for Lessons Learned](#)

**Witness Accounts**

[Empty text box for witness accounts]

**Records, Documents, Pictures, and Other References**

Picture of site are attached

Role	Person	Group	Phone	Fact Finding	Investigation Team	Notified
Lead Investigator	Nate Laverdure (nal)	MSCRYO	6260	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Subject Matter Expert	George Perry (gperry)	ESHDIV	7841	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ESH&Q Representative	Tina Johnson (cjohnson)	ESHDIV	7611	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Associate Director	Will Oren (oren)	ENGMGT	7344	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TJSO Observer	Steve Neilson (sneilson)	DOE	7215	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Witness	L.T. Yarrington (yarring)	MSCRYO	5287	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supervisor of Involved Person(s)	Sasa Radovic (radovic)	MSCRYO	5157	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	John Heckman (heckman)	MSINST	6251	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Emergency Notifications Made (Subsequent to the Event)**

Emergency Notification	Date	Time
Fire, Rescue & Emergency Medical: (9-911)	<input type="text"/>	00 : 00
Guard Post: x5822; 269-5822	<input type="text"/>	00 : 00
Occupational Medicine: 269-7539	<input type="text"/>	00 : 00
ESH&Q Reporting Officer: 876-1750	04/19/2017	00 : 00
Crew Chief: 630-7050	<input type="text"/>	00 : 00
Industrial Hygiene: 269-7863	<input type="text"/>	00 : 00
Other: Occupational Medicine	04/19/2017	00 : 00

**Documentation of Findings**

Notable Event Number

CATS Number

[Click here for CATS](#)

Lessons Learned Number	1010
<a href="#">Click here for Lessons Learned</a>	
ORPS Number	N/A
NTS Number	N/A
CAIRS Entry	17-0419
DOE Cause Code	A3 Human Perf. LTA, B1 Skill based error, C02 Step ommitted due to mental lapse
ISM Code	Perfrom work within Controls

Event Worksheet

**Attachments**[IMG\\_6159.JPG](#)[IMG\\_6160.JPG](#)[LT injury site.jpg](#)**Signatures**

Investigation Team Members, Affected Division Managers, ESH&Q Reporting Officer: It is asked that you review and provide comments to this document to the Lead Investigator (denoted on Page 1). Your comments will be reviewed and incorporated as appropriate. Thank you for your consideration in this matter.

**Investigation Signed By:** Tina Johnson ([cjohnson@jlab.org](mailto:cjohnson@jlab.org)) on 05/24/2017 10:50:48 AM  
**Team**

**Investigation Signed By:** John Heckman ([heckman@jlab.org](mailto:heckman@jlab.org)) on 05/24/2017 11:25:01 AM  
**Team**

**Investigation Signed By:** Nate Laverdure ([nal@jlab.org](mailto:nal@jlab.org)) on 05/24/2017 11:40:01 AM  
**Team**

**Investigation Signed By:** George Perry ([gperry@jlab.org](mailto:gperry@jlab.org)) on 05/24/2017 11:43:40 AM  
**Team**

**Associate Signed By:** Will Oren ([oren@jlab.org](mailto:oren@jlab.org)) on 05/31/2017 02:15:41 PM  
**Director /  
Department  
Manager**