

FESHM 3020: WORKPLACE INJURY AND ILLNESS MANAGEMENT PROGRAM

Revision History

Author	Description of Change	Revision Date
Angela Aparicio	<ul style="list-style-type: none"> Revision of chapter to incorporate references to new QAM 12140: Event Response Program 	September 2022
Bridget Iverson	<ul style="list-style-type: none"> Addition of Radiation Safety Officer (RSO) responsibilities 	June 2020
Dave Baird	<ul style="list-style-type: none"> Removed reference to Improvements Database and replaced with ESH&Q Section's Quarterly Summaries Clarified chapter responsibilities in light of the creation of the Incident Analysis Team (IAT). Provided additional Investigation and Analysis guidance Forms and flowchart have been updated	November 2018
John P. Cassidy	<ul style="list-style-type: none"> Added HPI language to Sections 1, 4, 5.4, 5.6, and 6.0. Added the Incident Reporting Process Flowchart. Added requirement to conduct and document HPI evaluations for recordable, first aid and near miss cases. Updated the IIP Subcommittee duties. Updated the Investigation and Analysis Procedure to include the documentation of reports. 	July 2013
John P. Cassidy	Employees will only have to report to medical after a motor vehicle incident if there is an injury.	July 2011
Nancy Grossman	Definitions and terms were standardized between each of the FESHM chapters and the CAPA procedure. Particularly Corrective Action, Preventive Action, Root Cause Analysis, ESHTRK became iTrack, Causal analysis was replaced with root cause analysis and carried forward. Also added reference to (1004.1001 Fermilab Corrective & Preventive Action Procedure) and (1004.1002 Fermilab Root Cause Analysis Procedure) if not already present. In 5.6, added items from the Injury and Illness Subcommittee charter.	March 2011

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1.0 INTRODUCTION AND SCOPE

This chapter outlines the workplace injury and illness reporting process. Lab personnel (employees, users/affiliates, subcontractors) are expected to report all work-related injuries and illnesses by notifying their line management. The Fermilab Occupational Medicine Office will oversee care for all reported workplace injuries and illnesses. All work-related injury and illness events will be reviewed following the process outlined in QAM Chapter 12140: *Event Response Program* to determine the cause(s) and implement control measures to prevent or reduce the likelihood of recurrence.

This chapter applies to all lab employees, users, affiliates, and subcontractors performing work on the Fermilab site, in Fermilab-leased spaces, and when performing work for Fermi Research Alliance (FRA).

2.0 DEFINITIONS

CAIRS - Computerized Accident Incident Reporting System

DART – Days Away, Restricted, or Transferred

Occupational Injury or Illness – An injury or illness that occurs while performing a work-related activity on an employer-controlled property or in an employer-controlled space; while performing certain other activities on an employer-controlled property or in an employer-controlled space during regular work hours; while performing sanctioned work-related activity away from the employer-controlled property or space; or while travelling on work-related business.

OSHA - Occupational Safety and Health Administration. An agency under the US Dept. of Labor.

[OSHA Recordable Injury/Illness](#) - Any occupational injury or illness resulting in death, days away from work, restricted work or transfer to another job, or medical treatment beyond first aid.

3.0 RESPONSIBILITIES

3.1 Employees/Users/Affiliates

- Immediately notify their supervisor/point-of-contact of any work-related injuries/illnesses or any involvement in an incident regardless of how minor it may initially appear.
- Visit the Fermilab Occupational Medicine Office for evaluation immediately after incurring a work-related injury or when signs of a work-related illness present. Complete the [Injury Incident Involvement Form](#), providing a statement of what occurred.

- If the event occurs while on official travel or assignment offsite, seek medical attention at a local facility as needed. Notify supervisor when able, and report to the Fermilab Occupational Medicine Office (FOMO) upon return.
- Deliver the [Injury/Illness Evaluation Form-5](#) to the supervisor/point-of-contact immediately upon return from the FOMO. A Form-5 is used to inform the supervisor of any medical restrictions placed upon the individual.
- Do not take days off from work due to the occupational injury or illness without medical authorization for the absence.
- Participate in the review of their injury/illness as directed by the supervisor/lab contact.

3.2 Supervisors/Points-of-Contacts (POC) for Users & Affiliates

- If the first to be notified, direct injured personnel to the Fermilab Occupational Medicine Office (FOMO). Dial x3131 if necessary.
- Immediately report any incident or near miss to your line manager and Division Safety Officer (DSO).
- Review the Form-5. If restrictions have been identified, determine if such restrictions will affect the individual's ability to perform normally assigned duties and mark the appropriate box on the form.
- Complete and sign the Form-5 and forward it to the DSO for signature. The original form with all signatures must be returned to the FOMO, MS 204, within 5 working days.
- Lead/Participate in the event review team, per the procedure outlined in QAM 12140 – *Event Response Program*.

3.3 Task Managers/Construction Coordinators/Service Coordinators

- Notify the Fermilab Occupational Medicine Office of any subcontractor injury incurred while performing work for Fermilab.
- Supply the Fermilab Occupational Medicine Office with the subcontractor's injury investigation report.

3.4 Division/Section/Project Heads (D/S/P)

- Ensure reviews are completed within the timeframes outlined in QAM 12140 – *Event Response Program*.
- Review the final review report to ensure that the root, direct and contributing causes and the corrective and preventive actions are appropriate.
- Provide a summary of the event review of the injury/illness to stakeholders (lab management, FRA board, Fermi Site Office, D/S/P personnel, etc.).

3.5 Division Safety Officer (DSO)

- Provide a summary of any injury/illness to the Chief Safety Officer (CSO) and Deputy CSO.
- Participate in the event review team.
- Review the Form-5 and provide signature. If medical restrictions have been placed on the individual, the DSO signature on the Form-5 signifies concurrence with the supervisor's assessment of whether the restrictions are job limiting. The DSO then forwards the Form-5 to the Fermilab Occupational Medicine Office.

- Act as the Accident Investigator for assigned divisions, sections, or projects.

3.6 Accident Investigator

- Complete the CAIRS case information per the procedure outlined in Technical Appendix 7.1, using the data gathered from the event review.
- For OSHA Recordable cases, enter injury/illness report containing all the information required by the OSHA 300 into the CAIRS database within 7 days of incident. This allows for the submission of cases to the DOE database by the 15th or last day of each month. Enter any restricted duty days or off-duty days in the CAIRS database, and update on a frequent basis.
- For first aid cases, enter pertinent information into the CAIRS database. The extent of the information required will be proportional to the potential for the injury having been more serious but ensure all fields have been filled to close out the CAIRS case.

3.7 CAIRS Coordinator or designee

- Review all completed injury/illness forms. Provide a DOE CAIRS case number for all recordable cases that meet the reporting requirements of DOE O 231.1B – Environmental, Safety and Health Reporting.
- Obtain subcontractor hours worked and enter into the Fermilab CAIRS database.
- Submit completed CAIRS forms and hours worked to DOE CAIRS database, as required by DOE O 231.1B.
- Maintain the OSHA 300 form. Post the 300A form annually by February 1st.
- Maintain CAIRS database for trending, training, and statistical data such as incident rates.
- Review incident reports for adverse programmatic trends that should be reported to DOE through the Noncompliance Tracking System (FESHM 3030).
- Review CAIRS data for accuracy on a quarterly basis and document the review.

3.8 Chief Safety Officer (CSO)

- Maintain a staff of formally trained injury/illness investigators to provide technical assistance when requested.
- Develop and maintain injury/illness investigation/analysis policies.
- Ensure notification of the Laboratory Director, Office of Communication, the Legal Office and the DOE Fermi Site Office (FSO) of any incident that may result in an independent DOE investigation.
- Support the Directorate by taking the lead on the investigative readiness effort in the event that an incident is severe enough to warrant an independent DOE investigation (Refer to DOE Order 225.1B – *Accident Investigations*). Control of the incident scene will be given to the ES&H Section. Maintain close coordination with the DOE investigation board chairperson to ensure efficient transfer of information and continued support of DOE activities.

3.9 Incident Prevention Subcommittee (IPS)

- Provide guidance to the laboratory concerning the prevention of incidents.
- Respond to requests from, and suggest items for action to, the Chair of the Fermilab ES&H Committee (FESHCom) and to the Chief Safety Officer (CSO).

- Through formal presentations, share information from investigations lab-wide, including root causes, corrective and preventative actions.
- Identify trends to the Fermilab ES&H Committee (FESHCom).
- Identify and recommend changes in policies and procedures to FESHCom to enhance lab-wide safety performance.
- For further detailed requirements of the IPS please see the [IPS Charter](#).

3.10 Fermilab Occupational Medical Office (FOMO)

- Assess occupational injuries and illnesses, provide necessary treatment, and place medical restrictions, when necessary, to ensure quick and complete recovery.
- Inform the supervisor/POC and DSO of each employee/user/affiliate who has reported to the FOMO with an injury or illness. This is normally done through electronic mail.
- Enter incident information into the CAIRS database if,
 - the incident resulted in an occupational injury, or
 - the incident is alleged by the employee/user/affiliate to be the result of an occupational injury or illness.
- Provide the Incident Involvement Form to the employee for completion.
- Provide the employee with a Form-5 to document the visit to the FOMO.
- Retain all completed Form-5s in the individual's file.
- Maintain the injury/illness (CAIRS) database (for worker's compensation purposes).
- Monitor cases with continuing lost or restricted time to ensure restrictions are accommodated. Update CAIRS database as necessary to reflect accurate days lost or restricted, or other new information.

4.0 PROGRAM DESCRIPTION

All workplace injuries and illnesses shall be reported, investigated, analyzed, and recorded. Those incident reports that meet the DOE reporting criteria will be submitted to DOE.

5.0 INJURY AND ILLNESS REVIEW PROCEDURE

Actions following a work-related injury or illness:

1. Emergency situations (life-threatening emergency):
 - a. Batavia site: Call x3131 from any lab phone, or 630-840-3131 from a cell phone.
2. Preservation of the scene.
 - a. Secure the scene and consult your Division Safety Officer (DSO) to determine whether the scene must be preserved for review.
 - b. Until emergency management arrive on scene, the area supervisor or lead employee is in charge of the scene. After an event occurs, take the following actions:
 - i. Verify that emergency assistance is present, or call emergency responders (x3131 at Batavia site).

- ii. Preserve the scene. Do not permit any equipment or vehicles involved to be moved. Do not allow passersby access to the scene or to interact with equipment or materials at the scene.
 - iii. When possible, obtain photographs, particularly of transient evidence such as debris, liquid spills, or scuff marks.
 - iv. Ask witnesses to remain in the vicinity while providing a statement to the responding investigator only if it is safe to do so. Otherwise, obtain names and contact information of witnesses before they leave.
 - v. Have witnesses write a statement documenting their observations, including conditions or events leading up to the injury/illness.
 - c. A review team will be assigned to investigate injury and illness events.
3. Review team assigned to review and analyze injury/illness events (following the procedure outlined within QAM 12140 – *Event Response Program*)
 - a. For Level 1 events (first aid, recordable injuries and illnesses), Supervisor/POC and DSO will conduct a review and complete the Level 1 Event Review form. Data from this form can be utilized to complete the Fermilab CAIRS database entry.
 - b. For Level 2 events (DART injuries and illnesses), a lead reviewer and review team (including the DSO) will review the event using HPI principles and document the review in the HPI database. This data can be utilized to complete the Fermilab CAIRS database entry.
 - c. Corrective and preventive actions will be entered into iTrack and linked to the Event in the Event Response Database. Lessons Learned will be added to the Quality Tool Suite
4. The DSO or designee will complete the Fermilab CAIRS data entry.
5. Recordable injuries will be submitted to the DOE CAIRS database by the CAIRS coordinator or designee.
 - a. Recordable injuries will be entered onto the OSHA 300 log by the CAIRS coordinator or designee.

6.0 REFERENCES

[DOE O 231.1-1B - Environment, Safety and Health Reporting Manual](#)

[CAIRS Injury and Illness Reporting Guide](#)

[DOE O 225.1B – Accident Investigations](#)

[Incident Prevention Subcommittee Charter](#)

[QAM Chapter 12140 – Event Response Program](#)

[Quality Assurance Manual](#)

7.0 TECHNICAL APPENDICES

7.1 DETAILED PROCEDURE – CAIRS Injury/Illness Reports

1. Accident Investigators are to complete the injury/illness investigation, and collect all data required to complete the fields in the Table below.
 - a. Note: Subcontractors that are directly supervised by Fermilab personnel shall be included on our OSHA 300 log.
 - b. Note: Subcontractors with more than 11 personnel on-site must also be included on the OSHA 300 log.
2. The Accident Investigator must continually update the ESH Off Duty Days and ESH Limited Duty Days, until case is closed or until the number of DART days exceeds 180 days.
3. To finalize the report, save, then verify. If no issues, “send emails.”

CAIRS Data Entry Fields:

Header	Notes:
CAIRS Type	Completed by Medical
Case Date	Completed by Medical
Worker	Completed by Medical
Work Start Time	Completed by Medical
RX	Completed by Medical
MSD	Completed by Medical
Claim Pending	Select Yes or No once reviewed
STS	Completed by Medical
Medical tab:	
Supervisor	Automatically populated
Injury	Medical selects from drop down list, if applicable
Illness	Medical selects from drop down list, if applicable
Accident	Completed by Medical
Medical Treatment	Completed by Medical
Org D/S at Time	Automatically populated
Occupation	Should populate automatically
Body 1	Medical selects from drop down list
Body 2	Medical selects from drop down list
Location	Completed by Medical
Comments	Completed by Medical
Medical Limited Duty Days	Completed by Medical
Medical Off Duty Days	Completed by Medical
General tab:	

1. Organization Code	Choose from: a. Fermilab b. Cost Construction – Time & Material c. Fixed Price Construction d. Security e. Service Subcontractors f. Visitors
2. DOE Case Number	Completed by CAIRS Coordinator
3. Multiple Case Number	Completed by CAIRS Coordinator Enter a number or code to represent any common accident that involves more than one recordable case. Use the same code on each of the separate cases.
5. Investigation Type – should either be “C” or “Non-Recordable”	Possible entries are A, B, C, NR, where Type A and Type B refer to Board investigations as defined in the current version of DOE O 225.1A. Type C refers to the level of investigation required for other recordable injury and illness. NR is for non-recordable cases.
6. Department, Division, or ID Code	Should populate automatically
9. Accident Occurred	Select if the injury occurred indoors or outdoors
10. On Employer’s Premise?	Select: Yes or No
Employee tab:	
15. Age	Should populate automatically
Length of present employment	Select the appropriate box that indicates the approximate length of employment: Under 3 months, 3-12 months, Over 12 months.
20. Experience on this job/equipment	Select the appropriate box that indicates the approximate length of experience on the job or equipment being used at the time of the accident: Under 3 months, 3-12 months, Over 12 months.
20b. If subcontractor, how many are assigned to the job?	Enter how many subcontractors are working on-site for that particular job (either directly through the subcontractor or through sub-tiered contracts).
Subcontractor Directed by Fermilab?	Choose from N/A, Yes, or No. These are typically Service Subcontractors that we hire as contractor employees (e.g. contract technician) where we supervise the individual.
ESH Comments	Describe what led up to the event, the extent of injury, and any treatment required.
OSHA tab:	
21. OSHA code	Select one: Injury, Not applicable, Poisoning, Respiratory condition, Skin Disorder
24. Has Employee returned to work with no further anticipated workdays lost?	Button automatically sets at Yes. May change to No or DNA, when applicable.
25. Permanent transfer to different job because of accident?	Enter Yes or No to indicate if injured/ill employee was given a permanent transfer to a different job because of a disability arising from the accident.
Terminated because of accident?	Enter Yes or No to indicate if injured/ill employee was terminated because of a disability arising from the accident.
26. Death Occurred?	Yes or No. If yes, enter the date of death.
ESH Limited Duty Days	Keep track of the days employee is working with job-limiting restrictions related to this accident. This is calendar days and includes weekends, vacation and holidays.

ESH Off Duty Days	Keep track of the days the employee missed work due to this accident. This is calendar days and includes weekends and holidays.
Property tab:	
Equipment tab:	
Narrative tab:	
Health care provider's name	Enter the name of the treating physician or other health care professional.
Name & Address of treatment facility	Enter the name and address of the offsite treatment Facility, if any/known.
Emergency Room Visit?	Select yes or no
Hospitalized Overnight?	Select yes or no
36. Activity in progress at time of accident	Enter a description of what activity was in progress just before the accident occurred. Describe the activity as well as the tools, equipment, or material the employee was using.
37. Events	Enter a description of what happened to cause the injury or illness, in order of sequence, beginning with the initiating event, and followed by the secondary and tertiary events. Enter a description of the nature and extent of injury/illness, part of body affected, and how it was affected. Be more specific than "hurt," "pain," or "sore."
38a. Accident causes – conditions	Enter a description of the conditions that existed at the time of the accident. (Typically include factors such as weather; visibility; limited room; location, equipment, materials or chemicals used.)
38b. Accident causes – actions	Enter a description of actions on the part of the employee that contributed to the occurrence of the accident.
38c. Accident causes – factors	Enter factors influencing underlying causes, either conditions or actions or both, that contributed to the accident/incident. (Conditions that collectively with other causes increased the likelihood of an accident but that individually did not cause the accident.)
38d. Material/objects involved that directly harmed the employee	Lists any materials, objects or substances involved that directly harmed the employee. If this does not apply to the incident, enter N/A.
39a. Corrective actions – actions taken	Enter a description of the actions taken to prevent reoccurrence of accident/incident.
39b. Corrective actions – actions recommended	Enter recommended corrective actions.
39c. Preventative actions (not entered into DOI database)	Enter preventative actions.
Investigator comments (not entered into DOI database)	
Accident Investigator tab:	
39c. Corrective actions to be completed by:	Date
40. Accident investigator, include telephone number	Enter the name and phone number of the person who completes the form. Check if they are the supervisor, safety professional, or other. Date is auto-filled when CAIRS is verified and saved.
41. Supervisor responsible for corrective actions	This should auto-fill. Date is auto-filled when CAIRS is verified and saved.

42. Accident investigation contact (if different from line 40)	Enter the name and phone number of the person to contact if different from person completing the form.
43. Direct cause	This field identifies the factor, condition, or action that was the primary cause of the accident. Select: Design/material, Employee, Other/none of the above, Procedures, Weather
44. Indirect cause	This field identifies the factors, conditions, or actions that were indirect contributors to the accident. Select: Design/material, Employee, Other/none of the above, Procedures, Weather
45. Injury/illness type	Select: a. Traumatic injury b. Systemic disease or disorder c. Infectious and parasitic disease d. Neoplasms, tumors, cancers e. Symptoms, signs and ill-defined conditions f. Other disease, conditions or disorders g. Multiple diseases, conditions or disorders h. Vehicle i. Not applicable
Corrective actions complete	Change to yes when applicable
Not work related	Change to yes when applicable
Detailed Analysis tab:	
	Create Detailed analysis to apply Causal Code(s) applicable to incident (required for recordable injuries)
Verification/Close Case tab:	
Verify Data button	Click button and the form will tell you if there are any fields that have not been completed. If you do not verify and complete all required fields, the case will not be counted on FermiDash.
Send Emails button	This will close the case and send notification emails.
iTrack tab:	
	Connect the case to an iTrack review.
Documents tab:	
	Use the Create Document button to attach any documents associated with the case.

7.2 DOE CAIRS Injury and Illness Reports

NOTE: New reports must be submitted to the DOE CAIRS database on or before the 15th and the last working day of the month.

4. By the 15th and last day of each month, check the Fermilab OSHA 300 report for new reportable cases: <https://www-esh.fnal.gov/pls/cert/osha300.html>
 - a. Assure that all CAIRS information is complete, and all cases have a DOE case number (enter DOE case number on “General” tab.)
 - i. DOE Case number should begin with the year, then the numerical order of cases.
 - For Service Subcontractor injuries, include SC after the case number.

- For Fixed Price Subcontractor injuries, include FP after the case number.
 - For T&M Subcontractor injuries, include TM after the case number.
 - For Security Subcontractor injuries, include SE after the case number.
 - For User injuries, include V after the case number.
5. Upload recordable cases to the DOE CAIRS Database
 - a. Open the DOE CAIRS database and choose data input
 - b. Save the case to production
 6. Updating DART days
 - a. Updates to the number of DART or other information previously reported for each case must be submitted quarterly until the case is closed, or until the number of DART days exceeds 180 days.

7.3 Quarterly Quality Checks/Trend Analysis

At the time of uploading the quarterly hours worked, conduct a quality check of the cases in the Fermilab CAIRS database to the cases entered in the DOE CAIRS database. Document the review

Documented quality checks of injury and illness information reported to DOE through CAIRS must be conducted at least quarterly to ensure information is thorough, accurate, and consistent with information contained in local records. The DOE Order requires a quarterly quality check, to be completed before entering the Quarterly Hours Worked. DOE facilities are required to review past data up to five years old.

Using the Data Screening option under Input Modules, select the year you want to review. Compare the case number's Lost Time and Restricted Duty days to the Fermilab OSHA Log's data. Update as necessary.

Occupational injury and illness information must be analyzed to identify adverse trends and lessons learned and develop corrective actions that prevent recurrence.

7.4 DOE CAIRS Hours Worked Reports

NOTE: Hours need to be uploaded quarterly – on or before the 10th day following the quarter (January 10, April 10, July 10, October 10).

1. At least one week prior to the end of the quarter, send the email request for the quarterly hours to all contacts. The contacts may either enter their data in the Excel file titled “Copy of Subcontractor Work Hours,” or respond with the numbers in an email.
2. Update the Excel file to include all the hours worked.
3. Check the status of CAIRS – **be sure all reportable cases have been entered completely and saved to production.**
4. By the 10th day following the quarter, upload the quarterly work hours.

- a. Enter data for each group into the DOE CAIRS database
 - i. Take care that you add to the correct year and quarter
- b. Once CAIRS hours have been collected for DOE CAIRS entry, the hours must also be uploaded into the Fermilab CAIRS Database.
 - i. Select “Hours Worked”
 - ii. Quarterly Employee hours are automatically imported into the Fermilab CAIRS database for both Batavia and South Dakota locations.
 - iii. Quarterly Contractor hours must be manually entered.
 1. Choose “Create” to add the subcontractor/user hours each reporting category and by location.
 2. Select the Work Location – either Batavia or South Dakota
 3. Select the contractor type
 - Fixed Price Construction (Lump Construction)
 - Security
 - Service Subcontractors
 - Cost Construction (T&M)
 - Visiting Scientists
 4. Select the Fiscal Year
 5. Select the Fiscal Quarter
 6. Enter the Total Hours
 7. Click “Create”