

4 **INCIDENT REPORTING AND**
5 **INVESTIGATION**

6
7 NIST S 7101.24

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11
12

13 **1. PURPOSE**

14 This suborder establishes the requirements and roles and responsibilities for the reporting and
15 investigation of work-related safety incidents and near misses to determine why these events
16 occurred and what actions must be taken to prevent their recurrence, and for the dissemination
17 throughout the organization of the related incident information and lessons identified. In
18 addition, this suborder provides administrative requirements for complying with Federal
19 Occupational Safety and Health Administration (OSHA) Injury and Illness Recordkeeping and
20 Reporting Requirements.
21
22

23 **2. BACKGROUND**

24 NIST management is committed to the safety of everyone who works for, works at, or visits
25 NIST. As part of this commitment, NIST strives to prevent safety incidents by effectively
26 managing risk in all its activities. Essential to effectively managing risk is to learn as much as
27 possible from incidents that have occurred and to take actions to prevent their recurrence.
28 Success in this depends, in turn, on the prompt reporting of incidents and on the timely
29 completion and use of the results of comprehensive incident investigations. Therefore, NIST
30 shall report and investigate incidents in a thorough and timely manner, and share incident reports
31 and lessons identified effectively throughout the organization. This incident data will be
32 analyzed to identify systemic weaknesses in the NIST occupational safety and health (OSH)
33 management system, leading to corrective actions to address those weaknesses.
34
35
36

¹ For revision history, see Appendix A.

37 **3. APPLICABILITY**

38 a. The provisions of this suborder apply to NIST employees and covered associates² engaged in
39 **work-related** activities (see Section 7, DEFINITIONS).

40

41 b. The requirements of this Suborder apply to the following types of events, as defined in
42 Section 7:

43

44 (1) Incidents:

45

46 (a) Injury;

47

48 (b) Illness;

49

50 (c) Exposure;

51

52 (d) Contamination by radioactive material;

53

54 (e) Spill / release;

55

56 (f) Property damage; and

57

58 (g) Other events with actual safety or environmental impacts; and

59

60 (2) Near misses.

61

62 c. The requirements of this suborder do not apply to unsafe conditions or practices, unless they
63 result in an incident or near miss event.³

64

65 d. This suborder does not address the following topics:

66

67 (1) Emergency communications from staff members and first responders, other than
68 communications for reporting of Immediate Notification Incidents as outlined in Section
69 6d of this suborder, through Organizational Unit (OU) management and emergency

² As per [NIST O 7101.00: Occupational Safety and Health Management System](#), a NIST associate permitted to perform work at a NIST workplace and subject to NIST policies and procedures to the extent allowed by law and the terms of the associate's agreement. Covered associates include Foreign and Domestic Guest Researchers (including contractors who perform NIST R&D/technical work); Research Associates; Intergovernmental Agency Personnel Act assignees; Facility Users; Volunteer Students; and other federal employees who perform work at NIST workplaces.

³ Unsafe conditions and practices should be reported through appropriate channels in accordance with procedures established in NIST S 7101.02: *Employee Reporting of Unsafe or Unhealthy Working Conditions*.

70 communication channels, to the NIST Director and Associate Directors, the Department
71 of Commerce, and others pursuant to an emergency or potentially serious incident.
72 Employees should refer to the Office of Facilities and Property Management web page
73 for guidance: <https://inet.nist.gov/ofpm>;

74
75 (2) Specific steps that employees and covered associates should take pursuant to sustaining
76 work-related occupational injuries or illnesses. Employees should refer to the Office of
77 Human Resources Management Workers Compensation Program at
78 <https://inet.nist.gov/ohrm/services/owcp>; and

79
80 (3) Requirements associated with consequence management, *i.e.*, policies, procedures, and
81 forms related to workers' compensation, automobile accidents, and personal property
82 claims.

83 84 85 **4. EXTERNAL REFERENCES**

86 a. 29 Code of Federal Regulations (CFR) Part 1904, [Recording and Reporting Occupational](#)
87 [Injuries and Illnesses](#)

88
89 b. 29 CFR Part 1960, [Basic Program Elements for Federal Employee Occupational Safety and](#)
90 [Health Programs and Related Matters](#)

91 92 93 **5. APPLICABLE NIST DIRECTIVES**

94 a. NIST O 7101.00: [Occupational Safety and Health Management System](#)

95
96 b. NIST S 7101.23: [Safety Education and Training](#)

97
98 c. NIST S 7101.02: [Employee Reporting of Unsafe or Unhealthful Working Conditions](#)

99
100 d. NIST S 7101.55: [Hearing Protection](#)

101 102 103 **6. REQUIREMENTS**

104 a. General Requirements

105
106 (1) All **incidents** and near misses shall be reported by employees and covered associates to
107 their OU line management using OU implementation procedures established per the
108 requirements of Section 6f.

- 110 (2) Each such incident or near miss (“event”) shall be documented and investigated to
111 identify why it occurred and what actions are needed to prevent recurrence.
112
- 113 (3) The NIST web-based application titled *Incident Reporting and Investigation System*
114 (*IRIS*) shall be used to document events subject to this Suborder, including the relevant
115 investigations. The following general requirements shall apply:
116
- 117 (a) Report Format - Events will be documented using one of two formats, based
118 generally on the complexity and seriousness of the event (see Section 7, Definitions):
119
- 120 i. Streamlined Format (Streamlined Report only); or
121
- 122 ii. Standard Format (Initial Report followed by Investigation Report).
123
- 124 (b) Reporting Timeframes
- 125
- 126 i. Streamlined and Initial Reports shall be submitted into the *IRIS* application
127 within two (2) business days of line management being notified⁴, if possible.
128
- 129 ii. Investigation Reports shall be recorded in *IRIS* within 20 (twenty) business
130 days of line management being notified, if possible.
131
- 132 b. Initial Evaluation and Information Gathering
- 133 As per OU implementation procedures, OU Line Management shall evaluate each event
134 reported to:
135
- 136 (1) Verify the applicability of this Suborder;
137
- 138 (2) Classify each event as an incident or near miss, based on the definitions in Section 7.
139
- 140 (3) Evaluate each incident to determine if it meets the definition of an **Immediate**
141 **Notification Incident** (see Section 7, Definitions).
142
- 143 (a) When an Immediate Notification Incident is identified, the reporting procedure
144 outlined in Section 6c below shall be followed immediately and OSHE shall assume
145 responsibility for subsequent reporting and investigation requirements.

⁴ Cases involving OSHA Recordable Standard Threshold Shift hearing losses shall be entered into IRIS within two (2) business days of line management being notified by letter that the case has either been confirmed by retest, or that a retest will not be taken. Please see NIST S 7101.55: *Hearing Protection* for additional information regarding these types of incidents.

146 (4) Determine which IRIS report format (Streamlined or Standard) will be used and collect
147 information needed to submit a Streamlined or Initial Report, as appropriate.

148
149 (a) OU management shall consider the significance of the circumstances of the event to
150 determine which format is required to be used.

151
152 (b) The Standard Format shall be used for the following:

153
154 i. Immediate Notification Incidents;

155
156 ii. Incidents known by the OU to be **OSHA Recordable cases** (see Section 7,
157 Definitions) unless the OU has received prior approval from the Incident
158 Reporting and Investigation (IRI) Program Manager (PM) to use the
159 Streamlined Format; and

160
161 iii. Incidents that result in contamination with or exposure to radioactive material.

162
163 (c) The **OU IRIS Administrator** and the **Incident Reporting and Investigation (IRI)**
164 **Program Manager (PM)** (see Section 7, Definitions) have the authority to require
165 the use of the Standard Format for an event.

166
167 (5) Identify OUs involved in the event, specifically:

168
169 (a) Identify all OUs with employees involved;

170
171 (b) Identify the OU with responsibility for the space where the event occurred; and

172
173 (c) Identify the OU with responsibility for the equipment involved.

174
175 c. Immediate Notification Incident Procedure

176
177 (1) Immediate Notification Incidents shall be reported to OSHE as soon as possible as per the
178 following procedure:

179
180 (a) During normal business hours:

181
182 i. Call OSHE at x5375, Option 3.

183
184 ii. If no one picks up, send an email to serious.injury@nist.gov.

185

- 186 (b) Outside of normal business hours, send an email to serious.injury@nist.gov.
187
- 188 (2) For each Immediate Notification Incident, the following information shall be provided to
189 OSHE:
190
- 191 (a) A brief description of the incident;
 - 192
 - 193 (b) The location of the incident;
 - 194
 - 195 (c) The time of the incident;
 - 196
 - 197 (d) The category of incident, as follows:
198
 - 199 i. Fatality;
 - 200
 - 201 ii. In-patient hospitalization;
 - 202
 - 203 iii. Amputation; or
 - 204
 - 205 iv. Loss of an eye;
 - 206
 - 207 (e) The number of employees and/or covered associates who suffered the incident;
 - 208
 - 209 (f) The names of the employee(s) and/or covered associate(s) who suffered the incident;
 - 210
 - 211 (g) An OU point of contact with phone number; and
 - 212
 - 213 (h) Periodic updates of the status of the employees(s) or covered associate(s) involved
214 and/or changes to previously provided information.
 - 215
- 216 (3) The NIST CSO shall confirm the reported incident meets the definition of an Immediate
217 Notification Incident.
218
- 219 (4) The NIST CSO shall report confirmed Immediate Notification Incidents to the 24-Hour
220 OSHA hotline at (800) 321-OSHA, within the following timeframes:
221
- 222 (a) Work-related fatality – within 8 hours of finding out; and
 - 223
 - 224 (b) Work-related amputation, loss of an eye, or in-patient hospitalization of one or more
225 employees or covered associates – within 24 hours of finding out.

- 226 (5) The NIST CSO shall report the following information to OSHA, for each Immediate
227 Notification Incident:
228
- 229 (a) The establishment name (e.g. NIST Gaithersburg, NIST Boulder, etc.)
 - 230
 - 231 (b) The NIST contact person and phone number
 - 232
 - 233 (c) The information in items 6c(2)(a)-(f) above.
 - 234
- 235 (6) After notifying OSHA of an Immediate Notification Incident, the NIST CSO shall submit
236 the following reports into IRIS:
237
- 238 (a) An Initial Report per the requirements of Sections 6a(3)(b)i and 6d; and
 - 239
 - 240 (b) An Investigation Report per the requirements of Sections 6a(3)(b)ii and 6e.
 - 241
- 242 d. Submittal of Streamlined and Initial Reports
243 A Streamlined or Initial Report shall be submitted for each event, based upon the format
244 selected in Section 6b above, and subject to the following requirements:
245
- 246 (1) OU Responsibility for Streamlined or Initial Report Submittal
247
- 248 (a) For an Immediate Notification Incident, OSHE, with participation from the OU(s)
249 involved, shall develop and submit the required report.
 - 250
 - 251 (b) For an event that involves individuals, space, and equipment from only one OU, that
252 OU shall submit the required report.
 - 253
 - 254 (c) For an event involving multiple individuals and/or space and/or equipment from
255 different OUs, the OU IRIS Administrators from all OUs involved shall coordinate
256 with each other to identify the OU to develop and submit the required report, with
257 appropriate support from the other OU(s).
 - 258
 - 259 (d) For an event where no individuals are involved (*e.g.*, a fire that occurred in a building
260 after hours or a chemical spill in a laboratory when no one was present), the OU
261 responsible for the space in which the event occurred shall submit the required report.
 - 262
 - 263
 - 264
 - 265

266 (2) IRIS Submitter Requirements

267

268 (a) Streamlined and Initial Reports shall be entered into IRIS only by employees
269 designated and trained as OU IRIS Report Submitters.

270

271 (b) Streamlined and Initial Reports should not be submitted by employees directly
272 involved in the event.

273

274 (3) Streamlined Report Content

275 Streamlined Reports shall include the following information:

276

277 (a) General Information:

278

279 i. Name, OU, Division, and Group of the individual submitting the report;

280

281 ii. Type of event (*e.g.*, Injury, Near Miss, Property Damage, *etc.*);

282

283 iii. Date and time of event, if known;

284

285 iv. Location of the event and type of space (*e.g.*, laboratory, office, hallway); and

286

287 v. When OU line management was first notified of the event;

288

289 (a) Individuals Involved - For each person involved in an event, the following
290 information shall be included:

291

292 i. Name;

293

294 ii. Position;

295

296 iii. Employment Status:

297

298 (i) Employee;

299

300 (ii) Associate; or

301

302 (iii) Visitor;

303

304

305

- 306 iv. Status of the individual as a result of the event:
307
308 (i) Injured;
309
310 (ii) Became Ill;
311
312 (iii) Exposed; or
313
314 (iv) Combination of i-iii above; or
315
316 (v) None of the above;
317
318 v. If injured, ill, or exposed:
319
320 (i) A description of the injury, illness, or exposure;
321
322 (ii) A description of the immediate care given;
323
324 (iii) If the individual will miss any days of work, if known; and
325
326 (iv) If the individual will be restricted or transferred to another job because
327 of the event, if known.

328
329 (c) Event Description

- 330
331 i. A brief description of the activity leading up to or taking place at the time of
332 the event;
333
334 ii. A description of what happened, or for a near miss, what could have
335 happened;
336
337 iii. A description of any immediate measures taken to respond to the event,
338 including any actions taken to prevent workers from exposure to hazards;
339
340 iv. A description of why the event occurred, including identification of any
341 hazard(s) that directly caused or almost caused the event;
342
343 v. A description of the measures taken to prevent recurrence, including the
344 abatement actions taken or planned to address any hazard(s) identified in Step
345 iv above;

346 (i) For abatement actions that will take 30 calendar days or longer to
347 implement, an abatement plan must be uploaded, including the
348 planned completion date and the name of the individual(s) responsible
349 for implementing the plan.

350
351 (d) Property Damage

- 352
353 i. A brief description of any damage to government property, other than
354 motorized vehicles;
355
356 ii. A brief description of any damage to personal property, other than motorized
357 vehicles; and
358
359 iii. A brief description of any damage to motorized vehicles.

360
361 (4) Initial Report Content for Standard Format shall include the following information:

362
363 (a) General Information:

- 364
365 i. Name, OU, Division, and Group of the individual submitting the report;
366
367 ii. Type of event (*e.g.*, Injury, Near Miss, Property Damage, etc.);
368
369 iii. Date and time of event, if known;
370
371 (i) For cases involving OSHA Recordable Standard Threshold Shift
372 (STS) hearing losses, the date the STS is confirmed by letter shall be
373 entered.
374
375 iv. Location of the event and type of space (*e.g.*, hallway);
376
377 v. When OU line management was first notified of the event;
378
379 vi. The OU responsible for the space where the event occurred;
380
381 vii. The OU responsible for any equipment involved in the event, if applicable;
382 and
383
384 viii. The OU responsible for leading the investigation, based on the guidelines
385 contained in Section 6(e)(1).

386 (i) If an OU other than the OU submitting the Initial Report is designated
387 to lead the investigation, the name of the individual in Line
388 Management from the designated OU who accepted responsibility for
389 the investigation must be documented.
390

391 (b) Individuals Involved - For each person involved in an event, the following
392 information shall be included:

393

394 i. Name;

395

396 ii. Position;

397

398 iii. Employment Status:

399

400 (i) Employee;

401

402 (ii) Associate; or

403

404 (iii) Visitor;

405

406 iv. Status of the individual as a result of the event:

407

408 (i) Injured;

409

410 (ii) Became Ill;

411

412 (iii) Exposed;

413

414 (iv) Contaminated by radioactive material;

415

416 (v) Combination of i-iv above; or

417

418 (vi) None of the above;

419

420 v. If injured, ill, or exposed:

421

422 (i) A description of the injury, illness, or exposure;

423

424 (ii) A description of the immediate care given;

425

- 426 (iii) If the individual will miss any days of work, if known; and
427
428 (iv) If the individual will be restricted or transferred to another job because
429 of the event, if known.
430

431 (c) Event Description

- 432
433 i. A brief description of the activity leading up to or taking place at the time of
434 the event;
435
436 ii. A description of what happened, or for a near miss, what could have
437 happened;
438
439 iii. A description of any immediate measures taken to respond to the event,
440 including any actions taken to protect workers from exposure to hazards;
441

442 (d) Property Damage

- 443
444 i. A brief description of any damage to government property, other than
445 motorized vehicles;
446
447 ii. A brief description of any damage to personal property, other than motorized
448 vehicles; and
449
450 iii. A brief description of any damage to motorized vehicles;
451

452 (5) OU Review of Streamlined and Initial Reports

- 453
454 (a) Prior to submittal to IRIS, the OU IRIS Administrator shall review the Streamlined
455 and Initial Reports submitted from within their OU for:
456
457 i. Appropriate selection of format;
458
459 ii. Appropriate selection of event type;
460
461 iii. Completeness of report; and
462
463 iv. Quality of report.
464

465 (b) If the Submitter of an Initial Report has designated a different OU to lead the
466 investigation, that designated OU shall have the opportunity to review and comment
467 on the Initial Report during the OU Review step.
468

469 (c) During the OU Review step, the OU IRIS Administrator shall designate one of the
470 following two notification options for how the report will be communicated:
471

472 i. Post Only

473
474 (i) Streamlined Reports, Initial Reports and Investigation Reports
475 designated as “Post Only” shall be posted to *IRIS* where they will be
476 viewable by the NIST staff.
477

478 (ii) An email containing a summary of the Streamlined Report, Initial
479 Report, or Investigation Report shall be sent only to the OU IRIS
480 Report Submitter, the OU IRIS Administrator, all investigators (for an
481 Investigation Report), and the IRI PM.
482

483 ii. Post with Notification

484
485 (i) Streamlined Reports, Initial Reports, and Investigation Reports
486 designated as “Post with Notification” shall be posted to *IRIS* where
487 they will be viewable by the NIST staff.
488

489 (ii) An email containing a summary of the Streamlined Report, Initial
490 Report, or Investigation Report shall be sent to the OU IRIS Report
491 Submitter, the OU IRIS Administrator, all investigators (for an
492 Investigation Report), the IRI PM, and notification subscribers as per
493 their subscription service preferences.
494

495 e. Conduct and Documentation of Incident Investigations

496 For each event utilizing the Standard Report Format, an investigation shall be conducted and
497 an Investigation Report submitted, per the following requirements.
498

499 (1) OU Responsibility for Leading Investigations

500
501 (a) For Immediate Notification Incidents, OSHE, with participation from the OU(s)
502 involved, shall lead the investigation.
503

504 (b) For events that involve individuals and space from only one OU, that OU shall lead
505 the investigation. Please note Section 6e(1)(e) for additional clarification.

506
507 (c) For events involving multiple individuals and/or space(s) and/or equipment from
508 different OUs, the OU IRIS Administrators from all OUs involved shall identify the
509 OU that will lead the investigation, with appropriate participation from the other
510 OU(s). The OU leading the investigation shall provide the Lead Investigator.

511
512 i. If an agreement cannot be reached, the IRI PM shall designate the OU
513 responsible for leading the investigation. Please note Section 6e(1)(e) for
514 additional clarification.

515
516 ii. If multiple OUs are involved in the investigation, each OU shall have the
517 opportunity to review and comment on the Investigation Report prior to its
518 submission by the lead OU.

519
520 (d) For events where no individuals are involved (*e.g.*, flooding that occurred in a
521 laboratory after hours or collapse of a bookshelf in an office when no one was present
522 in the room), the OU responsible for the space in which the incident or near miss
523 occurred shall lead the investigation. Please note Section 6e(1)(e) for additional
524 clarification.

525
526 (e) If at any time it is determined that another OU is responsible for the activity in which
527 the event occurred, or for the apparent cause of the event, or will be assigned a
528 corrective action, that OU will participate in or lead the investigation, or, if the
529 investigation is already underway, participate for the remainder of the investigation,
530 as necessary and appropriate.

531
532 (2) Investigator Requirements

533
534 (a) Investigations shall be led and documented in IRIS by an OU Lead Investigator
535 designated by the OU leading the investigation, and trained per the requirements of
536 Section 6g.

537
538 (b) An individual should not serve as an OU Lead Investigator for an event where there is
539 a conflict of interest (*e.g.* for an event that directly involved them or for an event
540 involving their direct supervisor.).

544 (3) OSHE Participation in Investigations

545

546 (a) Based on the nature of an incident or near miss, OSHE may require the inclusion of
547 OSHE subject matter experts on the investigation team. This requirement will apply,
548 at a minimum, to incidents related to the following NIST Safety Programs:

549

550 i. Biosafety;

551

552 ii. Electrical Safety;

553

554 iii. Ergonomics;

555

556 iv. Fire and Life Safety suborders;

557

558 v. Hazardous Waste Accumulation;

559

560 vi. Hearing Protection;

561

562 vii. Ionizing Radiation Safety;

563

564 viii. Laser Safety; and

565

566 ix. Other programs on a case-by-case basis.

567

568 (b) OSHE shall aid in conducting investigations upon request.

569

570 (4) Investigation Reports shall include the following information:

571

572 (a) Name and OU of the Lead Investigator;

573

574 (b) Name and OU of other members of the investigation team;

575

576 (c) A brief description of the investigative process;

577

578 (d) The essential findings of the investigation and supporting information, including;

579

580 i. A general (narrative) description of what happened and why;

581

582 ii. Any updates to information provided in the Initial Report;

583

- 584 iii. Pictures, sketches, videos, etc. (as needed);
585
586 iv. The causal factor(s); and
587
588 v. The root cause(s).
589
590 (e) At least one corrective action per root cause, including:
591
592 i. A description of each specific corrective action, including interim steps as
593 needed;
594
595 ii. Identification of persons responsible for implementation of corrective actions;
596
597 iii. Identification of the expected time to complete corrective actions;
598
599 (i) For corrective actions expected to require more than 30 calendar days
600 to complete, a corrective action plan must be uploaded and approval
601 from line management documented;
602
603 iv. Identification of individuals in line management responsible for verifying that
604 corrective actions are complete; and
605
606 (f) Any lessons identified, as defined in Section 7, for sharing with the broader NIST
607 community, including recommendations for follow-up by OSHE.
608

609 (5) OU Review of Investigation Reports
610

- 611 (a) Prior to submittal to IRIS for posting, the responsible OU IRIS Administrator shall
612 review Investigation Reports for completeness and quality.
613
614 (b) Each OU represented on the investigation team shall have the opportunity to review
615 and comment on the Investigation Report during the OU Review step.
616
617 (c) The OU IRIS Administrator shall designate a notification method for the
618 Investigation Report per Section 6d(5)(c).
619

620 f. OU Implementation Procedures

621 Each OU shall establish implementation procedures and responsibilities for carrying out the
622 requirements of this suborder including, but not limited to, the following:
623

- 624 (1) Reporting of incidents and near misses to OU management by employees and covered
625 associates, *e.g.*, whom they must contact and by what means;
626
- 627 (2) Evaluating and classifying reported events per Section 6b above;
628
- 629 (3) Reporting of Immediate Notification Incidents to the NIST CSO;
630
- 631 (4) Determining the recording format for the event (*i.e.*, Streamlined or Standard format), per
632 Section 6b(4) and the notification method per Section 6d(5)(c);
633
- 634 (5) Designating staff members with the following roles:
635
- 636 (a) OU IRIS Submitter(s);
 - 637
 - 638 (b) Lead Investigator(s); and
 - 639
 - 640 (c) OU IRIS Administrator(s).
 - 641
- 642 (6) Training of OU staff members to meet the OU Implementation Procedures and the
643 requirements of a Lead Investigator per Section 6g;
644
- 645 (7) Drafting and vetting of Streamlined Reports and Initial Reports;
646
- 647 (8) Drafting and vetting of Investigation Reports, including determination that corrective
648 actions are appropriate to prevent recurrence of the incident or near miss while not
649 inadvertently introducing other hazards;
650
- 651 (9) Ensuring corrective actions are:
652
- 653 (a) Implemented in a timely fashion;
 - 654
 - 655 (b) Implemented in such a manner as to prevent recurrence of the incident or near miss
656 while not inadvertently introducing other hazards; and
 - 657
 - 658 (c) Tracked to closure;
 - 659
- 660 (10) Sharing lessons identified, as appropriate, within the OU and identifying lessons to
661 OSHE that should be shared to a wider audience;
662

- 663 (11) Ensuring information required for regulatory documentation of injuries and illnesses
664 (e.g., OSHA 301 Forms for each OSHA Recordable injury or illness) is provided to
665 OSHE within seven calendar days of it being requested by the IRI PM; and
666
- 667 (12) For each OSHA Recordable case resulting in days away from work, restricted work,
668 and/or transfer to another job (**OSHA Recordable DART case**, as defined in Section 7),
669 ensuring work duty status information (e.g., full duty, restricted, unable to work) is
670 maintained and provided to the IRI PM as requested.

671

672 g. Training and Information

673

- 674 (1) All training shall be conducted and recorded in accordance with the requirements of the
675 NIST S 7101.23: Safety Education and Training.
- 676
- 677 (2) OU IRIS Report Submitters and OU IRIS Administrators shall complete training
678 provided by OSHE on the use of the IRIS application.
- 679
- 680 (3) Lead investigators shall complete training regarding incident investigation principles and
681 methods from either OSHE or equivalent training provided by an outside source
682 approved by the OSHE IRI PM⁵.
- 683
- 684 (4) OU staff shall be informed by the OU of those aspects of the OU Implementation
685 Procedures (see Section 6f) applicable to their roles in incident reporting and
686 investigation.

687

688 h. OSHE Management of IRI

689

- 690 (1) Processing of Streamlined and Initial Reports
- 691
- 692 (a) The IRI PM shall ensure that Streamlined and Initial Reports to be posted publicly to
693 **IRIS** do not contain information that can be used to identify specific individuals or
694 that can be used with other sources to identify such individuals;
- 695
- 696 (b) The IRI PM shall review submitted Streamlined and Initial Reports for appropriate
697 selection of the reporting format selected (Streamlined or Standard) per Section 6b(4)
698 and notification method selected per Section 6d(5)(c).
- 699

⁵ OSHE shall maintain a list of currently approved equivalent incident investigation courses provided by outside sources.

700 (c) The IRI PM shall post Streamlined and Initial Reports to **IRIS** within 2 business days
701 of submission, if possible.

702
703 (2) Processing of Investigation Reports
704

705 (a) The IRI PM shall ensure that Investigation Reports to be posted publicly to **IRIS** do
706 not contain information that can be used to identify specific individuals or that can be
707 used with other sources to identify such individuals;

708
709 (b) The IRI PM shall review submitted Investigation Reports for appropriate selection of
710 notification method per Section 6d(5)(c).

711
712 (c) The IRI PM shall post Investigation Reports to **IRIS** within 2-3 business days of
713 submission; if possible.

714
715 (3) IRI Notifications
716

717 (a) Notifications of Streamlined Reports, Initial Reports, and related Investigation
718 Reports shall be communicated to the NIST staff using the **IRIS** application.

719
720 i. NIST employees in a supervisory role shall receive notifications when
721 Streamlined Reports, Initial Reports, and Investigation Reports are posted.

722
723 ii. NIST staff shall be afforded the opportunity to receive email notifications
724 when Streamlined Reports, Initial Reports, and Investigation Reports are
725 posted, utilizing the **IRIS** application subscription service.

726
727 (b) For each NIST establishment identified in Section 6h(6)(b)(i) below, the CSO shall
728 sign and post the OSHA Form 300A – *Summary of Work-related Injuries and*
729 *Illnesses* (“annual summary”) from the previous calendar year on the NIST Safety
730 Web Page and in at least one conspicuous physical location at the establishment. The
731 annual summary shall be posted from February 1 to April 30.

732
733 (c) The IRI PM shall provide a weekly summary of IRI Program activity to the NIST
734 Director, Associate Directors, and OU Directors.

735
736 (d) The NIST CSO shall provide a monthly summary of IRI Program activity to the NIST
737 Leadership Board.
738
739

740 (4) Monitoring and Measurement

741
742 (a) The IRI PM shall collect data and compile metrics necessary to evaluate the
743 effectiveness of this program, including, but not limited to:

- 744
- 745 i. Number and types of events reported;
 - 746
 - 747 ii. Length of time for staff to report to line management;
 - 748
 - 749 iii. Time taken to submit Streamlined and Initial Reports into *IRIS*;
 - 750
 - 751 iv. Percentage of Streamlined and Initial Reports submitted within 2 business
752 days;
 - 753
 - 754 v. Time taken to submit Investigation Reports into IRIS;
 - 755
 - 756 vi. Percentage of Investigation Reports submitted within 20 business days;
 - 757
 - 758 vii. Backlog of investigations open longer than 20 business days; and
 - 759
 - 760 viii. Total number of OSHA Recordable cases and OSHA Recordable DART
761 cases.
- 762

763 (5) IRI Compliance Evaluation

764
765 (a) The IRI PM shall conduct an internal compliance evaluation of the regulatory
766 recordkeeping requirements outlined in Section 6h(6)(b) of this program on at least an
767 annual basis. A standard checklist shall be developed and used.

768
769 (b) Results of internal compliance evaluations shall be documented and maintained as a
770 record per Section 6h(6)(a).

771
772 (c) Corrective actions shall be implemented as soon as practical to address findings of
773 non-compliance.

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780 (6) IRI Recordkeeping

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(a) NIST-Required Recordkeeping

- i. Personal information that is collected in reports and investigations shall be maintained securely in the *IRIS* application.
- ii. Personal information that is collected in reports and investigations shall be accessible to the IRI Program Manager, OSHE IRIS Administrator, OU IRIS Administrator(s), the OU Submitter, members of the Investigation Team, the relevant supervisor(s), and the employee(s) directly involved.
- iii. For each injury and illness incident, the IRI PM shall classify the event using the U.S. Department of Labor Bureau of Labor Statistics (BLS) Occupational Injury and Illness Classification System. This will include classification of:
 - (i) Nature of Event or Exposure;
 - (ii) Nature of Injury or Illness;
 - (iii) Part of Body Affected; and
 - (iv) Source of Injury or Illness.
- iv. The IRI PM shall retain training records as identified in Section 6g using the IT application supporting the NIST Safety Education and Training Program.
- v. The IRI PM shall retain results of annual internal compliance evaluations as described in Section 6h(5).

(b) OSHA Required Recordkeeping

- i. The IRI PM shall maintain a list of NIST establishments for which separate OSHA records will be maintained, pursuant to [29 CFR 1904.30](#).
- ii. For injuries and illnesses resulting from an incident, the IRI PM shall document case details, including medical treatment, sufficient to make and record a determination of the OSHA status of each case as one of the following:

- 820 (i) OSHA Recordable;
821
822 (ii) OSHA Recordable DART; and
823
824 (iii) Not an OSHA Recordable.
825
826 iii. For each injury or illness determined to be an OSHA Recordable, the IRI PM
827 shall send a request for a completed OSHA 301 Form – *Injury and Illness*
828 *Incident Report* to the OU IRIS Administrator of the employee. Completed
829 OSHA 301 Forms shall be retained by the IRI PM for each OSHA Recordable
830 case.
831
832 iv. For each OSHA Recordable DART case, the IRI PM shall utilize the **IRIS**
833 application to obtain (from the supervisor of the employee), update, and
834 document DART information.
835
836 v. For the establishments identified in Section 6h(6)(b)(i), the IRI PM shall
837 maintain the OSHA Form 300 – *Log of Work-Related Injuries and Illnesses*.
838
839 vi. For the establishments identified in Section 6h(6)(b)(i), the IRI PM shall
840 maintain the OSHA Form 300A – *Summary of Work-related Injuries and*
841 *Illnesses*.
842
843 vii. The IRI PM shall maintain a record of all information initially provided to
844 OSHA for each Immediate Notification Incident, and all subsequent
845 correspondence related to the incident.
846
847 viii. The IRI PM shall provide any information described in this section to external
848 entities (*e.g.*, DOC, BLS) as requested.
849
850 (c) The retention period for the records identified in this section shall be not less than
851 five years from the end of the calendar year that these records cover.
852

853
854 **7. DEFINITIONS**

- 855 a. Abatement – Action taken to eliminate a recognized safety hazard or deficiency.
856
857 b. Abatement Plan – A set of planned actions to abate a recognized hazard and their estimated
858 completion dates.
859

- 860 c. Causal Factor – An action or condition, or lack thereof, related to equipment, people,
861 management, or the environment that an event occurred in, that caused or contributed to the
862 severity or likelihood of an event.
863
- 864 d. Condition – Any state, as found, whether or not it resulted from an event, that may have
865 adverse safety, health, environmental, or operational implications.
866
- 867 e. Contamination by Radioactive Material – The unintended/unexpected presence of radioactive
868 material on, or in, an individual.
869
- 870 f. Corrective Action – Action to eliminate the cause of a detected nonconformity or other
871 undesirable situation.
872
- 873 g. Corrective Action Plan – A set of planned actions to eliminate the cause of a detected
874 nonconformity or other undesirable situation such as the root cause of an incident.
875
- 876 h. Event – For the purposes of this suborder, a real-time occurrence.
877
- 878 i. Exposure – Contact by an individual through touching, breathing, or consuming a harmful
879 chemical or biological substance; or unintended / unexpected dose to an individual from an
880 ionizing radiation field. Any exposure that results in an injury or illness shall be classified as
881 an injury or illness.
882
- 883 j. Hazard – Source, situation, or act with a potential for harm in terms of human injury or ill
884 health, adverse impact on the environment, damage or loss of equipment or property, or a
885 combination of these.
886
- 887 k. Illness – Any abnormal condition or disorder, other than one resulting from a work-related
888 injury, caused by one-time, continued, or repeated exposure to environmental factors
889 associated with employment, including acute and chronic illnesses or diseases that may be
890 caused by inhalation, absorption, ingestion, or direct contact. OSHA Recordable STS
891 hearing loss cases are included in this definition.
892
- 893 l. Immediate Notification Incident – A work-related incident that results in any of the following
894 to one or more employees or covered associates (reference [29 CFR 1904.39](#)):
895
- 896 (1) Death, within 30 (thirty) calendar days of the incident;
897
- 898 (2) In-patient hospitalization within 24 hours of the incident; or
899

- 900 (3) An amputation or loss of an eye within 24 hours of the incident.
901
- 902 m. Incident – A work-related event in which any of the following, individually or in
903 combination, occurred: an injury or illness; an unauthorized spill or release of hazardous or
904 regulated material to the environment; property damage; exposure; or contamination by
905 radioactive material.
906
- 907 n. Initial Report – A report that contains the items listed in Section 6d(4).
908
- 909 o. Injury – Any wound or condition of the body caused by external force, including physical
910 stress or strain that results from a work accident or from exposure in the work environment,
911 e.g., amputation, bruise, burn, contusion, cut, fracture. The injury is identifiable as to time
912 and place of occurrence and member or function of body affected, and is caused by a specific
913 event or incident, or series of events or incidents, within a single day or work shift.
914
- 915 p. Investigation – The systematic process of analyzing the events leading up to an event,
916 gaining an understanding of what caused it, identifying actions to prevent recurrence, and
917 documenting the results in a written Investigation Report.
918
- 919 q. Investigation Report – A report that contains the items listed in Section 6e(4).
920
- 921 r. Lessons Identified – Information (such as Extent of Condition Reviews) resulting from an
922 investigation that, if acted upon by an organization and the individuals therein, will reduce
923 the probability of recurrence of that and similar events.
924
- 925 s. Near Miss – Also known as a “near hit,” “near-accident,” or “close call,” a work-related
926 event that did not result in any of the following, either individually or in combination, but
927 had a plausible likelihood of doing so: an injury or illness; a spill or release of hazardous or
928 regulated material to the environment; property damage; exposure; or contamination by
929 radioactive material.
930
- 931 t. OSHA Recordable case – Any injury or illness that meets the general recording criteria
932 established by OSHA at [29 CFR 1904.7](#). In general, this includes any work-related injury or
933 illness that results in death, days away from work, restricted work or transfer to another job,
934 medical treatment beyond first aid, or loss of consciousness. Work-related cases involving
935 cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum are
936 always OSHA Recordable.
937

- 938 u. OSHA Recordable DART case – Any OSHA Recordable case that results in death, days
939 away from work, restricted work or transfer to another job, as established by OSHA at [29](#)
940 [CFR 1904.7](#).
- 941
- 942 v. OU Responsible for the Space – OU to which the space has been assigned by the Office of
943 Facilities and Property Management.
- 944
- 945 w. Property Damage – Incident resulting in loss or harm to property.
- 946
- 947 x. Root Cause – A causal factor of an event that, if corrected, would prevent the recurrence of
948 that and similar events.
- 949
- 950 y. Spill / Release – An unauthorized spill or release of hazardous or regulated material to the
951 environment.
- 952
- 953 z. Streamlined Format – Format used for relatively simple and generally minor events that can
954 be resolved without significant corrective actions. (*Abatement actions* may be necessary.)
955 These cases will be documented in a single Streamlined Report containing information on
956 what happened, why it occurred, and how it can be prevented from happening again. A
957 separate Investigation Report is not required.
- 958
- 959 aa. Streamlined Report - A report containing the items listed in Section 6d(3).
- 960
- 961 bb. Standard Format – Format used to document more significant and/or more complex events
962 that require a higher level of investigation and significant corrective actions. This can
963 include near misses. These cases will be documented in an Initial Report, followed by an
964 Investigation Report that establishes the root cause(s) of the incident or near miss, and the
965 corrective actions.
- 966
- 967
- 968 cc. Work-Related – A condition wherein an injury, illness, or fatality was caused, contributed to,
969 or significantly aggravated, or could have been, by an event or exposure at work or on
970 official business away from work (reference [29 CFR 1904.5](#)).

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973 **8. ACRONYMS**

974 a. BLS – United States Bureau of Labor Statistics

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976 b. CFR – Code of Federal Regulations

977

- 978 c. DART – Days away from work, restricted work, or transfer to another job
- 979
- 980 d. DOC – Department of Commerce
- 981
- 982 e. EOC – Extent of Condition
- 983
- 984 f. IRI PM – Incident Reporting and Investigation Program Manager
- 985
- 986 g. IRIS – Incident Reporting and Investigation System
- 987
- 988 h. OSH – Occupational Safety and Health
- 989
- 990 i. OSHA – Occupational Safety and Health Administration
- 991
- 992 j. OU – Organizational Unit
- 993
- 994 k. STS – Standard Threshold Shift
- 995
- 996

997 **9. RESPONSIBILITIES**

- 998 a. OU Directors are responsible for:

- 1000 (1) Ensuring the establishment of OU procedures, the implementation of which will result in
- 1001 the requirements of Section 6 applicable to the OU being met
- 1002
- 1003 (2) Ensuring the OU procedures are implemented;
- 1004
- 1005 (3) Ensuring the quality and timeliness of Streamlined, Initial, and Investigation Reports;
- 1006
- 1007 (4) Ensuring that applicable lessons identified are shared within their OU, as appropriate; and
- 1008
- 1009 (5) Ensuring that all-required follow-up actions are completed and effective.
- 1010

- 1011 b. OU IRIS Administrators are responsible for:

- 1013 (1) Coordinating efforts with other OUs when multiple OUs are involved in an incident
- 1014 through personnel, space, or equipment, to ensure that the reporting and investigation
- 1015 requirements of this program are met;
- 1016

- 1017 (2) Reviewing incident reports and incident investigations for completeness, quality,
1018 accuracy, and appropriateness of the selected format (Streamlined or Standard);
1019
- 1020 (3) Designating the notification method that will be used for each incident; and
1021
- 1022 (4) Designating OU Submitters and OU Lead Investigators for their respective OUs.
1023
- 1024 c. Lead Investigators are responsible for organizing, conducting and documenting incident
1025 investigations, including EOC reviews as assigned, to effectively identify causal factors and
1026 root cause(s) of incidents and near misses, and appropriate corrective actions necessary to
1027 prevent recurrence.
1028
- 1029 d. Supervisors are responsible for:
1030
- 1031 (1) Reporting all incidents as soon as practically possible to their management in accordance
1032 with OU policies and procedures;
1033
- 1034 (2) Ensuring that equipment and facilities involved in incidents are shut down if necessary
1035 and restored to use only after hazards have been mitigated;
1036
- 1037 (3) Preserving the scenes of incidents intact to the extent possible to facilitate incident
1038 investigations;
1039
- 1040 (4) Supporting incident investigations as prescribed by their OU-level policies;
1041
- 1042 (5) Reviewing IRIS incidents, evaluating and communicating lessons learned applicable to
1043 activities under their span of control, and taking appropriate actions to prevent similar
1044 incidents;
1045
- 1046 (6) Completing required documentation for OSHA Recordable injury and illness cases,
1047 including OSHA 301 Forms and other relevant information as requested by the OSHE
1048 IRI PM; and
1049
- 1050 (7) Providing the OSHE IRI PM with updated case information (*e.g.*, current duty status,
1051 days away, *etc.*) for employees that incur OSHA Recordable injuries.
1052
- 1053 e. NIST Employees and Covered Associates are responsible for:
1054
- 1055 (1) Reporting (or having someone else report) incidents and near misses immediately to their
1056 supervisor or sponsor; and

1057 (2) Providing complete and accurate information in support of incident investigations and
1058 recordkeeping, as necessary and as prescribed by the OU-level policies.

1059

1060 f. IRI PM is responsible for:

1061

1062 a. Maintaining this suborder and providing guidance as requested by NIST personnel;

1063

1064 b. Reviewing IRIS cases and data to identify trends indicative of systemic issues,
1065 facilitating identification of tactics to address them.

1066

1067 c. Facilitating the communication of lessons learned across the NIST community.

1068

1069 d. Ensuring NIST-level training as required by this suborder is available;

1070

1071 e. Maintaining a list of incident investigation courses provided by external sources that meet
1072 the equivalent training requirement established at 6g(3); and

1073

1074 f. Carrying out duties as established within this suborder to maintain compliance with
1075 OSHA Injury and Illness Recordkeeping regulations.

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1078 **10. AUTHORITIES**

1079 There are no authorities specific to this suborder alone.

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1082 **11. DIRECTIVE OWNER**

1083 Chief Safety Officer

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1086 **12. APPENDICES**

1087 None

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Appendix A. Revision History

Revision No.	Approval Date	Responsible Person	Brief Description of Change; Rationale
0			<ul style="list-style-type: none">• None – Initial document
1	07/26/17	07/26/17	<ul style="list-style-type: none">• Revised order of document for clarity and flow.• Added regulatory injury and illness recordkeeping requirements.• Added incident types for radiation events• Incorporated changes designed to differentiate near miss events from incidents.• Added a streamlined process for less complex events.• Added options for how notifications for events are made, based on relevance of events to NIST staff.• Added ownership of equipment involved in an event as a criterion for determining OU responsibility.• Added process for review of reports at the OU level prior to submittal to OSHE for posting.• Added requirements for abating direct hazards.• Added requirements for IRIS Submitters and Lead Investigators to be designated and trained.• Updated and clarified the process for submitting Immediate Notification Incidents.• Added requirement for OSHE to conduct an annual compliance evaluation.
2	1/4/2021	April Camenisch	<ul style="list-style-type: none">• Updated links to suborders.

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