

Town Meeting

December 09, 2016

Safety Update

- Injuries
- Readiness
- ODH Event Follow – Up
- Safety Approval Forms

Injuries

FY 16

First Aid Minor treatment
 Recordable More than just first aid
 DART Days Away, Restricted, or Transferred

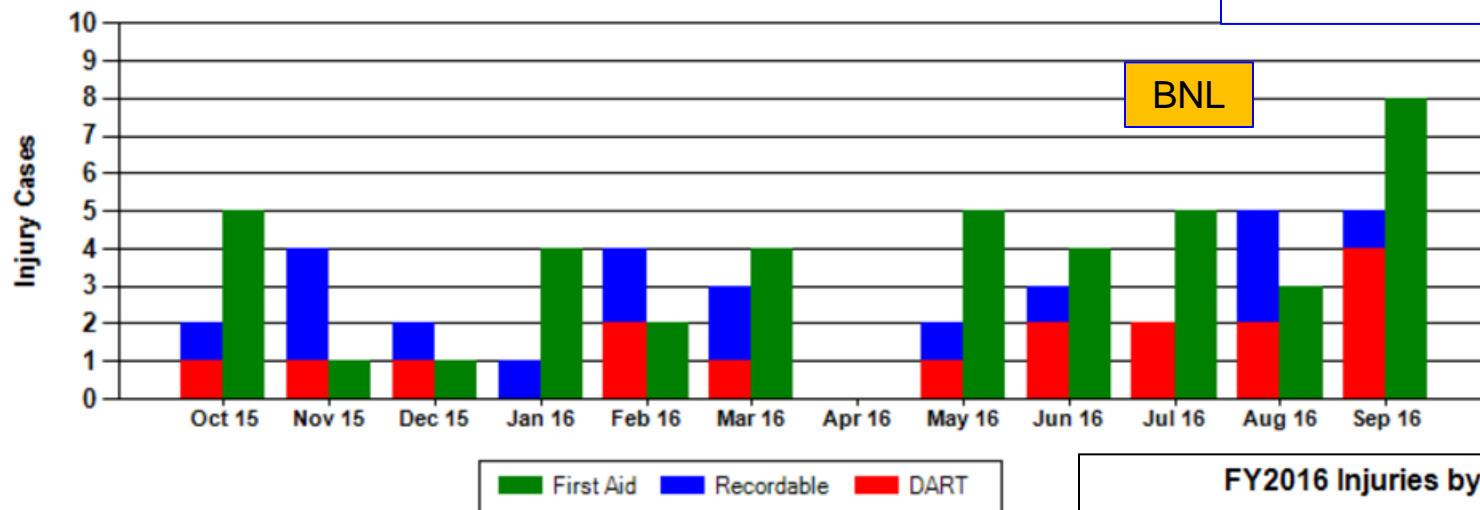
NSLS II

No Recordable/DART

3 First Aid

- Finger muscle strain
- Cut head
- Pinched hand

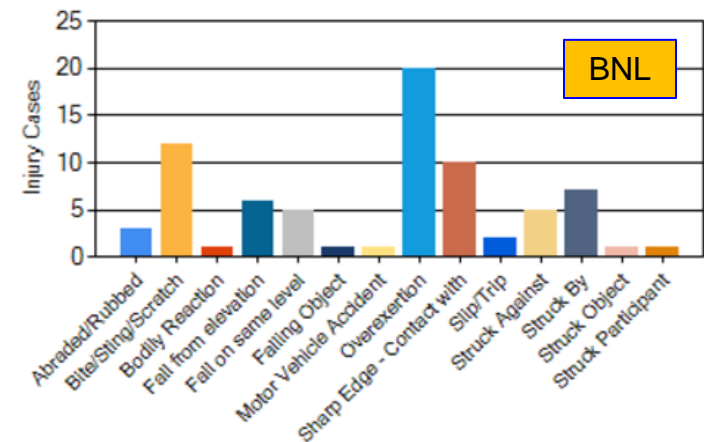
Fiscal Year 2016 Injury Cases



FY15
4 First Aid

| | | |
|------------------------|-----------|-------|
| | YTD Cases | Rates |
| <u>DART:</u> | 17 | 0.64 |
| <u>Recordable:</u> | 33 | 1.24 |
| <u>First Aid:</u> | 42 | N/A |
| Total Injuries: | 75 | |

FY2016 Injuries by Injury Cause



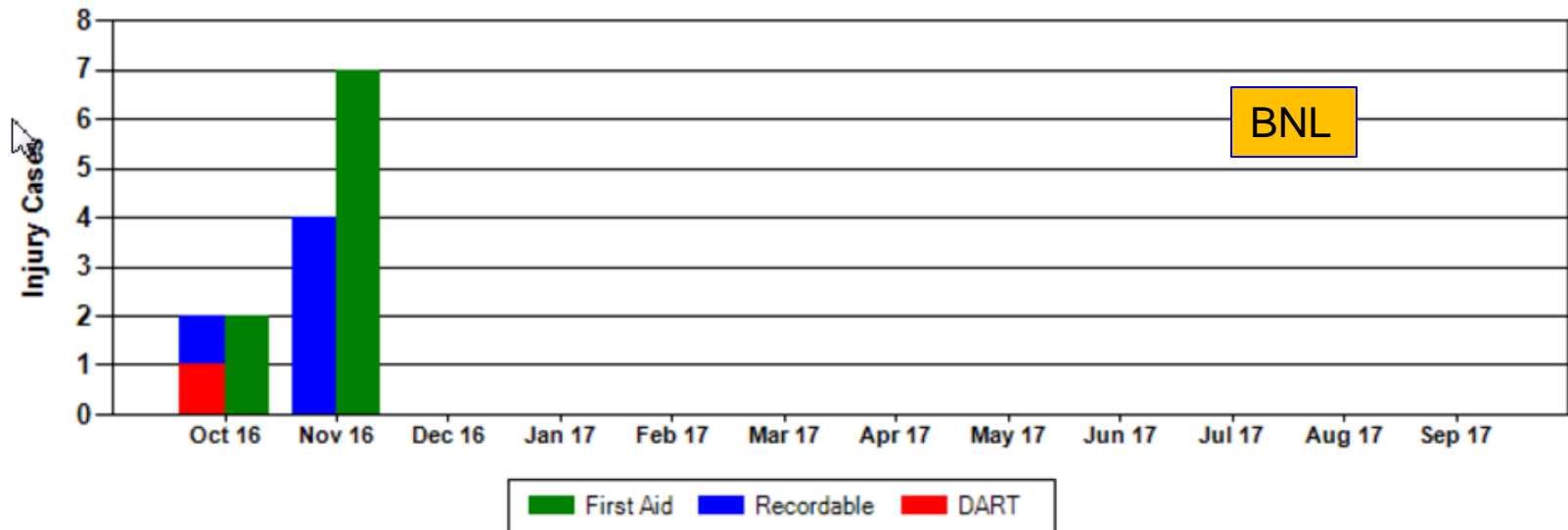
Injuries FY 17

NSLS II

First Aid Minor treatment
Recordable More than just first aid
DART Days Away, Restricted, or Transferred

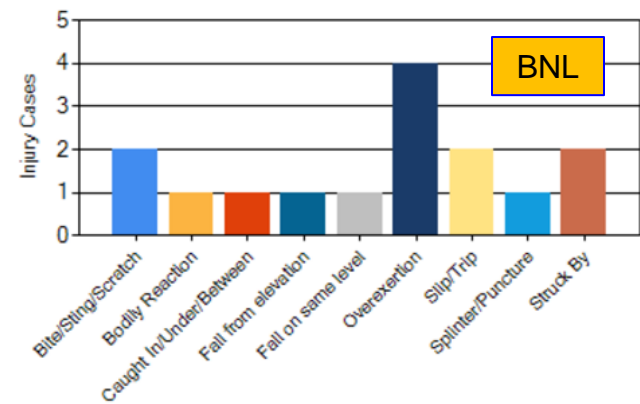
- Object in eye (Recordable)

Fiscal Year 2017 Injury Cases



| | | |
|----------------------------|---------------|-------|
| <u>DART:</u> | YTD Cases | Rates |
| <u>Recordable:</u> | 1 | 0.23 |
| <u>First Aid:</u> | 6 | 1.37 |
| | 9 | N/A |
| Total Injuries: | 15 | |
| Rates As Of: | November 2016 | |
| Most Recent Injury: | 11/29/2016 | |

FY2017 Injuries by Injury Cause



Instrument Readiness

Beamline IRRs

- 09/14: CSX 1&2
XPD
- 10/14: HXN SRX
IXS CHX

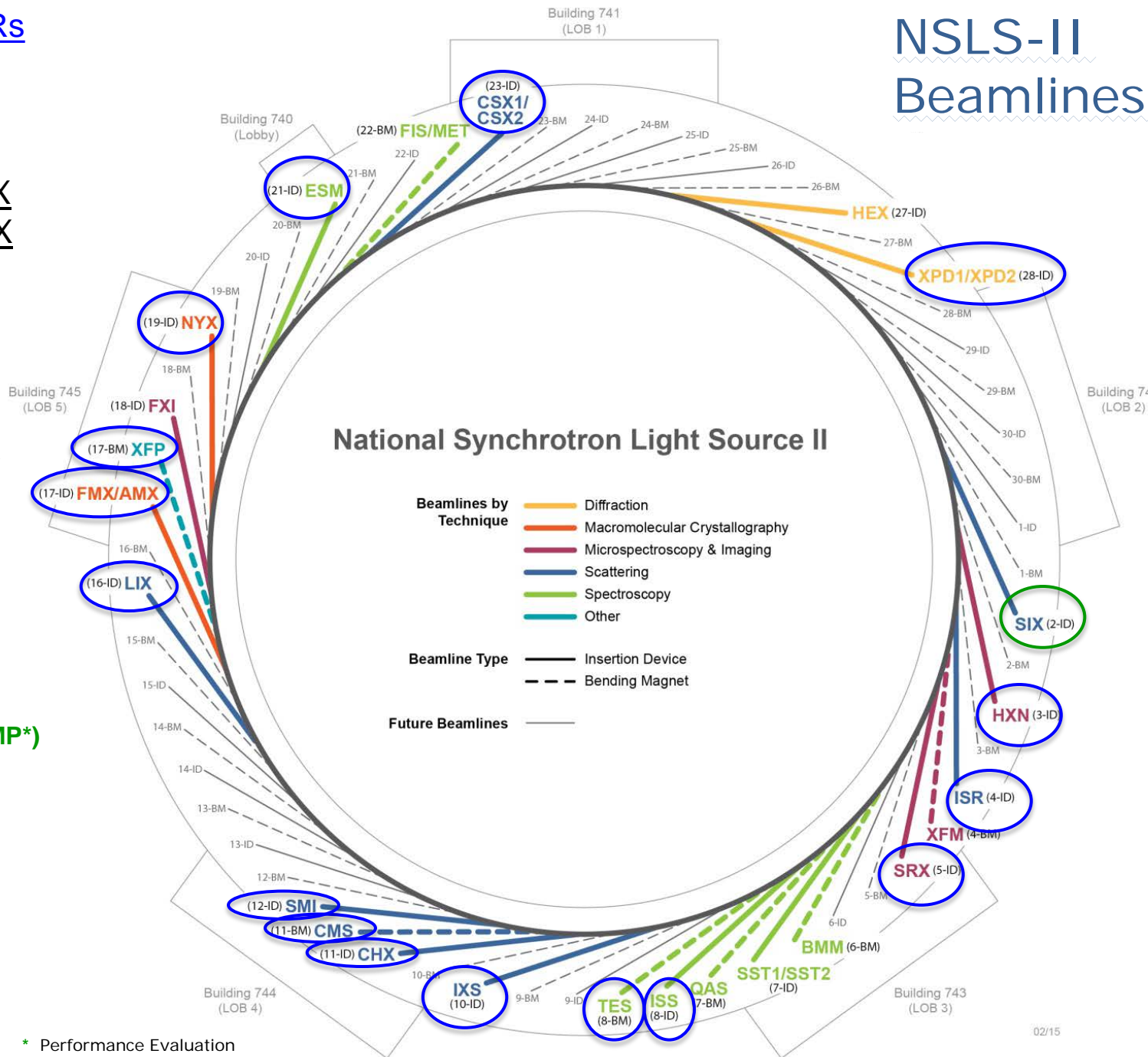
FY 16

- 10/15: LIX
- 03/16: FMX/AMX
- 04/16: ISS
- 06/16: ISR
XFP
ESM
- 08/16: TES
CMS (PEMP*)

FY 17

- 10/16: SMI
- 11/16: SIX
NYX

NSLS-II Beamlines



* Performance Evaluation
Management Plan

Oxygen Deficiency Hazard (ODH)

Follow – up

Three ODH Alarms (LN2 & GN2)

- Small dewar fills (2 instances) in 741 receiving room; vapor at sensor = alarm
 - Partial building evacuation
 - Improper re-entry; no Fire rescue clearance
- Unsecured plastic GN2 line at beamline; N2 gas to sensor = alarm
 - Incomplete response; staff remained; no call to the Control Room



- Fire / Rescue
- Flo Co

Alarm Response

- Leave
- Call Control Room
- No re-entry until cleared by Fire/Rescue

ODH Event Corrective Actions

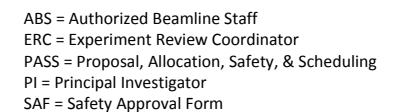
- Establish open dewar filling area on the experiment floor ODH Null location; isolated from walkway; LOB 1 & 3
- Stop open dewar fills in the Receiving Rooms; post signs
- Install a GN2 isolation valve at 17-ID and other pertinent hutch locations
- Change all O2 sensor alarm level from 19.5% to 18%
- Revise the ODH alarm response procedure; better manage unnecessary alarms, strategy for unmanned Control Room periods

ODH Event Corrective Actions

- Install UPS power back-up for the Receiving Room O2 sensors
- Identify the O2 sensor electric power circuit breakers; alternate O2 monitoring is needed to interrupt power; post a sign
- Reconfigure the Receiving Room O2 alarm strobes to latch when activated; FloCo key reset
- Install local camera monitoring for the Receiving Rooms

Safety Approval Forms

ABS = Authorized Beamline Staff
ERC = Experiment Review Coordinator
PASS = Proposal, Allocation, Safety, & Scheduling
PI = Principal Investigator
SAF = Safety Approval Form



SAF Use

Timely Submission

- Risk analysis and control is a shared responsibility – User, ESH, Beamline staff
- Early submission is best: 1 – 2 weeks
- Program maturing – late forms are understood, but not acceptable
- Don't want penalties
- Need beamline staff support
 - Use PASS – check on scheduled Users
 - Engage Users in the problem
 - Several people involved – help make this effective and efficient
 - We all want:
 - Complete risk analysis and control with no surprises
 - Efficient beam time use

END