

FEBRUARY 17, 2022

PSC SAFETY REFRESH AND REENTRY ORIENTATION



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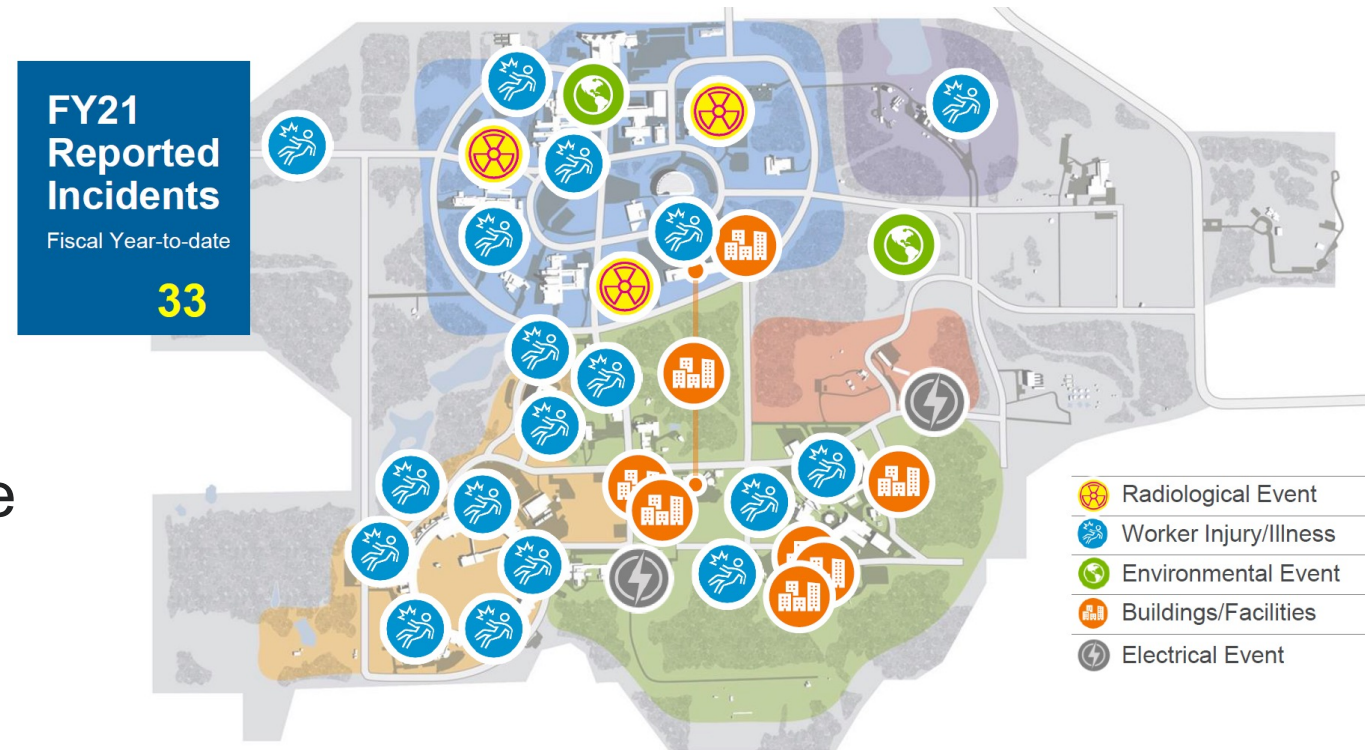


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PHOTON SCIENCES SAFETY REFRESH

- Argonne reportables are on a multi-year downward trajectory
 - 33 incidents in FY21, 5 in FY22 to date
 - However, serious Laboratory radiological incidents occurred in FY21
- Photon Sciences has had good safety performance in FY22 to date
 - High emphasis placed on electrical safety from July 2021 incident
- Reentry will require increased attention to safe practices
 - Take time to reacclimate to surroundings, work conditions, if not routinely onsite
 - Pre-job briefs to reorient staff; pause work and get clarification rather than assume



Safety remains everyone's responsibility!

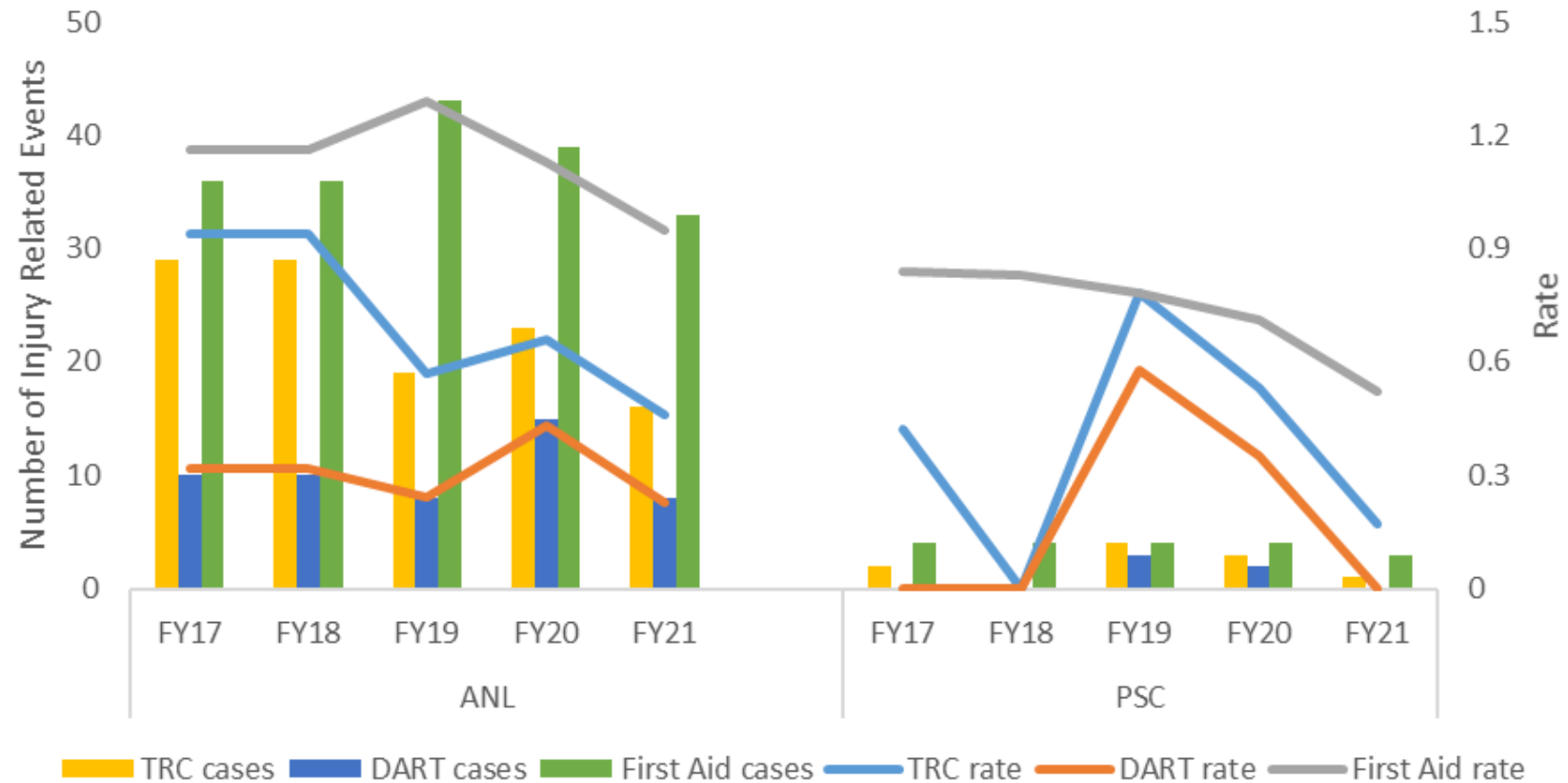
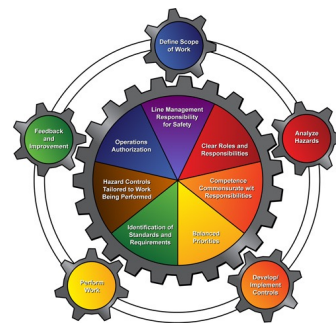
AGENDA

- Safety Refresh
 - PSC and Laboratory Safety Metrics
 - Summary of Recent Safety Incident
 - DOE Office of Enterprise Assessment Work Planning & Control Review
 - Other Safety Topics
- Hybrid Workplace Transition Plan
 - Actions to Take Prepare for Full Lab Re-opening
 - Reentry Plan Dashboard and PSC Specifics
 - Policies, Procedures and Preparation for Reentry

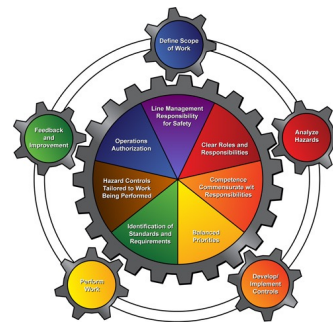
INJURY AND ACCIDENTS

Photon Sciences safety record excellent in FY22

- 0 First Aid Injuries
- 2 OSHA Recordable Cases (TRC)
- 2 Days Away or Restricted Time (DART)
- All TRC and DART cases were COVID related



SUMMARY OF RECENT SAFETY INCIDENT

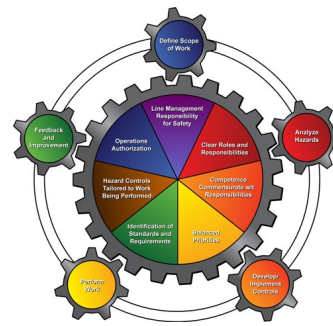


- The following slides summarize recent safety incidents in PSC

1. On July 15, 2021, a recirculating pump on an ultrasonic cleaning tank was rewired from 208V to 480V without the use of the following:

- Appropriate personal protective equipment (PPE)/electrically-rated gloves;
- Personal lock out/tag out (LOTO);
- Zero voltage verification (ZVV);
- Formal job briefing;
- Formal work control procedures; or
- Appropriate scope change management.

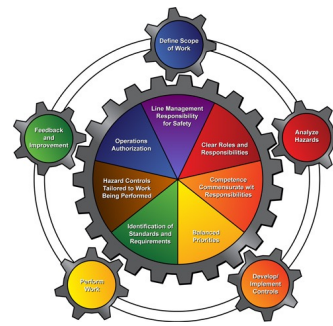
INCIDENT CAUSES



- Electrical disconnects were mislabeled. (Labeled 208 VAC, Actual 480 VAC)
- Work Control Document (WCD) and procedure were not specific to the assigned task nor when the scope changed.
- Communication between workers assigned the task and those assigning the task was less than adequate.
- No pre-job brief was conducted before work began.
- The verification of the wiring of the new pump was inadequate.
- Ambiguity occurred between personnel regarding the electrical glove exchange process.
- Assumptions were made that system was electrically-safe so there was no need to perform the ZVV and using any lock for LOTO was appropriate.

WHAT WENT RIGHT

- Work paused when verification on the panel could not be conducted safely.
- No injuries sustained; no property, plant or equipment damage



LESSONS LEARNED

- ZVV must be performed in accordance with the Argonne Electrical Safety Manual.
- LOTO must be performed in accordance with the Controlling Hazardous Energy Manual (LMS-MNL-4).
- When gloves are due for routine six-month inspection process, replacement gloves must be readily available and distributed before collection of used gloves for testing begins.
- When an unexpected condition occurs, an official work pause should occur, and the scope of work should be re-evaluated, which may include revising the WCD.
- Verify labeling is correct on electrical panels and disconnects.
- Conduct pre-job briefings before beginning work.
 - Ideally, the pre-job brief should be conducted at the site of the work to be performed. This will allow for visualization of the task and may prompt questions or safety concerns about the task in real time.
- Verify that a task-specific WCD or detailed procedure is in place (as appropriate) before work begins.

ZERO VOLTAGE VERIFICATION

For electrical work



When

- Before working
- After LockOut/TagOut
- Upon returning to work after 2+ hours
- If anything changes

How

- Test with contact tester
- Test every circuit
- Test every conductor
- Test every time

Live-Dead-Live is always required!

CONTACT

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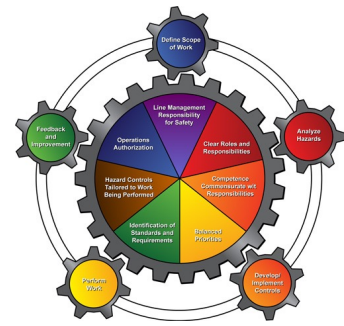
ADDITIONAL GUIDANCE

**Argonne Electrical Safety
Manual, Section 9**

**Electrical Safety Field Guides
for QEWs, Non-QEWs**

VOLTAGE-RATED GLOVES

For electrical work



RIGHT GLOVES

- Use proper voltage rating

RIGHT CONDITION

- Observe physical condition
- Confirm expiration date

RIGHT WAY

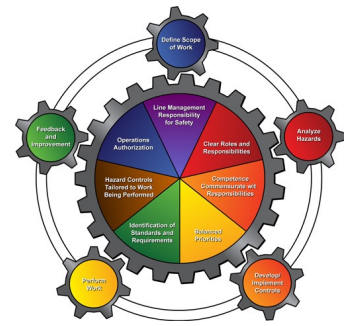
- Wear leather protectors over gloves



ADDITIONAL GUIDANCE
Field Guide 3

BARRICADES

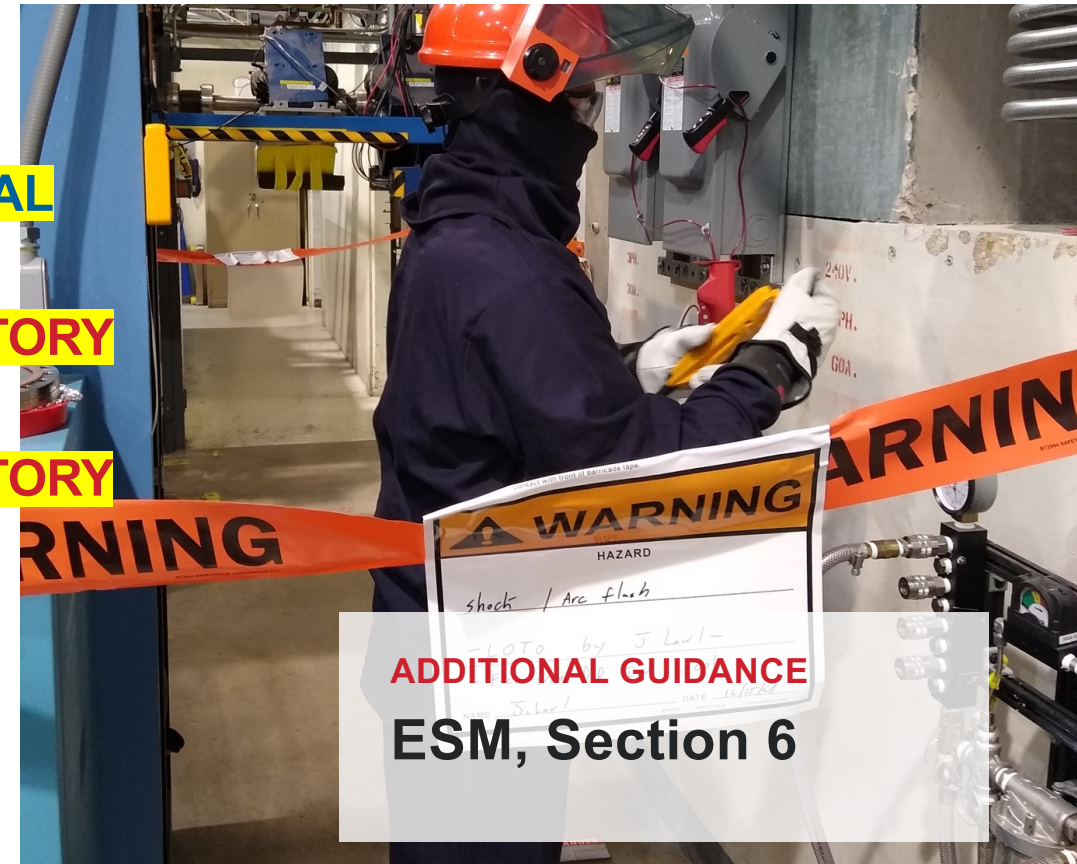
For electrical work



NOTICE	Mode 0—Electrically Safe Work Condition Established	
WARNING	Mode 1—LOTO and Zero Voltage Verification (ZVV)	OPTIONAL
DANGER	Mode 2—Energized Diagnostics (Testing and Troubleshooting)	MANDATORY
DANGER	Mode 3—Energized Repair Work Energized Electrical Work Permit (EEWP)	MANDATORY

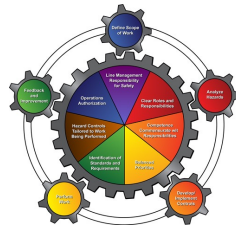
PLACE AT WHICHEVER IS FARTHEST

- Flash Protection Boundary *OR*
- Limited Approach Boundary



ADDITIONAL GUIDANCE
ESM, Section 6

DOE OFFICE OF ENTERPRISE ASSESSMENTS (EA) WORK PLANNING & CONTROL (WPC) REVIEW



DOE EA WPC REVIEW:

April 11-15 and
April 25-29, 2022

FOCUS:

- Skill of the Worker (SOW)
- Hazard and Control Identification
- Electrical Safety

IN PREPARATION:

Held internal WPC
assistance / readiness review

FOCUS:

- SOW: Documentation, OJT, other skills
 - Building Maintenance, Physics (ATLAS), EOF (Technicians)
- Electrical Safety: PSC and FAC
- Construction Safety: PMO
- Rad Safety: CFC and PHY
 - Building 205 gloveboxes and fume hoods
 - Access control for high radiation and very high radiation areas (ATLAS)

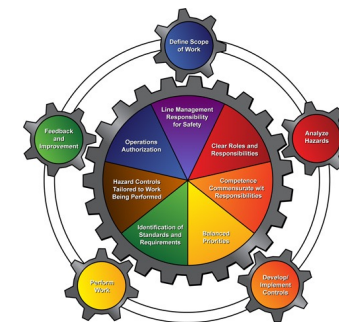
PREPARATION RESULTS:

OPPORTUNITIES FOR IMPROVEMENT:

- Aware (WPC software application) changes
- WPC process: SMEs involvement in planning
- Housekeeping / signage
- WCD and SOP edits
- Worker proficiencies for SOW
- Memory Card / Field Guide / 2-min Drill usage

ISSUES:

- Inconsistency in electrical work practices:
 - Procedure application
 - Boundaries
 - PPE usage and tools (e.g. meter, insulated tools)
 - Glove inspections
 - ZVV improperly performed, work paused (Non-ORPS)



WORKING ALONE

Employees working onsite or offsite must not be subject to increased risk because of working alone

Low Risk

- No additional controls if access to 911
- May request monitoring via Central Alarm Station (CAS), ext. 2-5730

Medium Risk

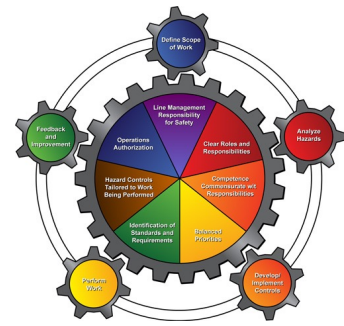
- Periodic check-in with remote co-worker required
- Procedure for contact frequency and emergency response

High Risk

- When allowed, use additional controls such as an assigned person in the vicinity of the work area with frequent check-ins

ALARA REVIEWS

As Low As Reasonably Achievable



ALARA Workplace Controls Review

LMS-PROC-93

- Complete as early as possible in the work planning process
- Conduct when work is completed

New Facilities and Facility Design Modifications

LMS-PROC-339

- Communicate and seek guidance
- Document and obtain approval



FOR ADDITIONAL GUIDANCE

LMS-PROCs
Area Health Physicist



HYBRID WORKPLACE TRANSITION PLAN REORIENTATION

AGENDA

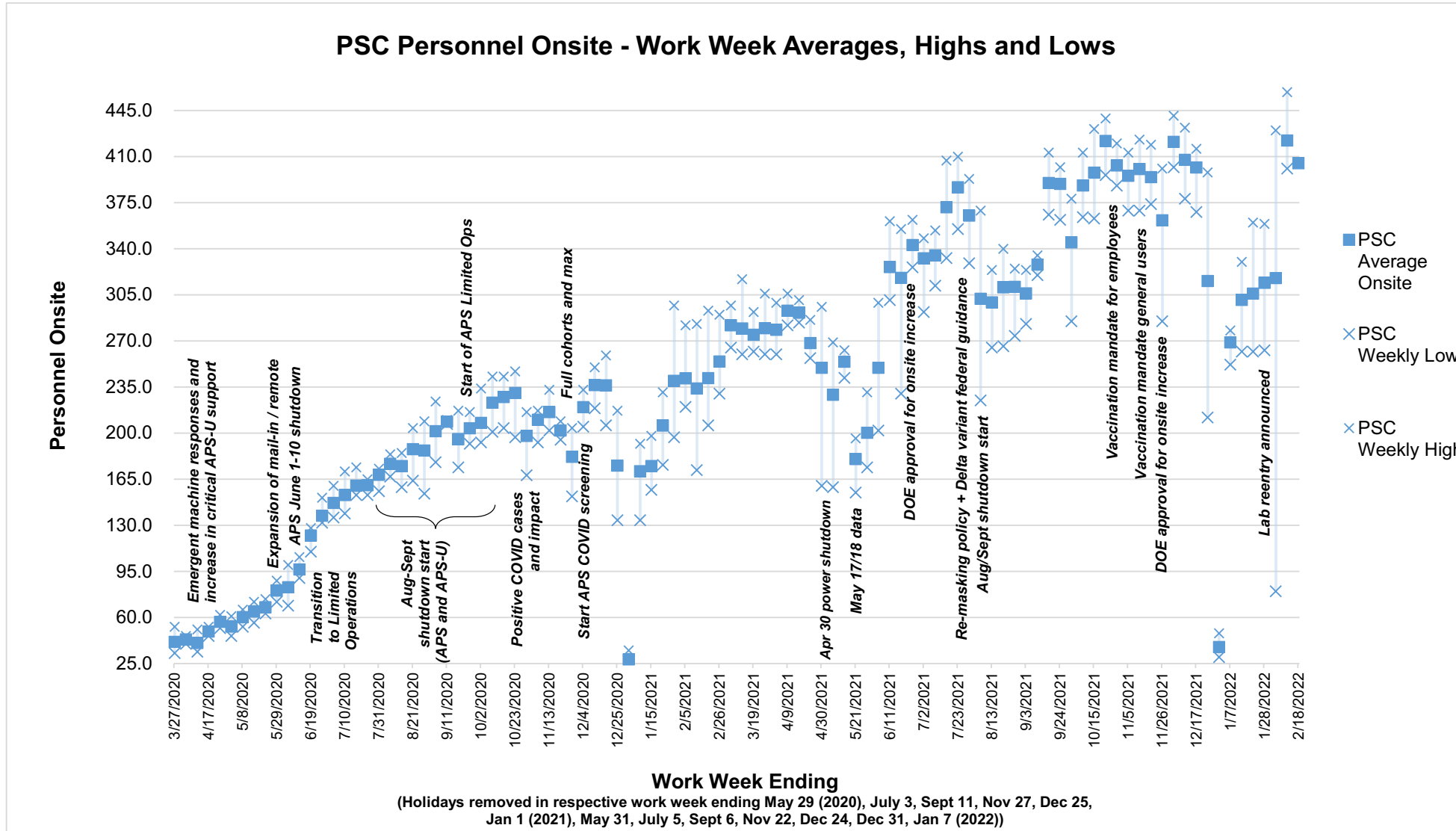
Our new hybrid workplace

What to expect onsite

Before arriving at the Lab

Q&A

A LONG ROAD TO THE PRESENT



2020:

- Stay at home order
- Mail-in/remote exp.
- Non-COVID exp.
- Suppl. run time
- Short shutdown
- Limited operations
- Onsite users
- Cohorts, max tele.
- NSLS-II alignment
- APS screening
- Proximity badges

2021:

- Onsite increases
- Re-mask, Delta
- Vaccination mand.
- Omicron surge

2022:

- Omicron waning
- Lab reentry

CORE VALUES AND INCLUSIVITY

Impact

Safety

Respect

Integrity

Teamwork

Our core values.
We believe in them.
We live them.



**DON'T JUDGE
PEOPLE BY
THEIR FACE**

masked

A truly inclusive workplace means cultivating an environment that recognizes and respects differences

- Respect for those who have been working onsite and those returning to the Lab
 - Keep your distance (6 ft. or more) in copy rooms, break rooms, bathrooms, and hallways
 - Knock and request permission before entering an office
 - Follow room occupancy limits
 - Follow meeting guidelines

WHEN WE'LL START

Timing for Hybrid Work Implementation

FEBRUARY 28

**Max Telework
lifted by DOE**

**Argonne
voluntary
return**

MARCH 14

**Flexible/
remote work
agreements
begin**

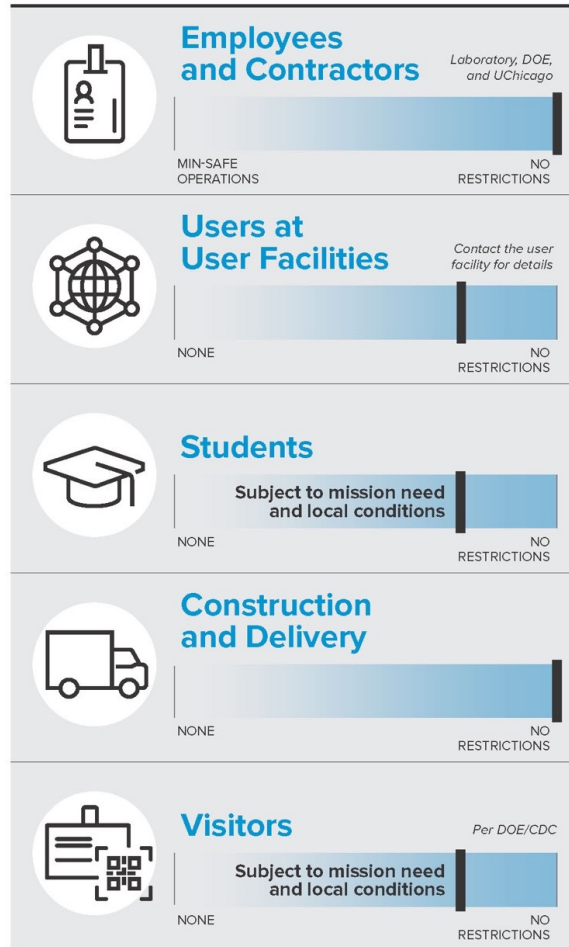
IF NEEDED

**Work with your
supervisor to
determine the
length of your
transition time**

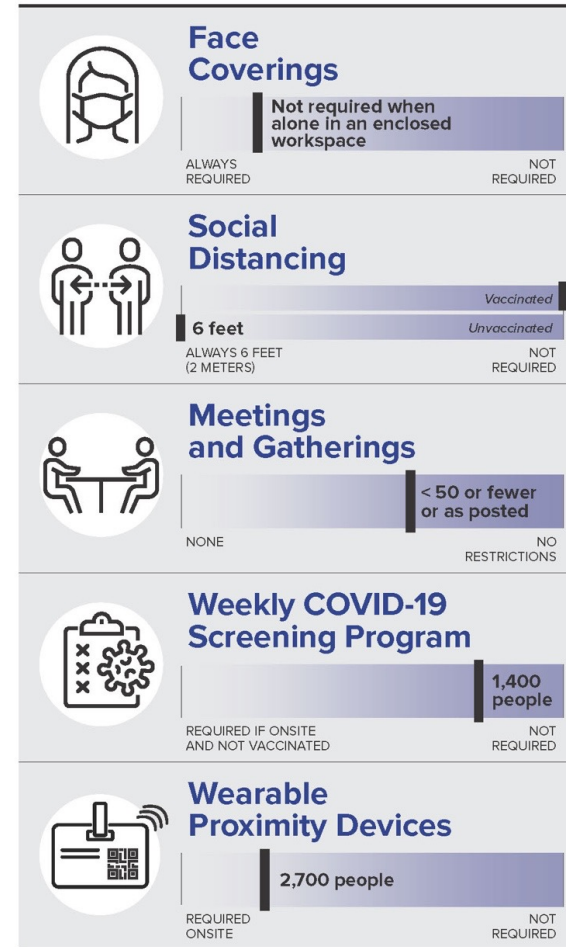
REENTRY PLAN

Most items will progress independently, subject to COVID-19 site access requirements

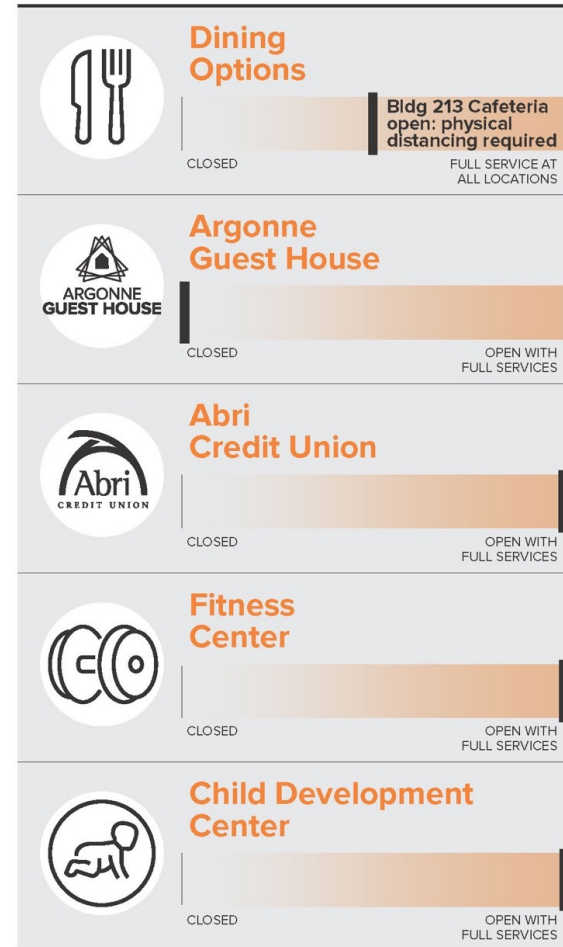
PEOPLE ONSITE



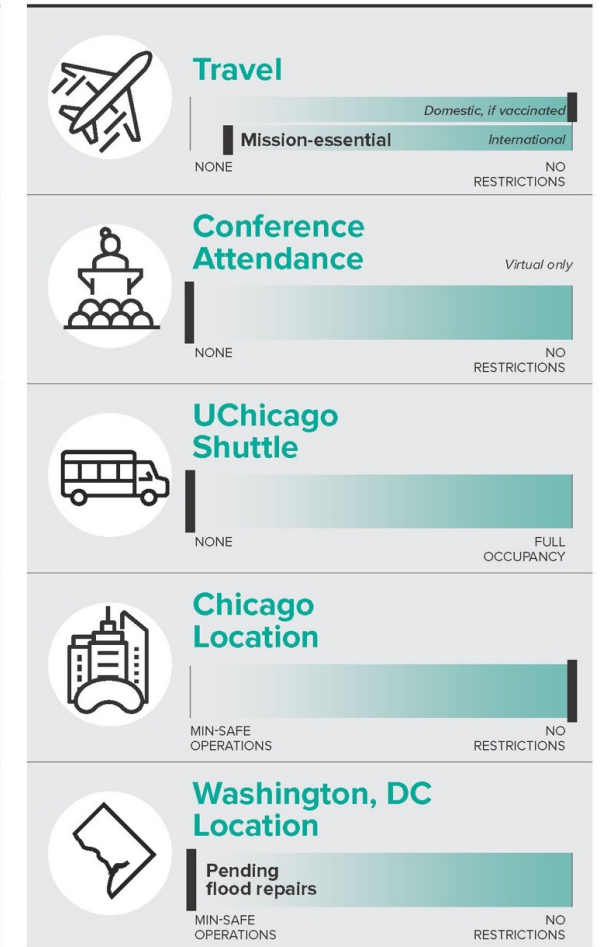
SAFETY AND COVID-19 CONTROLS ONSITE



AMENITIES



TRAVEL, SITE ACCESS, AND OFFSITE LOCATIONS

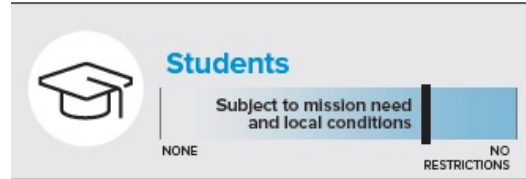


PHOTON SCIENCES (APS) DETAIL

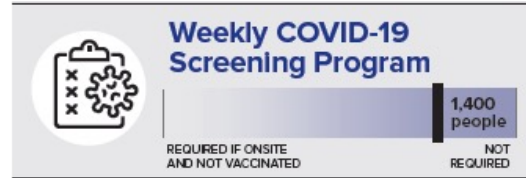
ANTICIPATED CONDITIONS ON
FEBRUARY 28, 2022



Expansion to hosting up to 3 general users onsite per ESAF
Case by case exception review for 4+ general users per ESAF
Site access: Name on approved ESAF as onsite user; continue to satisfy vaccination protocol



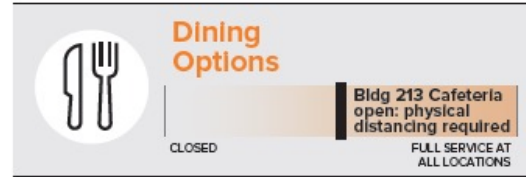
Ability to host undergraduate students onsite



Future reduction to include only unvaccinated population; **dependent on** transmission metrics



Expansion for regularly onsite population with high chance of close contact (not for rarely onsite personnel)



401 Grille will be phased in, starting with prepackaged to-go items



Guest House will begin reopening process with initiation of voluntary reentry



Operating hours expand 30 min on open and close: 7:30 AM to 5:30 PM

REMOTE WORK PROCEDURE AND AGREEMENT

Reflective of the New Hybrid Workplace

Remote Work Arrangements

LMS-PROC-108

- Outlines work schedule and location options
- Workday Flexible Work Arrangement form required if not “Primarily Onsite”

Changing Your Work Location

Flexible Work Arrangement
Workday Form

- Must be available to appear at necessary in-person activities
- Must maintain a dedicated, safe workspace
- Must be approved by March 14, 2022

Changing Your Work Schedule

ANL-13B
XINK Form

- Several alternate schedule options
- Automatic approval chain to process
- Follows LMS-PROC-306

HYBRID WORKPLACE CONTINUUM

A New Way to Think About Work



PRIMARYLY ONSITE

- Job duties require in person presence for effective mission delivery
- Full-time onsite role
- **Default condition: Does not require a Flexible Work Agreement to be completed**



MOSTLY ONSITE

- Some work can be effectively done remotely
- Typically 1 to 2 days remote per week
- **Requires a Flexible Work Agreement to be completed and supervisor approval**



OCCASIONALLY ONSITE

- Most work can be done remote; but some routine onsite access needed
- Typically 3 to 4 days remote per week
- **Requires a Flexible Work Agreement to be completed and supervisor approval**



RARELY ONSITE

- Job duties performed effectively remotely
- Full-time offsite role except for rare needs
- **Requires a Flexible Work Agreement to be completed and supervisor approval**

Most Time in Office ←

→ Least Time in Office

OFFICE SPACE

For employees who are rarely onsite



RARELY ONSITE

- Job duties performed effectively remotely
- May need to attend occasional in-person activities

- **Consult with your supervisor on your work schedule (fixed or flexible)**
- **Complete a remote work agreement** *Workday Flexible Work Arrangement Form*
- **Office space is not dedicated; hoteling space will be available**
- **Lab-provided equipment setup can be picked up at the Lab or shipped to your work location**
- **Consult supervisor for approval on travel to the Lab**

EXPENSES

Remote Work

Remote work under any status is voluntary.

Employees are responsible for all remote work expenses.

Examples of Non-Reimbursable Costs

- **Home office furniture and equipment**
Chairs, desks, printers, etc.
- **Home office maintenance and remodeling**
- **Incidental expenses**
Home internet, etc.
- **Travel expenses that are considered normal commuting**
Mileage, etc.

RECONNECTING TO THE NETWORK ONSITE

Be patient upon computer start-up

Connectivity

- Don't turn off or reboot while updating.
- Stored passwords may cause issues.

Information Security

- Remember to bring back HSPD-12 badges/readers.
- Return secure documents to the Lab for proper storage/disposal.

REMEMBER

If security scans identify vulnerabilities, you will be disconnected and contacted by BIS.

CONTACT Service Desk

Business & Information Services
Phone: 630-252-9999, option 2
Email: help@anl.gov

VIRTUAL AND HYBRID MEETINGS

Plan for a Combination of On-site and Remote Participants

CONTACT

Service Desk

Business & Information Services

Phone: 630-252-9999, option 2

Email: help@anl.gov

Microsoft Teams



- The Lab's virtual conferencing and collaboration platform
- Onsite participants, invite the conference room to the meeting invitation in Outlook

Conference Rooms

- If you are the host, bring your own computer
- Different rooms have different equipment
Search "conference rooms" on MYARGONNE for room equipment specifications

EQUIPMENT

Considerations for moving items to/from the Lab

Equipment Guidelines

- **The Lab cannot provide duplicate equipment setups**
- **Contact the Service Desk prior to moving computing equipment**
 - Disconnect/reconnect assistance
 - Equipment recommendations

Policies and Procedures

- **Complete an ANL-4 form to move property to or from the Lab**
- **Coordinate with your supervisor about taking Lab property off site**

Safety Guidelines

- **Do not move or lift more than 50lbs on your own**
- **If you are uncertain or uncomfortable moving equipment, contact your Building Manager, ESH Coordinator or supervisor**

ADDITIONAL PHOTON SCIENCES CONSIDERATIONS

Other preparation for return or on return to the Laboratory

Site Access and General Topics

- Renew expired or soon-to-expire badges
- Perform daily health self-check
- Review vaccination requirements for site access
- Review Job Hazard Questionnaire (JHQ); complete ESH108

Housekeeping

- Reentry is opportunity to (re)focus
- Request sanitization
- Identify gas cylinders, chemicals, electronics for removal
- Unbox and stock materials, orders

Work Planning & Control

- Review and revise Work Control Documents (WCDs)
 - Particularly those utilized infrequently
- Perform Pre-Job Briefs
 - Important to engage personnel not recently onsite

TRANSITION RESOURCES

VIA EMAIL

COVID-19 Questions coronavirus@anl.gov

Face Covering Questions facecovering@anl.gov

Wearable Proximity Devices wpc@anl.gov

Safety Concerns safety@anl.gov

Argonne Badges siteaccessmanager@anl.gov

Ergonomic Evaluations medical@anl.gov

Vaccination Program medical@anl.gov

VIA MYARGONNE

[Argonne
Mobile App](#)

[Badge
Scheduling](#)

[COVID FAQs](#)

[COVID Resources](#)

[Employee
Assistance
Program](#)

[Lab Reentry 2022](#)

[Lab Reentry Checklist](#)

[Laboratory Ombuds](#)

[Onsite COVID Testing](#)

[Positive Cases
at Argonne](#)

[Wearable
Proximity Devices](#)

IN CLOSING

- Pandemic is not over, but conditions improving
- Argonne and PSC have mature COVID controls in place
- PSC in good position for reentry:
 - High fraction of population with recurring onsite access and high familiarity
 - Hosting limited users onsite since Sept 2020; measured increase on reentry
- Reentry should include increased attention to safe practices
 - Take time to reacclimate to work conditions, noting updated safety policies (working alone) or addressing persist issues (housekeeping)
 - Significant focus on electrical safety due to recent incident in PSC