

IMPLEMENTATION OF A BSL2 CERTIFICATION PROGRAM AT NORTHWESTERN UNIVERSITY

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“To certify BSL2 safety management of our laboratories in adherence to all regulations, guidelines, standards and best practices”.



“To provide an opportunity for well managed BSL-2 laboratories to demonstrate and be recognized for their contributions in promoting a culture of safety within the institution”.

PROGRAM COMPONENTS

- Initial Annual Lab Inspection
- Unannounced Lab Inspections
- Review & Evaluation Process
- Maintenance of Certification & Requalification

THE PROCESS



INITIAL ANNUAL INSPECTION

- General Safety
- Operational Safety
- Chemical Storage and Waste
- Biohazardous Waste
- Biosafety
- Recombinant and Synthetic Nucleic Acids
- Select Agents & Controlled Substances
- Human Cadavers and Body Parts
- BSL3 Inspections



UNANNOUNCED LAB INSPECTIONS

- Focus on biological safety
- Twenty-three questions pulled from different review sections
- Two unannounced lab inspections within three months





REVIEW AND EVALUATION PROCESS

- Deficiencies corrected within 2 weeks
- Report submitted to Office for Research Safety (ORS)
- Approval



Maintenance of Certification & Requalification

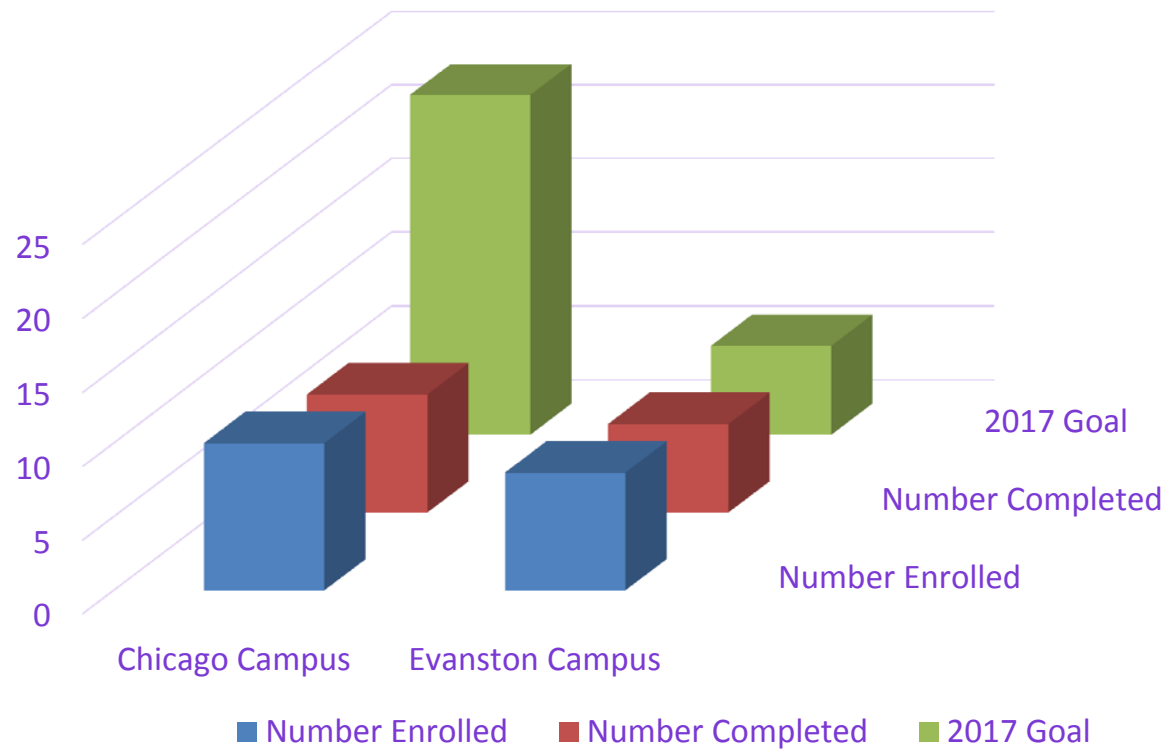
- Granted for 2 years
- Lab's responsibility to maintain safety culture and compliance
- Unannounced BSL-2 laboratories inspection and unofficial visit
- Active communication with ORS (any changes must be reported)
- Right to withdraw for failure to comply





- ❑ Program initiated July 1, 2017
- ❑ BSL2 labs - 230 PIs in Chicago and 55 in Evanston
- ❑ First Phase: few labs selected on each campus: Evanston and Chicago (excellent laboratory safety track record)
 - Status – in progress
 - Evanston: six labs obtained BSL2 certificates (two in process)
 - Chicago: eight labs obtained (two in process)
- ❑ Second Phase: invitation will be extended to additional qualified labs (good laboratory safety track record)
 - Status – in planning

BSL-2 Certification Progress and Goals





Labs recognized by:

- Excellence plaque on the door
- Listed in the Annual ORS report
- Featured on ORS Website



CHALLENGES

Labs:

- ✓ Commitment
- ✓ Extra Work
- ✓ Frequent Visits from ORS

Lab Safety Specialists:

- ✓ Convincing
- ✓ Persuading

SOLUTION

“The right start”

A FEW STEPS BACK...



How did we get here and how do we assist the labs?

EVOLUTION OF THE SAFETY PROGRAM & THE OFFICE FOR RESEARCH SAFETY

Growth by numbers and professional diversity

Professional expansion of the staff: microbiologists, chemists, engineer, biochemist, veterinarian, health physicists, training staff, administrative and support assistants, and multimedia designer.

MEET THE TEAM



ORS WORK AND SUPPORT FOR THE LABS

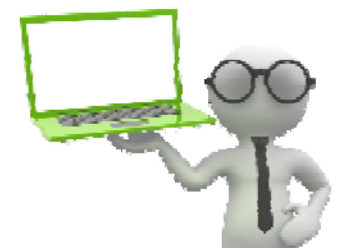
Safety Supply Catalog (free of charge):

- Hazard Communication Signs & Labels
- Hazardous Waste Tags and Chemical Waste Bags
- 1-Quart and 1-Gallon Wide-Mouth Jars
- Safety Glasses
- Safety Waste Funnel for 1-Gallon Jugs
- Peroxide Test Strips
- Incineration Box and Bio Waste Bags
- Cut Resistant Gloves
- Blue FR Rated Lab Coats and White Lab Coats

Training

ORS SERVICES - WEB BASED TRAINING

- Biological Safety Certification
- Bloodborne Pathogens for Clinical or Research Lab Workers Certification
- Compressed Gas Cylinders Certification
- Hazardous Chemical Waste Management Certification
- Laboratory Safety Certification
- Personal Protective Equipment Certification and more ...



ORS SERVICES - INSTRUCTOR LED TRAINING



Safe Shipping of Biological Materials and Dry Ice Certification

SAFETY SESSIONS

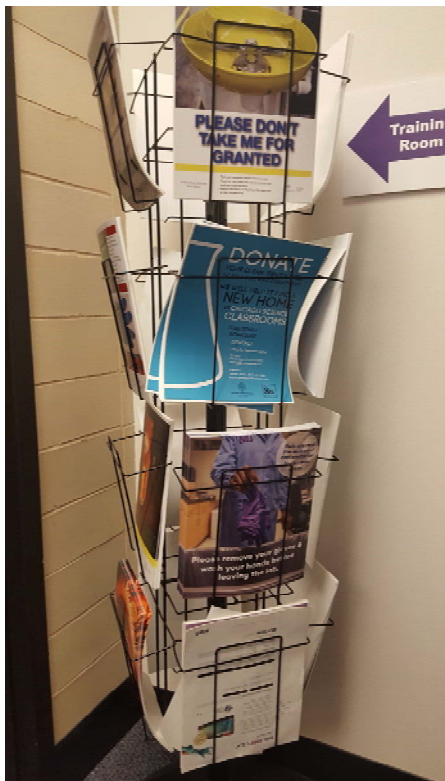


- Biological Research Groups Meetings
- Safety Designate Meetings: Chemistry and Engineering Departments
- Northwestern Laboratory Safety Focus Group
- Lunch and Learns

ADDITIONAL SERVICES



INSTRUCTIONAL FLYERS & LABELS



Conclusion

A magnifying glass with a black handle and a silver frame is positioned over the word 'Conclusion'. The lens of the magnifying glass is centered over the letters 'cl' in 'Conclusion', making them appear larger and more prominent than the rest of the word. The background is a light, neutral color.

- ❑ We expect that this program will achieve the following:
 - To promote a positive safety culture
 - To foster and/or improve a working relationship with biology-focused labs.

- ❑ Following successful implementation:
 - We intend to develop similar programs for Chemistry, Physics, and Engineering

OUTCOMES

The success of the program (to enlist as many qualified BSL2 labs as possible):

- Will make a difference in the daily operating routines
- Will provide safer environment for everyone
- Will improve the safety management system for ORS including safety inspections of biological laboratories
- Will recognize those who strive in excellent safe research
- Will allow ORS to learn and to share the experience





Testimonials

"I wish to express that the Woolley lab is delighted to receive the BSL2 accreditation. In my opinion, the process of obtaining BSL2 accreditation is fairly straightforward and simple. As we recently set up our BSL 2 facility in the lab, we had some minor issues but we fixed them effectively with the help from ORS, specifically from Iwona. I would encourage every lab to participate in this certification process. If nothing else, this process will help to improve the safety standards of the lab, which will contribute to improving the quality of research."

ACKNOWLEDGMENT



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ORS Staff: Dr. Robert Foreman, Dr. Andrea Hall, Dr. Michael Blayney, Dr. Marina Zelivyanskaya, Lucy Galindo, Cindi Mason, Gwen Sullivan, and the participating labs.