MGH Research Safety Committee

Meeting #7
September 29, 2014

Harry W. Orf, PhD, Senior Vice President for Research
Robert Castaldo, Safety Director
Michael Fisher, Director, RSMG
Mary Gervino, Director, MGH Research Compliance
1. Updates – Bob Castaldo and Rex Woodleigh
   Joint Commission
   Incidents and Events
   Radiation Safety Inspection

2. Status and Updates from Task Forces
   Documentation/Policy Task Force – Bob Castaldo
   Chemical Hygiene Task Force – Bob Castaldo
   Communications Task Force – Harry Orf
   Lab Survey Task Force – Michael Fisher
   Training Task Force – Rachel Ackman


5. Questions and Open Discussion
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5. Questions and Open Discussion
This initiative is the result of deficiencies found in CDC labs including:

- discovery of viable small pox vials
- inadequate deactivation of anthrax (BL3) sent to other lower containment labs (BL2) at the CDC

This is an opportunity to reexamine current biosafety practices and strengthen the overall safety culture in our MGH research facilities.
Biosafety Stewardship

- **Review biosafety practices** used in laboratory procedures and assess whether they require modification
  - Review procedures to minimize the risk of accidental exposures or spills.
  - Review procedures that involve sharps or have the potential to create aerosols or splashing
Conduct inventories of:

- infectious agents
- biologically derived toxins
- materials containing recombinant or synthetic nucleic acids
- other biological materials present in the laboratory (whether active or in storage)

Remove and dispose of any materials no longer needed

Keep an active and current log of:

- which materials exist (active or in storage)
- appropriate biosafety containment levels for storage of materials
- the responsible party for the stewardship of the materials
Biosafety Stewardship

- **Reinforce biosafety training:**
  - Investigators
  - Laboratory staff
  - Students
  - Vendors/visitors

- Review training materials and practices used, and update as needed

- Assess the frequency of training, when training is provided, and perform updates to training as warranted
Biosafety Incidents

- There were 3 reported sharps incidents in the past quarter
- 2 involved the use of recombinant agents, which required additionally reporting to the NIH and the City of Boston
  - A researcher had a stick from a glass micropipette used for stereotaxic injections in mice (3rd generation lentiviral vector)
  - A researcher had a glass Pasteur pipette break in their hand while removing it from the vacuum tubing (immortalized human cell line)
  - A researcher pricked their finger on a small needle used to inoculate fruit flies (Gram negative bacteria)
Vacuum-line aspirator devices to reduce use of sharps (and risks with Pasteur pipettes) - BL2/BL1
Vacuum line aspirator: purchase information

Partners vendor(s):
- Costar aspirator device (Corning #4930) Fisher Sci. ($293.45)
- Argos aspirator device (Argos cat. EV514) Fisher Sci. ($231.72)

Replacement parts (fits both Costar and Argos):
- Single channel plastic adapter (cat. EV526) Fisher Sci. ($23.38)
- Rubber grommet for Pasteur pipettes (cat. EV505) Fisher Sci. Vendor ID: TC15690015($6.36)
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Status and Updates from Task Forces

MGH
Research Safety Committee

Safety Documentation Task Force Update

Robert Castaldo, Safety Director
# Research Safety Manual

## Section 1: (Chapters 1-3)
### Organization and Hazard Management Process
Describes safety program organization, roles and responsibilities and safety management principles; directed primarily to management level staff.

<table>
<thead>
<tr>
<th>Policy Statement</th>
<th>Research Safety Organization</th>
<th>Hazard Management and Loss Control Process</th>
</tr>
</thead>
</table>

## Section 2: (Chapters 4-10)
### Safety for All Research Community Personnel
Presents material everyone in the research community needs to know about safety in their workplace, regardless of their job role.

<table>
<thead>
<tr>
<th>Safety Training Requirements</th>
<th>Fire and Life Safety in Research Facilities</th>
<th>Emergency Preparedness and Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Administrative Policies and Procedures</td>
<td>Safety (Incident) Reporting</td>
<td>Occupational Health Services and Ergonomics</td>
</tr>
<tr>
<td>Police and Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Section 3: (Chapters 11-17)
### Safety for All Technical Laboratory Personnel
Addresses general safety requirements applicable to all technical personnel working in labs.

<table>
<thead>
<tr>
<th>Chemical Safety</th>
<th>Hazardous Waste Management</th>
<th>Electrical Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Protective Equipment</td>
<td>Safety and Emergency Equipment</td>
<td>Laboratory Signage</td>
</tr>
<tr>
<td>Lab Equipment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Section 4: (Chapters 18-22)
### Special Hazards
Presents safety information for technical staff who also work with the following special types of hazards or situations.

<table>
<thead>
<tr>
<th>Animal and Animal Tissues Safety</th>
<th>Biosafety</th>
<th>Radiation Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Laser Safety</td>
<td>Human Subject Research Safety</td>
<td></td>
</tr>
</tbody>
</table>

## Section 5: (Chapters 23-25)
### Helpful Resources

<table>
<thead>
<tr>
<th>Links</th>
<th>Forms</th>
<th>Templates</th>
</tr>
</thead>
</table>
Status and Updates from Task Forces

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Chemical Hygiene Task Force Update

Robert Castaldo, Safety Director
## Chemical Hazard Classes

<table>
<thead>
<tr>
<th>Chemical Hygiene</th>
<th>Acute Toxicity - oral</th>
<th>Acute Toxicity - dermal</th>
<th>Acute Toxicity - inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion / Irritation</td>
<td>Eye Damage / Irritation</td>
<td>Respiratory or Skin Sensitization</td>
<td></td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Carcinogenicity</td>
<td>Reproductive Toxicity</td>
<td></td>
</tr>
<tr>
<td>Specific Target Organ Toxicity – single exposure</td>
<td>Specific Target Organ Toxicity – repeated or prolonged exposure</td>
<td>Aspiration</td>
<td></td>
</tr>
<tr>
<td>Explosives</td>
<td>Flammable Gases</td>
<td>Flammable Aerosols</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Gases</td>
<td>Gas Under Pressure</td>
<td>Flammable / Combustible Liquids</td>
<td></td>
</tr>
<tr>
<td>Flammable Solid</td>
<td>Self-Reactive Chemical</td>
<td>Pyrophoric Liquid</td>
<td></td>
</tr>
<tr>
<td>Pyrophoric Solid</td>
<td>Self-Heating Chemical</td>
<td>Emit Flammable Gas on Contact with Water</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Liquids</td>
<td>Oxidizing Solids</td>
<td>Organic Peroxides</td>
<td></td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>Pyrophoric Gas</td>
<td>Combustible Dust</td>
<td></td>
</tr>
<tr>
<td>Simple Asphyxiant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chemical Hygiene

Standard Hospital Chemical Safety Policy

Chemical Safety Guidelines

Updated CHP Templates
Communications Task Force Update

Harry W. Orf, PhD, Senior Vice President for Research
Communications Task Force Update

Action Items from September 2014 Meeting

Tracking Safety Training
“Central” Database for all Research Personnel w/Reqd Training now before Partners for FY15 budget and capital request
Research personnel survey to review all personal data and ID training needs – top level and detailed level questions completed, now need to test with pilot group

Safety Training Module Development
Prototype avatar module demonstrated, will take time to implement
New Res. Inst. Training and Education Cmte (RITE) being formed

Purchase ID badge scanner for recording training attendance
Piloted at Res Council – connectivity issues, still working out bugs

Lab Surveys - Electronic, Wireless Real Time Program
Misha from CSB has been hired to write program and develop portable survey tool and database
Formalize documentation of issues, resolution, feedback

Chemical Hygiene – Hazardous Chemicals List
List being forwarded to Communications Task Force for SOP database development
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Michael Fisher, Director, RSMG
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Safety Training Task Force Update

Mary Gervino, Director, Research Compliance
Rachel Ackman, Sr. Research Compliance Associate
Radiation Safety Refresher Training

• Carl Blesius of the Lab of Computer Sciences created an enhanced version of the Radiation Safety Refresher training, which uses animation and voice-over.
  – Carl and Mary Gervino will attend a CRP Training Critique session offered in October

• A survey to solicit opinions from the Research Safety Training subcommittee was sent in early July to gain feedback on the new training module.
  – The feedback was positive overall
  – A final version will be sent to a group of PIs for additional feedback
Radiation Safety Refresher Training

• The time investment required to create this training was a challenge
  – 5 hrs spent with content experts
  – Many hrs spent creating the animation and voice-over
Katherine Kulig volunteered to enhance this training module

Bob Castaldo approved this update
  – Currently working on a timeline for implementation
Training Template Progress

• The content experts have provided some new and improved modules, but the information needs to be plugged into the template created by the subcommittee
  – Research Compliance has recruited some help with this
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5. Questions and Open Discussion
Mission

- To promote the safe & constructive use of radiation and radioactive material

- Build collegial relationships with users to foster communication and trust – this achieves the best goals for everyone, which is safety and compliance
Authority

• Broad Scope & Irradiator licenses issued to MGH by Massachusetts Department of Public Health

• Radiation Safety Committee for institutional approval of activities

• State and Federal regulations
Scope and Services

- Geography: Main Campus, Simches, CNY, Shriner’s, McLean, 400 Tech Square
- Irradiators at all campus locations
- Protecting workers, MGH staff, and the general public
  - Collaborations with many departments across the Hospital
Research Involvement

- Constantly assess the use of radioactive material in permitted labs – 19 different isotopes used

- Official visits and help anytime it’s needed!

- Dosimetry, Geiger Counters, Waste Disposal, Training, Emergency Response
Metrics

- 145 Research permits
- 51 Irradiator permits
- 8,536 survey visits to 639 commissioned labs
  - 22,784 survey measurements
- 101 audits
- 360 Geiger counter calibrations
- 98.85% of monitored researchers received < public dose limit of 100 mrem/year
Goals for the Future

• Streamlining processes for users
• Introducing new technology
• Increased technical consulting
• Continued emphasis on customer service and compliance
Contact

- RSO: Rex Woodleigh 4.4577
- Assistant RSO & Research Contact: Tara Medich 4.4578
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Policy Management Conversion

John Belknap
Kelly Staples
MGH Compliance Office

September 29, 2014
MGH/MGPO Policy Management

- MGH/MGPO Corporate Compliance is responsible for managing the hospital's overall policy collection.
  - We manage the vendor relationship.
  - We oversee the Administrative policy manual.
  - We coordinate with others who oversee their own policy manuals.

- Each policy manual has owners and content workers who are responsible for organizing the process of policy review, approval, formatting and revising.

- MGH has used Trove to manage and store policies for over ten years.
About MCN Healthcare (ellucid® Policy Manager)

- MCN Healthcare is a US-based company headquartered in Colorado.
- There are over 25,000 organizations worldwide using MCN’s regulatory compliance software.
- MCN has over 26 years of providing regulatory compliance products to the healthcare industry.
- MCN maintains a Policy Compliance Library that is specific to the healthcare industry.
ellucid® Policy Manager - Features

Easy Searching:
- Most relevant documents will be presented first and can be filtered by manual
- Users have the option to define what and where to search (e.g. by manual, document title, keywords, document content)

Easy Access:
- Publishes documents in PDF.
- Link policies to external websites and resources
- Link policies to other procedures, guidelines, and policies within policy manager (ensures policies are always current)

New (and user-friendly) Automation:
- Optional scheduling and reminders of policy review and editing tasks
- Archiving of previous versions of policies and procedures
Why ellucid® Policy Manager?

- The ellucid® Policy Manager is tailored to the needs of Healthcare organizations, thus will enable MGH/MGPO to:
  - Streamline policy management activities
  - Minimize compliance risk by prompting policy updates
  - Improve Accountability
  - Effectively track process workflow in a systematic way
  - Manage approval/historical information in a seamless manner
Things to Know

- Wave 1 Go Live this Fall 2014
- BWH, BWFH will also have policies on ellucid
- Link to policies will live under Partners Applications
- Accessibility
  - MAC accessible (laptop, desktop, ipad, iphone)
  - Will be available remotely as was Trove, through authentication: VPN, GoToMyPC, etc.
  - Adobe Reader (to view documents), Javascript (to view some sections of Policy Manager), and Adobe Flash (for training videos) required
  - Web browser compatibility: Chrome, Firefox, Internet Explorer (version 8 and above) but NOT Safari
Currently working with policy owners/managers who keep their policy collections on Trove Library and who will transition to MCN ellucid in the fall.

All current Trove policy owners will be using ellucid® Policy Manager.

Training
- End users
  - Optional HealthStream e-learning
  - Video tutorial available on MGH/MGPO ellucid site
- Manual owners – train the trainer approach
ellucid® Illustration – All users
Home Screen

Welcome to Policy Manager

Click On Your Campus Below:

- BRIGHAM AND WOMEN'S Faulkner Hospital
- BRIGHAM AND WOMEN'S HOSPITAL
- MASSACHUSETTS GENERAL HOSPITAL
- MASSACHUSETTS GENERAL PHYSICIANS ORGANIZATION
ellucid® Illustration – All users
Advanced Search view

Please enter a search term

End User
Menu Selections

Policy Owner
Menu Selections
ellucid® Illustration – All users
Advanced Search results for entry “fire”
Available manuals when *Browse Manuals* is selected

- **MGH MGPO**
  - Administrative Policy and Procedure Manual (MGH MGPO)
  - Clinical Policy and Procedure Manual (MGH MGPO)
  - Guidance Documents (MGH MGPO)
  - Human Resources (MGH MGPO)
  - Imaging (MGH MGPO)
  - Implementation Manual (Global, MGH MGPO, Brigham and Women's Hospital, Women's Faulkner Hospital)
  - Infection Control (MGH MGPO)
  - Infection Control Department Specific Policies (MGH MGPO)
  - Medication Manual (MGH MGPO)
  - NICU (MGH MGPO)
ellucid® Illustration – All users
Policies within the Administrative Policy and Procedure Manual
Assigned quiz
Signature only attestation

Click Here to Sign Off

Your signature is required to verify that you have read this document (due: 11/22/2012)

I hereby acknowledge I have read and understand this policy and/or changes.

Yes

No

SUBJECT: DOMESTIC VIOLENCE ASSESSMENT AND REPORTING
DEPARTMENT: FACILITYWIDE
APPROVED BY:
ellucid® Illustration – All Users
MCN online Help screen for users
ellucid® Illustration – All Users
MCN feedback screen for users

This is the best way to contact the MCN Healthcare staff directly. Logging problems through this form allows us to work quickly and efficiently to answer questions or resolve issues.

Click here to visit the MCN Healthcare Policy Manager Forum.

You can also contact us by phone or fax:
Toll free: 800-538-6264
International: +1-303-762-0778
Fax: 303-762-0774

Feedback Type: Please select Feedback Type

Your Name: Kelly Staples

Subject:

Your Email Address: kstaples@partners.org

Reply: I do not want to receive a reply to my feedback.

Comments:
For additional information, contact Project Managers:
Kelly Staples at kstaples@partners.org or 617.643.5493
Julia C. Austin, MBA at jcaustin@partners.org or 617.726.5109

MCN ellucid Policy Manager captivate (interactive), click on below link:
https://imagestore.ellucid.com/Longer%20overview/Longer%20overview.htm

1st Round Group anticipated Go Live in Fall 2014!
Questions
&
Thank you!
Discussion!

Questions?