1. **PURPOSE:** To establish policy and procedures for the VA Maryland Health Care System (VAMHCS) Research and Development (R&D) Service to follow in the event of an internal or external disaster or emergency. VA R&D laboratories at approved off-site locations and VA research laboratories in leased space at University of Maryland follow the emergency policy/procedures of that location.

2. **POLICY:** In the event of a community or VAMHCS emergency, the R&D Service will provide support in carrying out the Medical Center Emergency Operations Plan (512-001/OPS-112). R&D Service personnel will be familiar with the responsibilities and procedures contained in the Medical Center Emergency Operations Plan and the R&D Service Disaster/Emergency Preparedness Plan (this plan).

3. **RESPONSIBILITY:** The Chief, R &D Service is responsible for ensuring that all R&D employees and Without Compensation Staff (WOCs) are trained to respond appropriately to an emergency or disaster event. The Deputy Service Chief is responsible for maintaining the R&D Service Callback Plan. It is the responsibility of all R&D Service personnel (both VA employees and WOCs) to be familiar with this plan and to carry out their duties in the event of a declared emergency or disaster.

4. **ACTION:** The VAHMCS Director will notify the Operator or Medical Administration Officer (MAO) to initiate the Cascade Callback Plan or VANS for the VAMHCS in the event of a declared emergency or disaster event.

   a. **IMPLEMENTATION:** (On and Off Duty)

   (1) In the event of an emergency/disaster, the R&D Service will follow the hospital plan as stated in the Medical Center Emergency Operations Plan and this R&D Service Plan.

   (2) In an emergency situation such as a fire, explosion, or large-scale release of chemical/infectious agent/toxin, employees are instructed to dial x6999 to report the event through the operator and to pull the red fire alarm. The R&D Administrative Office should also be notified immediately. R&D Service Administrative senior management personnel will respond to the scene and coordinate response and communication with the Emergency Management Coordinator, R&D lab staff, other hospital services and first responders if necessary. The hospital Emergency Management Coordinator assumes responsibility of the situation until appropriate first responders arrive.

   (3) The order of notification for R&D Service is:
b. EMERGENCY MANAGEMENT:

(1) Third Floor Research Laboratories:

The 3rd floor research laboratories contain a variety of chemical, biological and or radioactive hazards. Specific hazards are identified on Research Protocol Safety Surveys and laboratory chemical inventories.

If there is no impending harm to personnel: laboratory staff working with radioactive materials will secure all isotopes in use before exiting and locking laboratories; laboratory staff working with infectious agents will secure their work materials, place specimens in appropriate storage and await further instructions; laboratory staff will power down any electrical equipment that can be shut down before leaving their laboratories. If the potential for harm to personnel is present evacuate the area immediately, close doors and move to a safer area. While on standby, employees will provide support for Laboratory Service or the Manpower Pool when and if required.

Each laboratory is responsible for designating a person and a backup who are responsible for making sure that all laboratory employees have evacuated and that all laboratory doors are locked in the event of an emergency. If safe to do so, staff should check in surrounding labs to ensure that all personnel have evacuated. In the case of an emergency/disaster the central meeting place is in the Research Service Conference Room (3C-138) or, if the 3rd floor lab area is evacuated, the meeting place will be the R&D Administrative Office (3D-150). If we are forced to exit the building, the outside centralized meeting location will be at the corner of Greene and Fayette Streets.

Research Emergency Coordinators:

3rd floor - Tom Bowen - ext.4848
4th floor – Heidi Ortmeyer - ext. 5419
6th floor – Jennifer Alisea - ext. 7373

If security locks are disabled (as in the case of a fire alarm) VA Police and Research Administrative staff will monitor access to the 3rd floor labs and Animal Research Facility.
2) **Animal Research Facility (ARF) and ABSL-3 Facility**

The Animal Research Facility (ABSL-2) located on level BB of the hospital houses small animals infected with animal and human pathogens. The area also contains chemicals, compressed gases and inhalant anesthetics.

The Animal Biosafety Level 3 (ABSL-3) facility is located within the main animal research facility. The ABSL-3 may house rodents infected with animal and human pathogens and contains laboratories for working with these agents in their active infectious form. Ultralow freezer storage for these pathogens and infected animal carcasses is also contained in this area.

The emergency management plan for the Animal Research Facility (ARF) is described in the “Research Service Emergency Protocol – Animal Facility”. The emergency management plan for the ABSL-3 is described in detail in the ABSL-3 document: “Biological Agent Incident Response Plan”. The plans include specific descriptions of anticipated failures, hazards, and response interventions.

Based on the type of emergency, staff will immediately enact the Emergency Response Cascade or VANS delineated in their area emergency response plans. In extreme situations (such as a fire, explosion or large-scale release of chemical/infectious agent/toxin) employees are instructed to dial x6999 to report the event through the operator to pull the red fire alarm.

In the event of an evacuation and if time allows, staff will secure animals and working materials and power-down equipment. Staff will “stand by” to await further directions. If conditions merit, staff should evacuate the facility. The ARF and/or ABSL-3 manager(s) will assure that all staff are accounted for and that all facilities are locked after last person exits. All staff will meet at the entrance to the ARF and, if that location is not safe, they will report to the hospital loading dock. If that location is also not safe, staff will report to the front of the Bressler Research Building on Baltimore Street. (655 W. Baltimore St.)

3) **SPECIFIC EVENTS:**

(1) **Hazardous materials spill or contamination:** staff should contain the spill using proper containment materials while wearing the proper protective equipment. If containment is not possible, close all doors, notify surrounding staff, and evacuate lab personnel as necessary. Notify the R&D Administration Office at ext. 7130 and the Safety Office at ext. 7020/ 4014/ 4548/ 7032. When Safety Office personnel arrive on the scene, all staff will follow their direction. In the event that any emergency is or might be the result of theft or intentional release of hazardous agents, the VAMHCS Police Service will be notified immediately as well as the other individuals in the callback cascade.

(a) **Chemicals:** In the case of an emergency or work area contamination, staff must follow the Research Service Chemical Hygiene Plan. If time allows, secure chemicals in appropriate storage cabinets.

(b) **Isotopes:** In the case of an emergency or work area contamination, the Radiation Safety Officer (RSO) will be notified immediately. Responsible staff should contain and
decontaminate the spill according to instructions from the RSO. Spills (Attachment 5) will be handled according to the VAMHCS Radiation Safety Policy (512-001/ops-116).

(c) Biological Agents: In the case of an emergency or work area contamination, ABSL-3 staff must follow the ABSL-3 Biological Agent Incident Response Plan (Reference #10).

(2) Utilities Systems Failure: In the event of a utilities system failure, R&D Service staff is advised to refer to the Utilities Failure Management Plan for the R&D Service (see Reference #9). Actions related to specific failures are described in this plan. In general, however, staff must secure and/or evacuate the area and notify the Engineering Service and the R&D Office.

(3) Injury or Toxic Exposures: Emergency medical staff should be called to the area immediately in order to triage for medical interventions. As appropriate, decontamination, isolation and first aid measures are undertaken at the scene. If appropriate, affected individual(s) are taken to the Emergency Room for treatment. If the Emergency Room of the hospital has been affected, injured/exposed individual(s) are taken to the University of Maryland Medical Center, or to mobile first aid units, whichever is closer. Isolation measures are to be maintained as appropriate throughout the transport and treatment procedures.

4) STAFF AND EMPLOYEE TRAINING: VAMHCS safety staff and the R&D Service offer emergency preparedness training classes two times each year specifically for research personnel. These training sessions review hospital and Research Service policies and procedures on: hazard-specific interventions, use of personal protective equipment, notification of appropriate administrators and response personnel, etc. Several times per year, the Medical Center conducts disaster and fire drills in which research staff are included and during which they are educated on appropriate responses.

5) PROGRAM EVALUATION: Throughout the year, relevant VAMHCS Services conduct impromptu assessments of staff knowledge and laboratory safety. In addition, annual vulnerability self-assessments are conducted by the R&D Service to identify high-risk areas, sensitive materials, and physical security issues. These assessments include, but are not limited to: physical security, access security, utility system security, security of hazardous agents, information security, and effectiveness of staff training. Vulnerability assessments are also conducted after any serious incident.

Reports of these assessments are evaluated by a multidisciplinary team consisting of R&D personnel, a representative from VA Police Service, the facility Safety Officer, Safety Manager, Radiation Safety Officer, and Industrial Hygienist. Corrective action plans are designed and implemented to remediate vulnerabilities to intrusions and/or terrorist events as well as anticipated workplace events and to revise staff training appropriately.

The information and knowledge developed from results of disaster drills, from staff assessments, and from quarterly Hazardous Materials and Waste Management reports to the Environment of Care Committees are reviewed by the SRS to identify issues for action and improvement.

5. REFERENCES:

(1) Research Service Laboratory Safety Manual
6. **RESPONSIBLE OFFICE:** The Chief, Research & Development Service (151/R&D) is responsible for the contents of this standard operating procedure.


8. **RECERTIFICATION:** This document is scheduled for review and approval on/before the last working day of November 2015.

Christopher T. Bever, Jr., M.D., M.B.A.
ACOS for R&D

**ATTACHMENTS:**

1. Important Telephone Numbers
2. Cascade Callback Roster
3. Hazardous Materials/Wastes Spills or Leaks Flowchart
4. Mercury Spill Procedures
5. Radiation Spills
ATTACHMENT (1)

IMPORTANT TELEPHONE NUMBERS

EMERGENCY / FIRE – Ext. 6999
HOSPITAL POLICE: Ext. 7300
AFTER HOURS MEDICAL ADMINISTRATION Officer (MAO): Ext. 7316/5144
OCCUPATIONAL HEALTH OFFICE: Ext. 4323 ROOM 1D-118

VAMHCS SAFETY OFFICE
FACILITY SAFETY OFFICER: Emmanuel Mbong – Ext. 4548/7020, Pager 410-447-4470
FACILITY INDUSTRIAL HYGIENST (IH): John A. Barnes- ext. 4014
RADIATION SAFETY OFFICER (RSO): Oscar James – Ext. 7032; Cell 410-804-0225
EMERGENCY MANAGEMENT COORDINATOR – Dawn Ivancik- Ext. 7756
Cell 410-924-4066
RESEARCH SERVICE SAFETY OFFICER – Grazyna Zaidel-Ext. 6518

RESEARCH ADMINISTRATION
RESEARCH ADMINISTRATIVE OFFICE: Ext. 7130
RESEARCH LABORATORY COORDINATOR: Tom Bowen – Ext. 4848; Cell 410-302-6566
DEPUTY ACOS/R&D: Miriam Smyth, Ph.D. – Ext. 6510; Cell 443-252-0642

RESEARCH COMPLIANCE
RESEARCH COMPLIANCE OFFICER: Claudia MacAuley - Ext. 6544 – CELL- 410-459-4737

ANIMAL FACILITY
ANIMAL FACILITY SUPERVISOR: Virginia Bohrer – ext. 6426/6427 home; (410-284-3294)
ANIMAL FACILITY VETERINARIAN: VMO Louis DeTolla 410-706-3540
                                                Cell 443-677-9028
                                                Attending Veterinarian 443-677-9034 or 410-382-1888
                                                Vet on call afterhours/ weekend / holiday phone 443-835-9841
ABS-3 FACILITY DIRECTOR: Bob Rohwer, Ph.D. – Ext. 6462; Cell 443-472-2084
ABS-3 BIOSAFETY OVERSIGHT: Irena Alexeeva – Ext. 6488; Cell 703-597-5955
ATTACHMENT (2)

R&D Service Emergency Contact List – November 2014
Cascade Callback Roster

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>Name</th>
<th>Office Location</th>
<th>Office Extension</th>
<th>Emergency Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D OFFICE</td>
<td>Dr. Miriam Smyth</td>
<td>3D-157</td>
<td>6510</td>
<td>410-923-1503 home 443-252-0642</td>
</tr>
<tr>
<td></td>
<td>Dr. Christopher Bever</td>
<td>3D-155</td>
<td>7130</td>
<td>410-663-1557 home 410-447-1264</td>
</tr>
<tr>
<td></td>
<td>Eva-Marie Austin</td>
<td>3D-150</td>
<td>6706</td>
<td>Cell 703-909-4974</td>
</tr>
<tr>
<td></td>
<td>Tom Bowen</td>
<td>3D-148</td>
<td>4848</td>
<td>Cell 410-302-6566</td>
</tr>
<tr>
<td>RADIATION SAFETY</td>
<td>Oscar James</td>
<td>6D-191</td>
<td>7032</td>
<td>410-804-0225 cell 410-273-0547 home</td>
</tr>
<tr>
<td>BIOSAFETY</td>
<td>Melissa Morland</td>
<td>UM</td>
<td>410-706-7845</td>
<td>410-706-7055</td>
</tr>
<tr>
<td></td>
<td>University Police</td>
<td></td>
<td></td>
<td>410-706-6882 Communication Officer PCO will know the EHS on-call staff</td>
</tr>
<tr>
<td>CHEMICAL SAFETY</td>
<td>Grazyna Zaidel</td>
<td>3C-110</td>
<td>6518</td>
<td>Cell 410-919-8698</td>
</tr>
<tr>
<td>ANIMAL FACILITY</td>
<td>Ginny Bohrer</td>
<td>BB-147</td>
<td>6426</td>
<td>410-284-3294 home</td>
</tr>
<tr>
<td>VMC VETERINARIAN</td>
<td>Ned Kriel</td>
<td>BB-147</td>
<td>6426</td>
<td>410-284-3294 home</td>
</tr>
<tr>
<td>Veterinarian On Call</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMO</td>
<td>Louis Detolla, VMD</td>
<td></td>
<td>410-706-8536</td>
<td>443-677-9028 cell 443-677-9034 cell 443-835-9841 cell</td>
</tr>
<tr>
<td>INFECTION CONTROL</td>
<td>Kathy Agnes</td>
<td>6D-160</td>
<td>7471</td>
<td>410-447-0506</td>
</tr>
<tr>
<td>NEEDLE STICK HOT LINE</td>
<td></td>
<td></td>
<td></td>
<td>410-447-STIK</td>
</tr>
<tr>
<td>INDUSTRIAL HYGIENIST</td>
<td>John A. Barnes</td>
<td>Baltimore</td>
<td>Ext. 4014</td>
<td></td>
</tr>
<tr>
<td>FIRE SAFETY</td>
<td>Emanuel Mbong</td>
<td>6D-190</td>
<td>4548</td>
<td>410-449-4470</td>
</tr>
</tbody>
</table>
HAZARDOUS MATERIAL / WASTES SPILLS OR LEAKS

Class I Spill or Leak: Spills easily cleaned up by the spill user by neutralizing or absorbing with absorbent material, cloth or towel. Spills of generally less toxic agents.

Class II Spill or Leak: All leaking gas cylinders and beyond a simple countertop spill. Spills or leaks of any size of acutely toxic or highly toxic agents.

Chemical Spill or Leak Occurs

Is the spill more than a countertop spill, a leaking gas cylinder or valve? Is it toxic or an extreme physical hazard?

No

CLASS I Spill

Can spill be safely contained?

Yes

Stop leak, prevent spread of spill, and take steps to prevent ignition if flammable.

Notify coworkers and immediate supervisor. Supervisor notifies safety office at Baltimore X7020

Neutralize spill if possible. Absorb spill with absorbent material or cloth. Place in appropriate container for disposal by the Safety Office.

No

CLASS II Spill

Immediately alert co-workers notify supervisor and dial EMERGENCY Number

Fire or explosion imminent? Respiratory hazard?

Yes

Stop leak or shut off leaking valve, if safe to do so.

Evacuate area. Secure doors where possible to prohibit entry by others. Render first aid to injured if necessary.

Await arrival of safety personnel. Advise nature and amount of spill or leak. Provide MSDS, if available. Fire Department will be summoned based on information.

No
MERCURY SPILL PROCEDURES

Mercury Spill Occurs

Immediately block off area to control pedestrian traffic. Do not attempt to clean up spill. If the spill came from a portable device, do not move it.

Notify immediate supervisor and advise co-workers not to enter the spill area.

Spill occurs during normal business hours (7:00am to 4:30pm)

- Yes: Contact Environmental Management Service
- No: Contact MAO to contact Environmental Management Service
Radioactive material spills can be classified as major or minor spills (see tables below). A minor radiation spill is one that the laboratory staff is capable of handling safely without the assistance of the RSO or emergency personnel. All other radiation spills are considered major.

**MAJOR SPILL**

<table>
<thead>
<tr>
<th>Action</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>TREAT INJURED</td>
<td>Treat injured personnel, and notify those not involved to vacate the room. Making sure they do not enter the contaminated zone</td>
</tr>
<tr>
<td>PREVENT SPREAD</td>
<td>Cover spill with absorbent pads, attempt to confine the spill and potentially contaminated personnel in one area until they have been monitored and determined to be free of contamination, do not attempt to decontaminate</td>
</tr>
<tr>
<td>SHIELD SOURCE</td>
<td>Shield the spill only if significant contamination or increased personnel exposure is probable.</td>
</tr>
<tr>
<td>SECURE ROOM</td>
<td>Control access to prevent entry by unauthorized personnel.</td>
</tr>
<tr>
<td>REPORT</td>
<td>Immediately notify the RSO at extension 7032 or cell# 410-804-0225.</td>
</tr>
<tr>
<td>DECONTAMINATION</td>
<td>Contaminated clothing shall be removed and stored in clean plastic bag. In the event the individual's skin is contaminated, wash thoroughly with appropriate radiation detector for residual contamination. Complete decontamination procedure with RSO assistance or guidance.</td>
</tr>
</tbody>
</table>

**MINOR SPILL**

<table>
<thead>
<tr>
<th>Action</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTIFY PERSONNEL</td>
<td>Notify persons in area that a spill has occurred</td>
</tr>
<tr>
<td>PREVENT SPREAD</td>
<td>Cover spill with absorbent paper/pads</td>
</tr>
<tr>
<td>DECONTAMINATION</td>
<td>Start by cleaning the areas of lesser contamination to areas of greater contamination with absorbent paper/pads, soap and water. Dispose contaminated waste in an appropriately labeled container</td>
</tr>
<tr>
<td>SURVEY</td>
<td>Check area around spill, hands, feet and clothing for contamination with appropriate survey meter, and repeat decontamination if necessary</td>
</tr>
<tr>
<td>REPORT</td>
<td>Notify the RSO promptly to document the occurrence for possible inclusion in the incident file and reporting to the RSC</td>
</tr>
</tbody>
</table>

A-5