



Laboratory fire alarm operation, silencing and resetting.

Added: Jun 26, 2023; **Last Modified:** Nov 15, 2023, _Version: 1.0_

This protocol describes the standardized operating procedure (SOP) for the operation, silencing and resetting of the Viral and Human Genomics Laboratory fire alarm. The Viral and Human Genomics Laboratory's fire alarm system consists of several wall-mounted manual activation controls (Honeywell Fire-Lite BG-12LX), several ceiling mounted sound alarms and strobe lights (Honeywell Notifier) as well as a smart central control panel (Honeywell ES-50X).



Manual activation control



Smoke sensor and flame



Audible alarm and strobe light



Smart central control panel

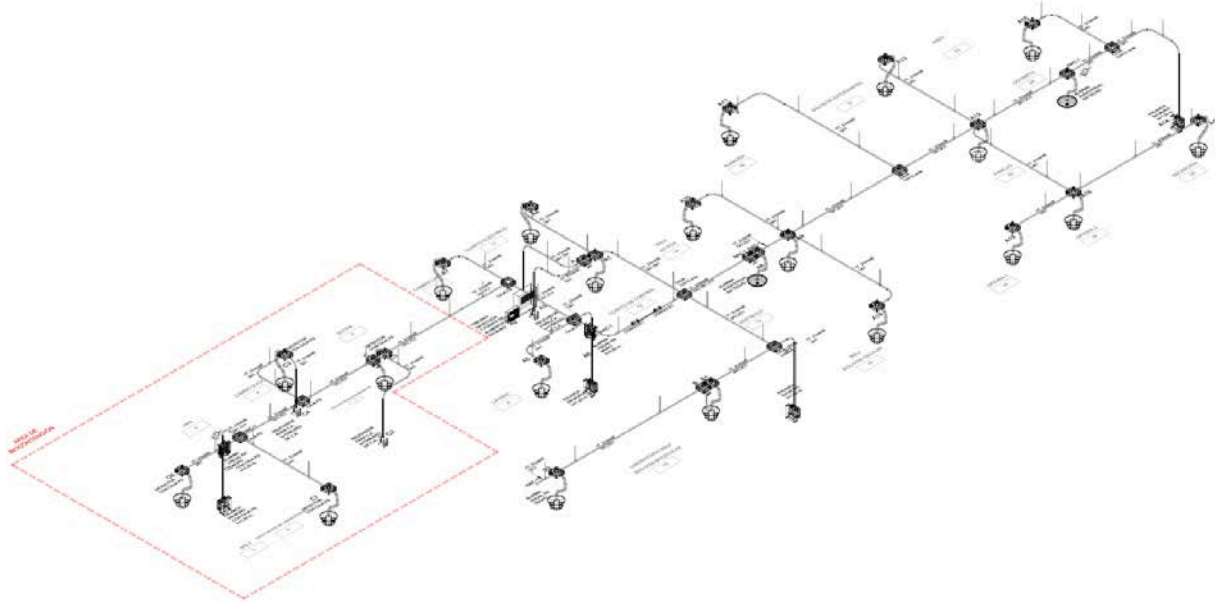
<i>Reception</i>	<i>Reception</i>	<i>Reception</i>	<i>Control room</i>
<i>Molecular biology lab</i>	<i>Office corridor</i>	<i>BSL-2 laboratory corridor</i>	
<i>Wash-up room</i>	<i>Student cubicles</i>	<i>Molecular biology lab</i>	
<i>BSL-3 suite</i>	<i>Principal investigator's office</i>		
	<i>Associate investigator's office</i>		
	<i>Warehouse</i>		
	<i>BSL-2 laboratory corridor</i>		
	<i>Cell biology lab</i>		
	<i>RT-PCR Lab</i>		
	<i>Molecular biology lab</i>		
	<i>Control room</i>		
	<i>Electrical cupboard room</i>		
	<i>Wash-up room</i>		
	<i>Clean anteroom</i>		
	<i>Dirty anteroom</i>		
	<i>BSL-3 suite</i>		
	<i>Decontamination chamber</i>		

Photograph, name, and location of each component of the fire alarm system





The alarm system has complete coverage of the interior area of the laboratory from reception to BSL-3 suite.



Distribution and coverage of manual controls, sensors, audible/visual alarms and control center.

How is the fire alarm activated?

The alarm can be activated by smoke or flame detection as well as manually through the manual activation control located in each laboratory area. If the alarm is triggered, an unavoidable audible and visual alarm will be activated in all laboratory areas.





What to do if you are in the office, students' cubicle, reception or kitchenette?

1. Suspend work immediately, do not try to collect your belongings.
2. Notify all staff and ask them to evacuate lab and wait outside the laboratory front door.
3. Use internal telephone extension to contact any person working inside the BSL-3 suite and notify them of the alarm and the recommended procedures (see next section on *What to do if you are in BSL-3 area?*).
4. Request a specific person to notify the laboratory manager or director using their mobile phone or by dialling 6684 through a telephone other than those of the Viral & Human Genomics Lab.
5. Tend to the CCTV monitor located in the principal investigator's office and try to identify the source of smoke or fire.
6. If you identify the fire and have proper training and experience in the use of extinguishers, inform the rest of the staff of your intentions, take the nearest extinguisher, and attempt to extinguish the fire.
7. If you do not have the proper training or experience in the use of fire extinguishers do not attempt to do so, evacuate the laboratory, and join the rest of the team outside the front door.
8. If the laboratory manager has tended to the alarm, follow their instructions. Do not attempt to return to the laboratory or remove your belongings.
9. If the person in charge of the laboratory has not tended to the alarm, evacuate all personnel to the centre of the Faculty of Medicine's main garden, ask one of those present to notify main administration of the alarm (and ask them to return to you with an update), wait for instructions from the laboratory director or fire brigade.
10. If no source of fire or smoke can be identified, ask the occupants of the laboratory on the following:
 - a. Was anyone carrying out procedures with flame or those which cause smoke generation.
 - b. Did anyone perceive smoke emanating from instruments or equipment.
 - c. Was anyone smoking natural or electronic cigarettes or generating dust.
 - d. Did anyone inadvertently activate manual alarm.





What to do if you are in a BSL-2 area (RT-PCR, Cell Biology, Molecular Biology, Wash-up room, Clean anteroom or Shower room)?

1. Suspend work immediately, do not try to collect your belongings, get dressed.
2. Notify all staff and ask them to evacuate lab and wait outside the laboratory front door.
3. Use internal telephone extension to contact any person working inside the BSL-3 suite and notify them of the alarm and the recommended procedures (see next section on *What to do if you are in BSL-3 area?*).
4. Tend to the CCTV monitor located in either the wash-up room (if BSL-3 clearance allows so) or in the principal investigator's office and try to identify the source of smoke or fire. Select your best evacuation route, either through laboratory front door or through rear emergency door.
5. If you identify the fire and have proper training and experience in the use of extinguishers, inform the rest of the staff of your intentions, take the nearest extinguisher, and attempt to extinguish the fire.
6. If you do not have the proper training or experience in the use of fire extinguishers do not attempt to do so, evacuate the laboratory, and join the rest of the team outside the front door.
7. If the laboratory manager has tended to the alarm, follow their instructions. Do not attempt to return to the laboratory or remove your belongings.
8. If the person in charge of the laboratory has not tended to the alarm, evacuate all personnel to the centre of the Faculty of Medicine's main garden, ask one of those present to notify main administration of the alarm (and ask them to return to you with an update), wait for instructions from the laboratory director or fire brigade.
11. If no source of fire or smoke can be identified, ask the occupants of the laboratory on the following:
 - a. Was anyone carrying out procedures with flame or those which cause smoke generation.
 - b. Did anyone perceive smoke emanating from instruments or equipment.
 - c. Was anyone smoking natural or electronic cigarettes or generating dust.
 - d. Did anyone inadvertently activate manual alarm.





What to do if you are in a BSL-3 area (Personal Protective Equipment Anteroom, BSL-3 Suite or Decontamination Chamber)?

1. Stop work immediately, remain calm and follow biocontainment procedures.
2. Notify all personnel located in the BSL-3 area of the alarm and ask them to follow your instructions.
3. Use internal telephone extension to contact reception or main office staff unless you have already been contacted by them. Follow the indicated procedures.
4. If you are handling risk group 2 or 3 infectious biological specimens, leave them within the biological safety cabinet and allow the cabinet to continue operating. **DO NOT TURN THE CABINET OFF!**
5. If you are handling infectious biological specimens of risk group 3 and receive the indication to **INACTIVATE BIOLOGICAL SPECIMENS**, use 0.5% Sodium Hypochlorite solution, leave them within the biological safety cabinet and allow the cabinet to continue operating. **DO NOT TURN THE CABINET OFF!**
6. Decontaminate the exterior of the personal protective equipment using 0.1% sodium hypochlorite or whatever disinfectant the biological agent, procedure, or BSL-3 activities require.
7. Enter the biological decontamination chamber directly without following the routine egress procedure through the BSL-3 anterooms.
8. Rapidly disinfect personal protective equipment again and remove it. Leave it on the floor. Help your peers in doing the same.
9. Exit the biological decontamination chamber together (a single opening of the door) and check the CCTV monitor for the location of the fire.
10. Select the best evacuation route based on the location of the fire.
11. Evacuate the lab and join the rest of the team at the labs front door or central garden.
12. Confirm that the laboratory manager has been notified.
13. If you identify the fire and have proper training and experience in the use of fire extinguishers, inform the rest of the personnel of your intentions, take the nearest fire extinguisher and attempt to extinguish the fire.
14. If you do not have the training or experience in the use of fire extinguishers, do not attempt to extinguish the fire, evacuate the laboratory and join the rest of the team at the labs front door or central garden.





15. If the laboratory manager or director has tended to the alarm, follow his instructions. Do not attempt to return to the laboratory or remove your belongings.
12. If the laboratory manager or director has not responded to the alarm, move all staff to the central garden, ask one of those present to notify main administration (and ask him to return with an update), await laboratory director's instructions or those of the fire brigade.
13. If no source of fire or smoke can be identified, ask the occupants of the laboratory on the following:
 - a. Was anyone carrying out procedures with flame or those which cause smoke generation.
 - b. Did anyone perceive smoke emanating from instruments or equipment.
 - c. Was anyone smoking natural or electronic cigarettes or generating dust.
 - d. Did anyone inadvertently activate manual alarm.

How to reset the manual activation control?

1. If any human error is identified at tripping the alarm and the absence of fire is certain, enter the laboratory and head to the control room.
2. Locate the control that was triggered, this can also be checked in the smart central control panel screen located in the control room (see below).



The control room is on the right behind the door marked as "Entry forbidden to unauthorized person".



14. Once inside the control room, look for *the alarm's central smart control panel* behind the server rack.



Location of the alarm's central intelligent control panel.

15. On the Central Smart Control Panel display, identify the area, sensor and type of activation that triggered the alarm.



In this example, the central smart control panel indicates that the alarm was caused by smoke detection in the electrical room.



16. Press the "ALARM SILENCE" button to turn off the audible and visual alarm.
17. Go to the affected area cautiously **TAKING CARE TO FEEL THE TEMPERATURE OF THE DOORKNOB BEFORE OPENING IT**. If it is hot **DO NOT OPEN THE DOOR**. Notify the laboratory manager immediately or request the presence of the fire department through extension 9111.
18. If the knob is not hot to the touch, go in and check the cause of the alarm (in the example above it was the raising of dust during cleaning activities that triggered it).
19. Extinguish source of flame or smoke if any.
20. Disconnect any electrical equipment that may have caused alarm.
21. Vent any dust or smoke present.
22. Press the "RESET" button on the central smart control panel for at least 3 seconds or until you hear auditory confirmation that it has been reset.
23. If the alarm was triggered by manual control activation, it will be necessary to restart the activated manual control before the alarm can be reset by pressing the "reset" button on the central intelligent control panel.

How to reset a manual fire alarm activation control?

1. Locate the control that was triggered, this can also be checked in the smart central control panel screen located in the control room (aforementioned).
2. Go to the key box located behind the Laboratory Warehouse door.
3. Remove the key marked "Manual Alarm Control Reset".
4. Open the triggered control with the key.
5. Reset the manual control button by raising the black switch to the right.
6. Lock the manual alarm control.
7. Press the "RESET" button on the central smart control panel for at least 3 seconds or until you hear auditory confirmation that it has been reset.





Place key in manual control



Inside the manual control.

Disclaimer

This document was drafted thanks to the generous support of the Mexican government through the National Council of Science and Technology (CONACYT), project #264326 "Complementary support 2015 for infrastructure related to safety, biosafety and laboratory certification". The content of this document is the sole responsibility of the authors and does not reflect the opinion of CONACYT or the Mexican government.

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Change history

- 1.0 Original document.

