

2020 EHS Checklist for Restarting Research Activities

This general laboratory checklist is intended to aid you and your research team as you plan to restart laboratory operations. This checklist will help to minimize potential disruptions and to ensure safety for all working in a research facility. For specific areas such as Radiation, Biological or Chemical Hazards, be sure to contact Environmental Health & Safety (EHS) for specific guidance (ehs@wpi.edu).

	<p>Read and acknowledge the "WPI Return to Campus Guidance" and the "WPI Research Lab Reopening Guidance"</p> <ul style="list-style-type: none"> Requirement includes the completion of a lab specific "Laboratory Reopening and Social Distancing Plan" written by the lab PI. <ul style="list-style-type: none"> Address issues with shared office, break and food preparation areas, laboratories & field locations Identify when cloth face coverings are appropriate when they are not allowed in the laboratory (e.g. When biological, radiological or acutely toxic materials, etc. are used by personnel in the laboratory.) Establish staggered schedules (AM vs PM, every other day, every other desk, etc.). Establish a laboratory disinfection policy for areas not maintained by Facilities staff. Requirement includes completion of two online training modules for all laboratory personnel.
	<p>Survey the laboratory for any unsafe conditions.</p> <ul style="list-style-type: none"> Chemical/Biological leaks, spills, or releases must be reported to WPI Police immediately at 508-831-5555. Supplies, equipment, glassware, and other items left out during the hibernation. Manage any expired, outdated, peroxide-forming, self-reactive, or other reagents with a limited lifespan appropriately. Secure, correctly label, and/or request a pickup of any hazardous wastes. Manage any biological wastes appropriately.
	<p>Confirm all chemicals and glassware on the benchtops or stored in cabinets are still secured.</p> <ul style="list-style-type: none"> If damaged chemical containers or spills are found get out of the lab and contact WPI Police immediately at 508-831-5555. EHS will be contacted by WPI Police to assess the conditions.
	<p>Review any ongoing experiments that were running during the hibernation that could have been affected by loss of electricity, water, etc.</p>
	<p>Ensure chemical fume hoods are functioning properly before use.</p> <ul style="list-style-type: none"> If fume hoods do not appear to function contact Facilities at 508-831-5500 and do not use the hood.
	<p>Ensure biological safety cabinets (BSC) are functioning properly. If not, contact EHS at ehs@wpi.edu and do not use the BSC.</p>
	<p>Ensure that all refrigerators, freezers, and incubators are functioning properly.</p>
	<p>Ensure any essential equipment that was on emergency power is functioning properly.</p>
	<p>Ensure any sensitive electrical equipment that was shut off and unplugged is functioning properly.</p>
	<p>Review equipment operation safety.</p> <ul style="list-style-type: none"> Review equipment manuals for safe startup instructions. Review equipment state and safely release any stored-up energy sources.
	<p>Ensure any unplugged non-essential electrical devices particularly heat-generating equipment such as hot plates, stir plates, vacuum pumps, or ovens are functioning properly.</p>
	<p>Confirm Dewar's and cryogen containers that were used for sample storage and critical equipment are still filled.</p>
	<p>Confirm that storage of perishable items that used alternate cooling methods (e.g. liquid nitrogen, dry ice, etc.), vulnerable items that were put in storage units that have power backup systems, or items that were stored in duplicate locations are still secured and safe.</p>
	<p>Check containers of chemicals, biohazardous, radioactive materials, and hazardous waste are still properly labeled, closed, and secured in appropriate storage areas.</p>
	<p>Check infectious material and toxins that were put away for storage are still secure.</p>
	<p>Check all gas cylinders to ensure that they are still secured and valves closed.</p> <ul style="list-style-type: none"> Ensure regulators are still not attached and caps are still in place on cylinders. Ensure natural gas lines in the laboratory are still closed.
	<p>Ensure that all water sources (e.g. circulating water baths, aspirators, etc.) are not leaking.</p>
	<p>Return any elevated equipment, supplies, electrical wires, or chemicals that were off the floor to protect against flooding from broken pipes.</p>
	<p>Contact the vivarium staff to ensure animals used in your research have been cared for and safe.</p>
	<p>If necessary, restore any backed up secure data and turn on non-essential/non-critical computers and equipment.</p>
	<p>Return stored laboratory notebooks and computers in areas that may have been impacted by possible broken water pipes.</p>
	<p>Return any secured laptop computers or other easy to remove electronic devices.</p>
	<p>Review safety procedures.</p> <ul style="list-style-type: none"> Review/update any internal laboratory hazard analysis. Review/update the Chemical Hygiene Plan, Radiation Safety Manual, Biosafety Manual, and any other Standard Operating Procedures.
	<p>Review any shared facilities, such as microscopy areas, analytical laboratories, etc., for any use restrictions.</p> <ul style="list-style-type: none"> Delays due to start-up procedures. May have restricted schedules to accommodate social distancing.
	<p>WPI is attempting to centrally acquire, store and distribute essential supplies needed for research activities. However each lab should prepare for supply chain disruptions and limited availability by both WPI's central stockpile and at the local/national distributors. (Don't assume others on campus will be able to get supplies that you need).</p> <ul style="list-style-type: none"> Recognize that order placement may be slower as the volume of requests increases. Plan for limited sales of high demand items. Plan for limited Personal Protective Equipment availability (including N95s, face shields, and gloves). Plan for some reagents having limited availability. Plan for some consumables having limited availability.