OVERVIEW: The purpose of this document is to provide guidance to faculty who wish to conduct teaching demonstrations or research activities from home. Faculty are expected to follow all standard safety precautions when conducting these activities. Remember that your behavior impacts your personal safety and health along with others present in the home.

GENERAL INFORMATION: The use of online demonstrations, simulations, and video footage for remote instruction is strongly encouraged. There are also a variety of “lab kits” produced for remote instruction that may meet the needs of faculty members. These options should be thoroughly evaluated and favored over the completion of alternative demonstrations within the home whenever possible.

PERMITTED ACTIVITIES IN THE HOME: The attached table has been developed in order to provide guidance to faculty members who wish to perform teaching demonstrations or research from home. Information is provided for biological, chemical, physical, and radiation hazards. The following three-tiered approach has been developed for each hazard category:

- **Tier 1 Activities** are permitted to be conducted outside of a University lab, shop, or research setting and can be completed without obtaining prior approval.
- **Tier 2 Activities** need to be reviewed and approved by EHS prior to being conducted outside of a University lab, shop, or research setting. Please submit detailed requests for review to psuehs@psu.edu.
- **Tier 3 Activities** are not permitted to be conducted outside of a University lab, shop, or research setting.

Any proposed activities which are not listed in the table should be referred to EHS at psuehs@psu.edu for further evaluation.
## COVID-19 Teaching Protocols

### EHS Guidance for Research or Teaching Demonstrations Outside of a University Lab, Shop, or Research Setting

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Tier 1 Activities (Approved for completion outside of a University lab, shop, or research setting)</th>
<th>Tier 2 Activities (Need to be reviewed and approved prior to completion outside of a University lab, shop, or research setting)</th>
<th>Tier 3 Activities (Not to be performed outside of a University lab, shop, or research setting)</th>
</tr>
</thead>
</table>
| Biological      | - Use of home “lab kits” previously approved by EHS and Risk Management for remote instruction  
     - Microbiology using bakers/brewer’s yeast  
     - Fermentation-based food science  
     - Insect and plant work NOT subject to APHIS or quarantine policies  
     - Backyard ecology  | - Use of home “lab kits” not previously approved by EHS and Risk Management for remote instruction  
     - Spotted lanternfly work (preexisting projects)  | - Any work with BSL-2 pathogens  
     - Work with human blood or body fluids  
     - Vertebrate animal work  |
| Chemical        | - Use of home “lab kits” previously approved by EHS and Risk Management for remote instruction  
     - Fundamental “kitchen chemistry” using consumer products that do not contain hazardous chemicals  | - Use of home “lab kits” not previously approved by EHS and Risk Management for remote instruction  
     - Chemistry using small quantities of consumer products that may contain hazardous chemicals  | - Use of flammables in excess of small quantities  
     - Use of any explosives, corrosives, compressed gases, cryogenic materials, toxic gases, pesticides, or other highly hazardous chemicals  |
| Physical        | - Use of home “lab kits” previously approved by EHS and Risk Management for remote instruction  
     - Use of “low hazard equipment” including non-powered hand tools, low and medium power tools, and small bench top tools (see Appendix A of PSU Machine Shop Safety Program for examples)  
     - Low voltage work (< 50 volts)  | - Use of home “lab kits” not previously approved by EHS and Risk Management for remote instruction  
     - Use of 3D printers  
     - Use of household open flame sources such as candles or matches outside of approved kits  
     - Generation of high noise levels  
     - Activities which create the potential for excessive physical exertion or strain  | - Use of “medium hazard equipment” or “high hazard equipment” including powerful portable tools, light industrial tools, and large industrial tools (see Appendix A of PSU Machine Shop Safety Program for examples)  
     - Any work involving non-household open flames outside of approved kits (no welding, torch cutting, use of Bunsen Burner, etc.)  
     - Medium or high voltage electrical work (> 50 volts)  |
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| Radiation       | - Use of portable survey instruments for detection of naturally occurring radioactivity or cosmogenic radiation  
                  NOTE: This includes only the radioactivity hazards. Chemical hazards of any experiment or demonstration need to be considered separately. | - Transportation or use of any GL (generally licensed) radioactive materials off University property  
                  - Transportation or use of any exempt-quantity sealed source materials  
                  - Any work with radioactive materials  
                  - Purchase of any radioactive materials (including check sources or GL items) | - Any work with dispersible radioactive materials  
                  - Any work with special nuclear materials (including naturally occurring materials with sufficient quantities of uranium or thorium to be considered source materials)  
                  - Any work with materials licensed under Penn State’s broad scope radioactive materials license  
                  - Any work that results in dose rates above 2 mrem/hour  
                  - Any use of radiation producing equipment (x-rays, accelerators, or similar equipment)  
                  - Work with radioactive sample media |

- No elevated work from unguarded surfaces (guardrail or edge protection required)