

| Harvard Summer Program Immunology Project Resource Information Form | |
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| Title | Immunity and Bio-terrorism |
| Resource Type | <input type="checkbox"/> Lesson Plan <input checked="" type="checkbox"/> Activity <input type="checkbox"/> Lab Activity <input type="checkbox"/> Web-quest |
| Description | Immunity and Bio-terrorism is a project that allows a teacher to use the topic of Bio-terrorism to introduce interest microbes. Students investigate the topic through an assigned website. The teacher can then study bacteria and virus differences and/or proceed into further depth into immunity. |
| Author(s) | Sandi Haracz Gil |
| Author Institution(s) | Harvard University |
| Objective | To use a current topic to begin a study of bacterial and viral microbes To be able to use the topic to stimulate further study in immunity. |
| Key Concepts | Bio-terrorism, characteristics of bacteria and viruses, principles of immunity |
| Student Prep | None |
| Materials | Computer with internet access Materials for creating bacterial and viral model (optional) Pen or pencil Paper |
| Grade level(s) | Grade 10; advanced for going further |
| Teacher Prep Time | 30 minutes to run through the program |
| Class Time | One class to cover the bio-terrorism One class to review bacteria and virus Going further: 1-3 class periods |
| National Standards | Science –content standard-The severity of a disease is dependent on many factors. Science in personal/social perspectives-natural and human induced hazards |
| State Standards | MA frameworks 2.1 Relate cell parts/organelles 4.2 Human anatomy-describe how the function of individual systems are integrated to maintain a homeostatic balance in the body |

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| Sources | <p>www.bioedonline.org(Bio-terrorism, Superflu being brewed in the lab) www.biology.eku.edu (Bio 301 Blood and Body Defenses) www.biochem3d.com/anthrx.html www.pbs.org/wgbh/nova/aids/immune.html Newscientst.com/hottopics/bioterrorism (Anthrax)</p> |
| References | <p>web.ukonline.co.uk/webwise/spinneret/microbes/bacter.html</p> |
| Assessment | <p>included questions sheet page for bacterial identification</p> |