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| **Ultraviolet Light Safety** | | | | |
| **Purpose** | To provide information and guidelines for the safe use of Ultraviolet (UV) Light to protect the health of laboratory staff using or potentially exposed to UV radiation during their work activities. | | | |
| **Scope** | This policy applies to laboratory staff involved in activities where exposure to UV radiation is possible. | | | |
| **Sources** | Sources of UV light in the laboratory include germicidal lamps in biological safety cabinets (BSC) in Molecular and the UV lamp in Histology. | | | |
| **Hazards** | There are no immediate warning symptoms to indicate overexposure to UV radiation.  UV radiation generated by laboratory equipment can exceed recommended exposure limits and cause injury with exposures as brief as three seconds in duration.  Adverse health effects that may occur to the eyes or skin include erythema (sunburn), photokeratitis (a feeling of sand in the eyes), retinal burns, cataracts, melanoma, and skin cancer. | | | |
| **Guidelines to Minimize Exposure** | * Do not expose eyes and skin to direct UV light. UV radiation generated by the germicidal UV lamp in the BSC and the UV lamp in Histology can cause injury with only a few seconds of exposure. * Do not look directly at UV light. * Wear protective goggles (ANSI Z87.1 – 1989 UV certification).   Ordinary eyeglasses do not block UV light.   * Wear a fully buttoned lab coat and gloves if there is potential for skin exposure. * Keep the BSC sash closed when the germicidal UV lamp is in use. Never work in a BSC while the germicidal UV lamp is on. | | | |
| **Emergency Procedure** | If an accidental exposure to UV radiation occurs:   1. Immediately discontinue the use of the UV producing equipment. 2. Notify laboratory management no matter how minor the injury may seem. 3. Seek treatment at Employee Health Service or Abbott or United Emergency Department. 4. Complete Employee Incident Report. <https://starnet.childrenshc.org/forms/EmployeeIncident/> 5. Report all unsafe working conditions to laboratory management. | | | |
| **Supporting Documents** | [MCVI 3.2 Safety in the Microbiology/Virology Laboratory](http://khan.childrensmn.org/manuals/lab/sop/mcvi/safety/209731.pdf)  [1067.00 Work Related Injury/Illness Reporting and Management](http://khan.childrensmn.org/manuals/policy/1000/004975.pdf) | | | |
| **References** | 1. CLSI. *Clinical Laboratory Safety; Approved Guideline – Third Edition.* CLSI document GP17-A3. Wayne, PA: Clinical and Laboratory Standards Institute; 2012. 2. OSHA. Laboratory Safety Guidance. 2011. | | | |
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| **Historical Record** | **Version** | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** |
| 1 | Becky Carlson | 02/1991 | Initial |
|  | 2 | Becky Carlson | 07/11/93 |  |
|  | 3 | Kerstin Halverson | 06/07/04 |  |
|  | 4 | Carol Buhl | 07/17/15 | Reformatted to CMS.  Renumbered from 4.3.1.  Added Hazards.  Added Emergency Procedure.  Added Supporting Documents.  Updated References. |
|  | 5 | Lab Safety Committee & Carol Buhl | 05/25/17 | Added mercury lamp life expectancy. |
|  | 6 | Lab Safety Committee & Carol Buhl | 06/27/18 | Removed information and references to mercury lamps as they are no longer used in the lab. |