

Appalachian State University

Departments of Biology and Chemistry

Statement re Chemical Exposure and Health in University Laboratories

Introduction

The safety of our students and others that may visit or interact with activities in a university laboratory has always been the paramount concern of everyone in the Departments of Biology and Chemistry. This statement is being provided to inform students taking a biology or chemistry lab course about the chemicals they may be exposed to during the lab experience.

All students who enroll in a biology or chemistry laboratory course are required to read, understand, and adhere to all departmental laboratory safety rules and requirements before and during any work in any lab. All participants shall wear appropriate personal protective equipment (PPE) as defined by the Lab Safety Program and the instructor. Safety Data Sheets (SDS) and related safety information is available for all chemicals being used during the lab courses and a full set of SDS's may be provided to a student upon request. Students should immediately report any accident or injury in a university lab to their instructor(s). The safety precautions in place are to be followed by all students/participants as they significantly minimize health and safety risks for everyone participating in lab courses.

Students/Participants with Medical Concerns

Laboratory courses may present hazards that are not encountered in other classes. While instructors make every effort to design experiments and laboratory procedures that minimize risk, it is always possible that a student/participant may have a medical condition that warrants additional caution. Students or participants who have underlying medical conditions, including but not limited to certain respiratory issues, allergies, or pregnancy, may need to seek reasonable accommodations to ensure further risk mitigation during lab courses. While exposure levels to chemicals commonly encountered in a university teaching laboratory setting pose low or no risk to an adult, they can pose a significantly higher level of risk to students/participants with certain medical conditions or to a developing embryo or fetus.

The toxicological properties of many chemicals are not well studied, and often it is not known what exposure level is acceptable for participants with underlying medical issues. It is therefore prudent to limit unnecessary exposure to laboratory chemicals where possible. This is especially true for pregnant students/participants if the chemicals are mutagenic (cause damage to chromosomes) or teratogenic (cause birth defects and/or fetal death).

Process to Seek Accommodations

Any student enrolled in or wishing to enroll in a biology or chemistry lab course that has an underlying medical condition or concern, has allergies, respiratory issues, is pregnant, nursing, or anticipates becoming pregnant while taking the laboratory course should discuss the possible risks of exposure to chemicals in the lab with their personal physician. If a student or participant needs an accommodation to participate in any laboratory course, they should reach out to the Office of Disability Resources (ODR)

for assistance. ODR engages in a collaborative process and considers each individual's condition, the request, and the essential elements of Appalachian State University programs, services and activities in determining eligibility. Accommodations are determined individually and are intended to remove disability related barriers to ensure equal opportunities for participation. Accommodations may include appropriate academic adjustments, auxiliary aids/services, modifications to policies/procedures, and reasonable workplace accommodations.

By following the safety precautions in all laboratory settings, participants will ensure that there is no unnecessary chemical exposure in the laboratory that would cause injury to the student or others.