

Safety and Health Training

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Director, EHRS



Environmental Health and Radiation Safety Department

- Health Science Campus, Main Campus, Scott Park, Lake Erie Center and the UT Medical Center and associated clinics.
- Responsible for maintaining programs designed to protect your safety and health
- Controlling exposures, preventing injuries and illnesses

Injury and Illness Reporting

- Common injuries on campus
 - Needlesticks
 - Back Injuries, lifting patients/heavy items
 - Slips, trips, falls
 - Prompt reporting required



Prevention--Ergonomics

- Lifting technique
 - Use assist devices
 - Bend at knees
 - Avoid twisting and turning
 - Get help
- Desk Work
 - Avoid static postures
 - OSHA eTool (setup work area)



Additional Safety and Health Training

- Laboratory Safety
- Biological Safety
- LASER Safety
- Radiation Safety
- Maintenance Safety
- Emergency Preparedness drills
- Continuing Education on-line



UT Police Department



Patrol

full service, sworn police force with arrest power.

Investigations

Investigation of serious crimes.

Community Affairs

Education and programming like:

A.L.I.C.E. - (Alert Lockdown Inform
Counter Evacuate)

Healthy Boundaries – healthy relationship
education

University of Toledo Police
419-530-2600

Transportation Center (MC)
police.utoledo.edu

Follow UTPD on Facebook,
Twitter and Instagram

Hospital Security



- Full service security department.
- Responds to alarms, problem patients, and non-police calls.
- Provides assistance with lock-outs and battery jumps.
- Manages Lost and Found and HSC door access.



HSC Security

419-383-2600

Mulford Library 007

Fleet Safety

UT Drivers must have:

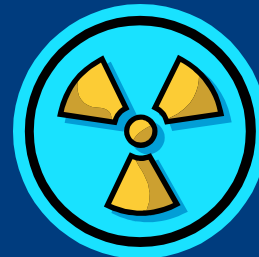
- Valid driver's license
- Driver's records check
- Complete driver safety training

And obey all traffic rules...



Hazardous Materials Awareness

- Physical Hazards
- Chemical Hazards
- Biological Hazards



Radiation Safety

- Radioactive Materials and radiation generating devices are managed by the Radiation Safety Office
- As Low as Reasonably Achievable (ALARA)
- Signage
- Monitoring (Dosimeter Badges)





ELECTRICAL AND MEDICAL EQUIPMENT SAFETY



Date ____/____/20____ Time ____:____

Biomed/Tech Support ID# 00

Name/Title _____

Dept/Floor/Unit _____

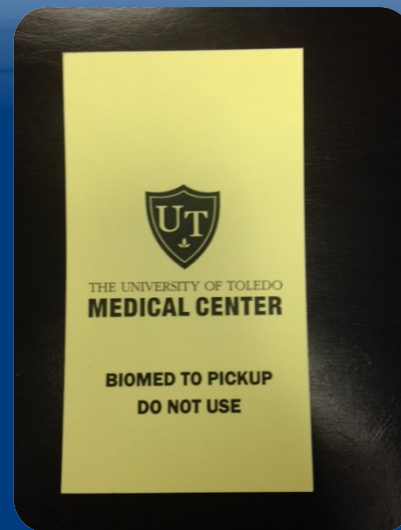
Phone _____

Problem:

<input type="checkbox"/> No power/won't boot	<input type="checkbox"/> No power/dead battery
<input type="checkbox"/> Lead/cable/cuff issue	<input type="checkbox"/> Fluid invasion
<input type="checkbox"/> Noisy/erratic signal	<input type="checkbox"/> Error code # _____
<input type="checkbox"/> Physical damage	<input type="checkbox"/> Alarming: _____
<input type="checkbox"/> Exposed wires	

Description of problem or other comments:

For service, please call Biomedical Engineering at #4899.
You may also enter an online work request using the Biomedical Engineering Service Request link on the Clinical Portal Resources page. (Online Work Order# _____)



Electrical Safety

- Report to your supervisor
 - Any and all malfunctioning electrical equipment
 - Any shocks received from electrical devices
 - Report any obvious electrical hazards
- Safe Medical Device Act (SMDA) and the Food and Drug Administration (FDA)
 - Anytime a patient is injured by a piece of medical equipment it must be reported to the FDA.



BIOLOGICAL HAZARDS

(Infection Control & Bloodborne Pathogens)



Bloodborne Pathogens of Most Concern

- Human Immunodeficiency Virus (HIV)
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Signs and Symptoms can include:
 - Loss of appetite, nausea, vomiting, fever, abdominal pain, jaundice etc.

What Do I Need To Do To Protect Myself?



Use Proper Hand Hygiene get vaccinated (HepB & Flu) available free to employees




Use appropriate Personal Protective Equipment (PPE) i.e. gloves, gown, mask, eye protection, or face shield, to shield from exposures


Standard Precautions


- A set of procedures designed by the Centers for Disease Control and Prevention (CDC) to prevent the spread of known and unknown sources of infections.
- Applies to blood; body fluids, excretions, and secretions of the skin; and oral mucosa.

Signage on Room (Can be Used in Combination)

DO NOT REMOVE SIGN UNTIL EVS IS NOTIFIED AND ROOM IS CLEANED ACCORDING TO POLICY

Contact Precautions






Private Room

All VISITORS please report to the Nurses Station.

Instructions:

- Wash hands on entering and leaving room with hand gel or soap and water.
- Personal Protective Equipment REQUIRED:
 - > **Gown & Gloves ALWAYS** when entering a room
- When transporting patient:
 - > Try to cover/contain area of infection on patient.
 - > NOTIFY RECEIVING DEPARTMENT OF ISOLATION PRECAUTIONS.



Infection Prevention and Control Department
Ext. 5006

UTPH 111 0519

DO NOT REMOVE SIGN UNTIL EVS IS NOTIFIED AND ROOM IS CLEANED ACCORDING TO POLICY

Contact Precautions - D





Private Room

All VISITORS Please Report to the Nurses Station

Instructions:

- Wash hands on entering room with hand gel or soap and water.
- Wash hands ONLY with soap and water when leaving room.
- Personal Protective Equipment **REQUIRED**:
 - > **ALWAYS** wear **Gown & Gloves** when entering a room.
- When transporting patient:
 - > Notify receiving department of isolation precautions.

HANDS MUST BE WASHED AFTER REMOVING GLOVES.



Infection Prevention and Control Department
Ext. 5006

NO Purell



Soap & Water only upon exit

UTPH 111 0519

Signage on Room (Can be Used in Combination)

DO NOT REMOVE SIGN UNTIL EVS IS NOTIFIED AND ROOM IS CLEANED ACCORDING TO POLICY

STOP Droplet Precautions STOP

Private Room
All VISITORS please report to the Nurses Station.

Instructions:

- Cleanse hands on entry and when leaving room with hand gel or soap and water.
- Personal Protective Equipment REQUIRED:
 > **YELLOW SURGICAL MASK**

(INDICATED WHEN WITHIN 3 FEET OF PATIENT)

- When transporting a patient:
 - > Apply surgical mask to patient.
 - > Limit persons on elevator.
 - > NOTIFY RECEIVING DEPARTMENT of isolation precaution.

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Infection Prevention and Control Department
Ext. 5006

UTH 11 0615

DO NOT REMOVE SIGN UNTIL EVS IS NOTIFIED AND ROOM IS CLEANED ACCORDING TO POLICY

STOP Droplet PLUS Precautions STOP

Private Room—DOOR REMAINS CLOSED
NO VISITORS. ESSENTIAL STAFF ONLY. Please report to the Nurses Station.

Instructions:

- Cleanse hands on entry and when leaving room with hand gel or soap and water.
- Personal Protective Equipment REQUIRED:
 - > **FACE SHIELD/GOGGLES/EYE PROTECTION**
 - > **N95/PAPR (for aerosolizing-generating procedures*)**
 - Must be placed in negative pressure for aerosolizing-generating procedures
 - > **SURGICAL MASKS (for non-aerosolizing-generating procedures)**
 - > **GLOVES**
 - > **GOWN**
 - **Wraps around back and fasten at neck and waist**

Remove gown, gloves, and eye protection before leaving room.
Remove surgical/N95 mask and discard on outside of room.

*Aerosolizing Procedures include, but are not limited to: bronchoscopy, intubation, oropharyngeal suctioning or other cough-generating procedures (see reverse for more information)

- Patient to be transported only with ID or IP&C approval:
 - > During transport: Patient wears surgical mask (Vent dependent patients should have a filter on ambu bag instead of wearing mask)
 - > NOTIFY RECEIVING DEPARTMENT of isolation precaution
 - > Nurse to transport patient
- Patient is not to be taken out of Droplet Plus without IP&C approval


UT HEALTH
THE UNIVERSITY OF TOLEDO
MEDICAL CENTER

Infection Prevention and Control Department **Pager: 419.218.3744**

UTMC 1530

Signage on Room (Can be Used in Combination)

STOP Airborne Precautions STOP
DO NOT REMOVE SIGN UNTIL EVS IS NOTIFIED AND ROOM IS CLEANED ACCORDING TO POLICY



**Private Room with negative pressure air exchange.
Door of room must be kept closed.**

All VISITORS please report to the Nurses Station.

Instructions:

- Cleanse hands before entry & when leaving room with hand gel or soap and water.
- Personal Protective Equipment REQUIRED:
 > **N95 RESPIRATOR MASK or PAPR HOOD**
- When transporting patient:
 > Apply surgical mask to patient.
 > Limit persons on elevator.
 > NOTIFY RECEIVING DEPARTMENT of isolation precautions.

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Infection Prevention and Control Department
Ext. 5006

Room Requirements:

- Private, monitored negative pressure.
- Call Infection Prevention if no negative pressure room available.

In addition to Standard Precautions, use Airborne Precautions for patients known or suspected to have serious illnesses transmitted by airborne droplet nuclei:

- Measles
- Tuberculosis

Illnesses which require Airborne Precautions combined with another type of precaution include:

- Herpes zoster (Shingles) – airborne & contact (disseminated in any patient or localized in immune-compromised patient)
- Chicken pox (Varicella) – airborne & contact (until lesions are crusted)
- SARS or MERS – airborne & contact, goggles (eyewear)
- Ebola – airborne & contact, goggles (eyewear)

PAPR cart obtained from central distribution.

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STOP Protective Precautions STOP
VISITORS: please visit the Nurses Station before entering the room.



Visitors are not permitted to visit if:

- Experiencing signs and symptoms of swelling or inflammation of the eye(s) and/or respiratory illness (fever, cough, sneezing, runny nose).
- Recently exposed to communicable diseases (chicken pox, measles, pertussis).

Instructions: Cleanse hands with hand gel or soap and water when entering and leaving the room.

Components of Protective Precautions include:

- Wear masks when entering the room if the patient has an ANC < 1,000.
- Plants and dried/fresh flowers are not allowed in the room.
- Healthcare workers with signs and symptoms of respiratory illness (fever, cough, runny nose) should avoid caring for patient. If care must be provided, wear a mask in the room.

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MEDICAL CENTER

Infection Prevention and Control Department **Ext. 5006**

Hand Hygiene

Hands are visibly dirty or contaminated with blood or other body fluids.



Wash hands with soap and water.

Hands are not visibly soiled



Use an alcohol-based hand rub for routinely decontaminating hands.

So, when must we clean our hands?

- ✓ Before & After Contact with Patient or Patient Environment
- ✓ Before and After Removing Gloves
- ✓ Before Eating & After Restroom
- ✓ Wash in and out of patient rooms or within 3 feet of the patient
- ✓ After manipulating biological samples

NOTE: Do not wear artificial fingernails or extenders when having direct contact with patients. Keep natural nail tips less than 1/4-inch long.

Bloodborne Pathogen Standard

- Exposure Control Plan
 - Located on Infection Control Website
- Exposure Determination
- Engineering and Work Practice Controls
- Personal Protective Equipment
- Housekeeping
- Contact Environmental Health & Radiation Safety for copy of regulatory text

Needlestick Prevention



- Contaminated sharps shall not be bent, recapped, or removed.
- Use a “No Touch Technique” when cleaning up blood and/or sharps.
- Do not place sharps in full sharps containers. Contact 419-383-5353 for disposal.
- Use a “No Pass Technique”.

Blood and Body Fluid Exposures

- Sharps injuries
 - Needles, scalpel, glass etc.
- Splashes
 - Eyes, mouth, nose
- Non-intact Skin Exposure
 - Cuts, skin conditions, hang nail



Exposure Reporting



- Normal Business Hours
 - Report to the Emergency Department
 - In Operating Room report to supervisor
- After Hours
 - Administrative Supervisor (Operator)
- Prompt Reporting within 2-hours

Resources / Contacts

Infection Control

419-383-5006

www.utoledo.edu/depts/infectioncontrol



CHEMICAL HAZARDOUS MATERIALS



Chemical Hazards

- Hazard Communication Standard
- Global Harmonization System (GHS)
- Standardized Safety Data Sheets (SDS) and labeling



Chemical Hazards

- “Hazardous chemical”
 - Physical Hazard
 - Health Hazard
 - Simple asphyxiant
 - Combustible dust
 - Pyrophoric gas
 - Hazard not otherwise classified.
- Review the label and determine how to best protect yourself from exposure
- Discuss chemical hazards and handling with supervisor or laboratory director

Chemical Hazards

- You must make SDS's available and accessible, for all hazardous chemicals, to all employees and they MUST know where they are kept.
- SDS's must be kept via paper copies or [CHEMWATCH](#)

Address: 49-61 Stephen Road Botany 2019 NSW Australia PO Box 62 Footscray West 3012 VIC Australia Kororoit Creek Road Altona 3018 VIC Australia

“SDS” Format

Section 1 – Identification

Section 2 – Hazard(s) identification

Section 3 – Composition/information on ingredients

Section 4 – First-aid measures

Section 5 – Fire-fighting measures

Section 6 – Accidental release measures

Section 7 – Handling and storage

Section 8 – Exposure controls/personal protection

Section 9 – Physical and chemical properties

Section 10 – Stability and Reactivity

Section 11 – Toxicological Information

Section 12 – Ecological Information

Section 13 – Disposal Considerations

Section 14 – Transport Information

Section 15 – Regulatory Information

Section 16 – Other information including date of preparation or last revision

Pictograms

Physical Hazards



Flammable



Compressed Gas



Oxidizing



Corrosive



Explosive

Health Hazards



Health Hazard



Corrosive



Skin Irritant



Toxic

Reference Tools

<http://www.osha.gov/dsg/hazcom/ghs.html>

Environmental Hazards



Environmental Hazard

Controlling Exposures to Hazardous Materials

- Engineering Controls
 - Ventilation Systems
 - Hoods in Labs
 - Negative Pressure Rooms
- Administrative Controls
 - Policies and Procedures
 - Plans and Manuals
 - Standard Operating Procedures (SOP's)



Controlling Exposures to Hazardous Materials (PPE)



- Shield or isolate individuals from the chemical, physical and biological hazards encountered at work
- Selection and use of PPE should protect the entire body.
- No combination PPE can protect against all hazards

Waste Disposal Procedures

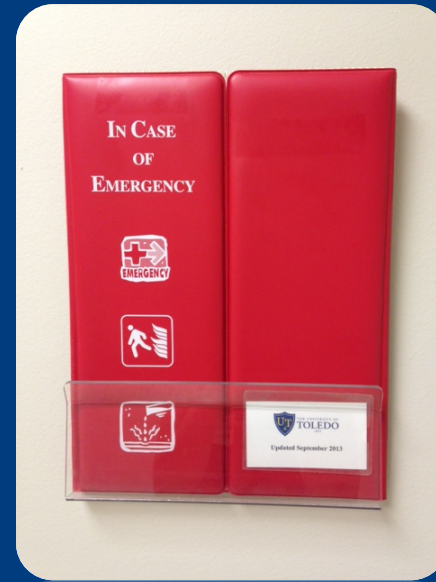
- Remember the colored bags are a form of labeling
- Don't mix the waste streams, intermingling of streams causes the new stream to take on the highest hazard class (i.e., mixed solid and infectious is now all infectious)
- Always wash hands with soap and water after handling waste and don't eat, drink or smoke around wastes.
- Others will be handling these materials based on how you classify them

Recycling at UT

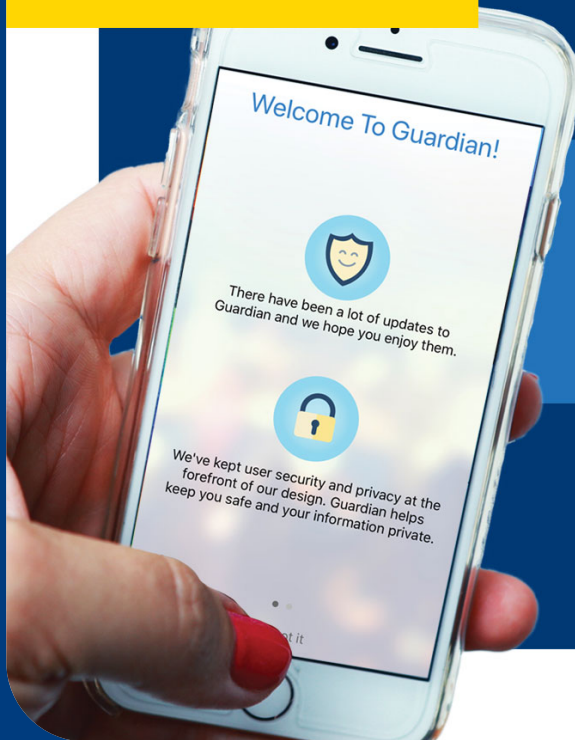
- Reduce, Reuse, Recycle
- Recyclables
 - Paper, Newspaper and Magazines
 - Cardboard
 - Plastic bottles & aluminum cans
- Universal Waste
 - Batteries-- Only rechargeable batteries must be collected and given to EHRS (alkaline go to trash)
 - Computers and electronics
 - Fluorescent bulbs



Emergency Communication



Emergency Communication



UToledo is protected by



RAVEGuardian
Download the app.

Call 911 in emergencies.

- ☐ For hospital codes, call 419.383.2600
- ☐ Code Blue: 77

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- ☐ For hospital codes, call 419.383.2600

Emergency Procedures

- Did something spill? Is it a hazardous material? Will it affect the environment? ([HM-08-013](#))
- Call and report any chemical spills to Campus Police at 419-383-2600/419-530-2600 so trained personnel may be involved.
- Areas where hazardous materials are stored
 - Institutional contingency plan
 - Spill supplies



UT Emergency Codes

UT Emergency Code Designations



Announced "Code"	Meaning and Procedure #
Code Adam	Infant/Child Abduction SM-08-002
Black	Bomb Threat EP-08-004
Blue	Medical Emergency 3364-100-45-06 and 3364-100-45-07
Brown	Missing Adult Patient SM-08-004
Copper	Communication Involving Utility Failure EP-08-014
Gray	Severe Weather/Tornado Watch or Warning EP-08-002
Green	Evacuation – Follow announced instructions EP-08-005
Orange	Chemical, Biological or Radioactive Incident EP-08-003
Red	Fire Reported in Campus Building LS-08-001
Violet	Violent Situation EP-08-015
White	Snow/Transportation Emergency Plan EP-08-008
Yellow	Disaster Procedure – Internal/External EP-08-001

CODE GRAY

Severe Weather/ Tornado

- Conditions are favorable to severe weather (Watch condition)
- Tornado Sighted/Confirmed
(Warning Condition within Lucas County)



CODE RED

- Fire reported in campus building
- Activated by:
 - Pulling pull station
 - Smoke and heat detector response
- Smoke Free and Tobacco Free
 - Includes on grounds/lawn, in parking lots or in your personal vehicles.
 - [UT Smoke Free Tobacco Free Policy](#)



R.A.C.E. in Response to a Fire Situation

- R escue anyone in immediate danger
- A larm Sound the alarm that there is a fire (pull station)
- C onfine the fire by closing doors and windows
- E xtinguish or, with an extinguisher P.A.S.S.
- E vacuate the area either horizontally, vertical or total

P.A.S.S. to use a Fire Extinguisher

- **P**ull the pin on the extinguisher
- **A**im at the base of the fire
- **S**queeze the handle to expel the extinguishing media
- **S**weep from side to side working from the front of the fire to the back



CODE GREEN

Evacuation of Campus Building

- May be called in association with another code (i.e., red or gray)
- When a fire alarm sounds you must act!
- Evacuation can be:
 - Lateral
 - Vertical
 - Complete
- Special Equipment (paraslydes)



CODE WHITE

Snow or transportation emergency

- Level 3 Snow Emergency called in Lucas County
- Essential Employees
- UT ID's



Managing Emergencies

Incident Command System (ICS)

- Management by Objectives
- Disaster management system based on a position assignment
- Individual staff members may be reassigned to work in roles outside of their normal job
- The incident commander is in charge
- The operation of the institution will change based on the needs of the incident

