### Cytotoxic/Antineoplastic Agents Training



## What are "Cytotoxic/Antineoplastic (CT/AND) Agents"?

They are drugs that interfere with or prevent the growth and development of cells.

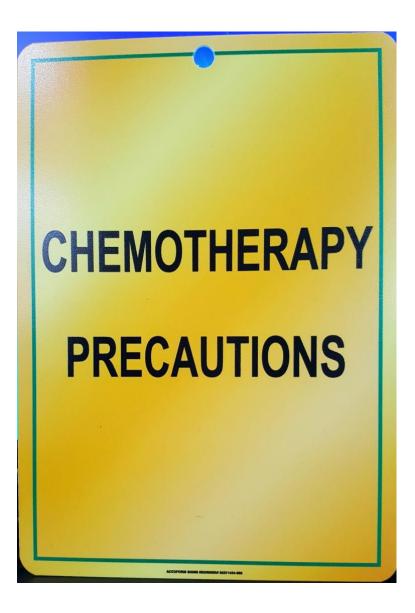
All CT/AND drugs are toxic compounds. These drugs can be given IV or Orally. All specimens collected within 48 hours after a patient has received CT/AND drugs are potentially hazardous to any Laboratory personnel who come in contact with them.



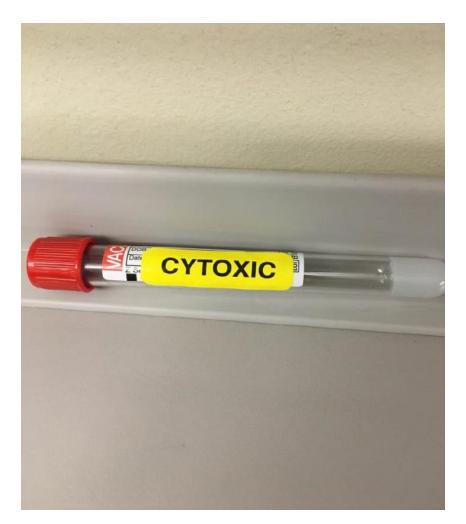
When collecting and processing specimens containing cytotoxic/antineoplastic drugs certain precautions must be taken in order to create a safe environment.

In this module you will learn how to handle, store and dispose of specimens containing CT/AND and how to properly clean up a Toxic Spill.

All Inpatients shall be placed on CT/AND **Blood and Body Fluid** precautions until 48 hours after the last dose has been administered, or for the length of time appropriate to the specific agent.



All specimens from patients treated with CT/AND must be prominently identified with Yellow warning labels. This identification must follow the specimen or any part of it.



#### Specimen collection procedures for Phlebotomist:

- Gloves: Unpowdered surgical non-Latex
- Masks: Not necessary unless aerosolization of the specimen is a possibility.
- Inpatients on special precautions: follow the instructions on the patient's door for appropriate personal protective apparel before entering patient's room.
- After specimens have been obtained place the Yellow
  Cytotoxic warning label on the specimen.

## Protective Apparel for handling and testing cytotoxic specimens:

- Gown: Must be impermeable with close fitting cuffs. Cuffs will be tucked under gloves.
- Gloves: Unpowdered surgical non-Latex
- Masks: Not necessary unless aerosolization of the specimen is a possibility.
- Eye Protection: Goggles, face shields and spatter shields must be used anytime eye contact is a possible.



# Handling and Testing of Specimens containing (CT/AND)

 Centrifuge all specimen containers inside covered buckets.

 Cover the tops of the blood collection tubes with absorbent wipes to prevent spattering when opening. To reduce unnecessary handling and exposure these testing procedures are in effect:

- Use plastic-backed absorbent mats to cover work surface.
- Urinalysis follow normal urinalysis procedure. Recap tube and discard in CT/AND rack.
- Microbiology and feces examination-Use biological safety cabinet. Store all CT/AND containing specimens separately from those of other patients.
- Other Analysis-Store in CT/AND rack.

# Cleaning work surface areas after manipulation of specimens:

- Wash contaminated surfaces with water and absorb with gauze or paper towels, then use 10%.
- Effluent and waste from analyzers is minimally hazardous because of high dilution.

### **Chemotoxic Spill Kits**

Located in:

- Phlebotomy rooms at Jay and Ozark
- Lab storage room at Branson
- Room SB112 at Mount Vernon
- Fayetteville Main Lab, safety storage cabinet, next to hematology area
- Room 1199-21(Specimen Processing), Lab Blood Draw

### SPILL CLEAN UP:

- In the event of a blood or body fluid spill, personnel in the spill area will immediately evacuate patients and unnecessary people from the area.
- In cleaning up all spills, a long-sleeved disposable gown and double gloves should be worn. A protective mask should also be worn to protect against inhalation of powders or aerosols. These items are found in the spill kits.
- Place spilled materials in appropriate container and wipe up remains with a disposable towel or gauze and place in bag. Wash contaminated surfaces with water and absorb with gauze or disposable towels and place in bag. Seal the bag and properly label as "Biohazard." Dispose of according to EMS guidelines "Yellow" bag.
- Notify safety officer of spill

- Notify Environmental management services for pickup and disposal.
- Report to Occupational Health only if exposure of personnel occurs.

#### Disposing of CT/AND contaminated materials

- CT/AND contaminated materials should be stored separate from other patient samples, but for the same length of time.
- CT/AND contaminated materials are considered hazardous and must be disposed of properly. Urine, feces, and vomitus may be disposed of in the toilet and not in the sink. Place sample cups, urine tubes and blood tubes in appropriate container and then in a yellow polyethylene bag. CT/AND contaminated materials should be sealed before being moved.

It is the responsibility of all employees to know and follow the approved standard and to notify their supervisor of any unsafe conditions.