

XIII. MEDICAL PRACTICE

a) Antineoplastic Medications

Acute Exposure: To provide for the safety of the administrator and help prevent possible contamination with potentially toxic chemicals.

NOTE: Acute exposure is contact with large spills, skin, eye or mucous membrane contact or needle poke episodes.

Procedure: Direct Contact with Drug

- i) Implement appropriate emergency spill procedure.
- ii) Change contaminated gloves, gown or other clothing immediately.
- iii) Wash affected skin area with copious amounts of soap and water.

NOTE:

- (1) Report to the camp physician if drug came in contact with open lesions, mucous membranes, eyes, needle poke or if obvious reaction occurs.
- (2) If eye contact occurs, immediately flush eye with water or normal saline for five minutes. Report to the camp physician or Medical Director.
- (3) Wash skin as above for inadvertent patient skin contact.

b) Emergency Spill Procedures

To provide for the safety of the administrator and help prevent possible contamination with potentially toxic chemicals.

NOTE: Small spill is defined as less than 5 ml. Large spill is defined as greater than 5 ml.

Equipment:

Emergency Spill Kit content:

- Respirator mask
- Safety goggles
- Long sleeved, cuffed cover gown
- Absorbent towels
- Absorbent powder
- Zip-Loc bags
- Gloves

Procedure: Small Drug Spill

- i) Open spill kit.
- ii) Contain and isolate spill by covering with absorbent material.
- iii) Clean up spill wearing appropriate personal protective equipment from Spill Kit, *i.e.*, double latex gloves, cover gown and eye protection.
- iv) Wipe up spills with absorbent gauze pads.
- v) Wash spill area three times with soap and water.
- vi) Dispose of all contaminates in Zip-Loc bag and dispose of bag in biohazard receptacle labeled contaminated chemotherapy waste.

Procedure: Large Drug Spill

1. Contain and isolate spill by covering with absorbent material. Be extremely careful not to generate aerosols.
2. Isolate spill area.
3. Clean up spill wearing appropriate personal protective equipment from Spill Kit, *i.e.*, eye protective respirator mask, double latex gloves and cover gown.
4. Wipe up spills with absorbent gauze; if very large spill, use absorbent powder.
5. Use care to pick up any glass fragments, place in absorbent towel and then into Zip-Loc bag.
6. Wash spill area three times with soap and water.
7. Place any contaminated linen with wet areas rolled into the middle into a water-soluble linen bag then into a red bag labeled contaminated chemotherapy linen.
8. Place all disposable chemotherapy contaminated waste in Zip-Loc bag, then dispose of in a biohazard receptacle labeled contaminated chemotherapy waste.

c) **Safety Precautions**

To provide for the safety of the administrator and help prevent possible contamination with potentially toxic chemicals.

General Considerations

- i) Many antineoplastic drugs are known to be carcinogenic, mutagenic or teratogenic.
- ii) Direct contact with some of these drugs may cause irritation to the skin, eyes and mucus membranes and ulceration and/or necrosis of tissue.
- iii) Potential routes of exposure to the administrator/caregiver are primarily by inhalation of aerosolized drug, absorption through the skin, and ingestion of drug through the G.I. tract.
- iv) Metabolized and non-metabolized by-products of antineoplastic drugs are known to be present in varying quantities in urine, feces, blood, sweat and tears of persons receiving these agents. Therefore, caution is needed when handling body wastes also.
- v) All chemotherapeutic agents will be mixed by a licensed pharmacist of a cooperating institution and delivered to the camp properly contained and ready for administration.

d) **Procedure For Antineoplastic Intravenous Push Drugs**

- i) Initiate I.V. and stabilize.
- ii) Put on disposable cover gown with long sleeves and gloves to protect skin.
- iii) Place a sterile cotton 3x3 carefully around the needle tip if air needs purging or if any droplets of drug leak in the needle cap. Then dispose of 3x3 in a biohazard receptacle labeled contaminated chemotherapy waste.
- iv) Place paper washcloth or blue pad under I.V. tubing Y connector to prevent contamination of bed linens or chemo chair.
- v) Administer drugs in normal fashion. When pulling needle from Y connector, cover area with alcohol pad to catch any inadvertent discharge. All syringes and needles must have safety devices attached.
- vi) Dispose of syringe and needle intact, contaminated alcohol pads, cotton 3x3s and gloves in a biohazard receptacle labeled contaminated chemotherapy waste.
- vii) Wash hands.

- viii) Wear gown in immediate treatment area only. Gown is discarded in chemo waste receptacle. Other contaminated linen is to be laundered as soon as possible, separately, cycling twice.
- ix) Dispose of prepared drugs when necessary, by doing the following:
 - (1) Put on surgical latex gloves.
 - (2) Inject into empty vial or I.V. piggyback bag and place in a biohazard receptacle labeled contaminated chemotherapy waste.
 - (3) Dispose of gloves in biohazard bucket as well.

e) **Procedure For Antineoplastic Infusions**

- i) Change tubing in the following manner:
 - (1) Loosen I.V. connection.
 - (2) Protect patient's skin with cotton 3x3.
 - (3) Exchange tubing.
- ii) Dispose of tubing, bag and cotton 3x3 in a biohazard receptacle labeled contaminated chemotherapy waste.
- iii) Wash hands.
- iv) A nurse will remain with the patient during the infusion.

f) **Care Of The Camper With Vascular Access Device**

To provide for the proper care of the camper with a vascular access device (catheters and implanted ports). NOTE: The nursing staff will follow prescribed care of the camper's home institution; yet, in lieu of this, will follow the protocol recommendations of the ONS Nursing Standards for Vascular Access Devices.

i) ***Policy Re: Waterfront Activities***

Campers with externalized central lines (Broviac, Hickmann) are not allowed to swim unless they have written permission by their doctor/nurse practitioner. Campers with ports may swim, if the port has not been accessed within previous 24 hours. Those with Broviacs may ride pontoons, and must be accompanied by a volunteer on paddleboats; they may not use other watercraft. Campers who have had surgery within previous seven days will follow the same waterfront policy as for those with externalized catheters.

ii) ***Procedure: Catheters***

- (1) Site Care (or as indicated by camper's institutional policy)

- (a) Wash hands.
- (b) Prepare appropriate equipment for the procedure.
- (c) Carefully remove the old dressing.
- (d) Inspect the site for redness, drainage, swelling or pain.
- (e) Apply gloves (sterile/non-sterile).
- (f) Cleanse the site with alcohol, then with povidone iodine and allow to dry (unless otherwise contraindicated).
- (g) Apply a sterile air-occlusive dressing over the site. Repeat the above procedure at least three times a week, whenever the dressing is no longer dry and intact.

(2) Maintaining Patency

- (a) Flush the catheter with at least 10cc of normal saline after each drug administration.
- (b) If not in use, flush the catheter with heparin according to institutional policy.

(3) Injection Cap Change

- (a) Wash hands.
- (b) Prepare appropriate equipment.
- (c) Apply gloves (sterile/non-sterile).
- (d) Clean the catheter hub and the injection cap with povidone iodine and allow to dry. Remove the iodine with alcohol, clamp the catheter, remove the injection cap and attach a new injection cap.
- (e) Change the cap prior to flushing the catheter and do so a minimum of twice a week or when needed, or as indicated by the camper's institutional policy.

(4) Blood Drawing

- (a) Wash hands.

- (b) Obtain the appropriate equipment.
- (c) Apply gloves.
- (d) Cleanse the injection cap with alcohol and insert a needle/syringe or clean the catheter hub with iodine, remove the iodine with alcohol, clamp the catheter, remove the injection cap and attach a syringe.
- (e) Remove at least 5cc of blood/solution from the catheter and discard in needle box after clamping the catheter.
- (f) Attach the syringe.
- (g) Unclamp the catheter and withdraw the desired amount of blood.
- (h) Clamp the catheter.
- (i) Using alcohol swab, remove any blood that may be on the catheter hub, flush catheter.
- (j) Unclamp the catheter and heparinize the catheter, then replace cap or remove needle/syringe.

iii) Procedure: Implanted Ports

- (1) Accessing venous vascular implanted ports
 - (a) Wash hands.
 - (b) Apply EMLA over access site for 40-60 minutes prior to access. Cover EMLA cream with tagaderm or press and seal.
 - (c) When ready to access remove tagaderm or press and seal, remove EMLA and wash hands.
 - (d) Obtain the appropriate equipment for the procedure.
 - (e) Palpate site to locate vascular implanted port.
 - (f) Apply gloves (sterile).
 - (g) Paint area with povidone iodine swab stick starting over the port and moving outward in a spiral motion. Cover the area two inches on all sides of the port.
 - (h) Repeat three times with three povidone iodine swab sticks. Allow to air dry after the last application.

- (i) Remove the dry povidone iodine with a sterile alcohol wipe.
- (j) Access the system using the appropriate non-coring needle attached to a syringe with an extension tube or I.V. tubing pre-primed with normal saline.
- (k) Push the needle firmly through the skin and portal septum until it makes contact with the bottom of the portal chamber or a conventional port or the side of a skin parallel access port.

(2) Blood drawing from venous system

- (a) Attach an extension tube with clamp to a non-coring needle. Attach a 10-cc syringe filled with normal saline to the extension tube and prime the set up. Clamp the extension tube.
- (b) Follow the procedure for accessing the system.
- (c) Flush the implanted port with 5cc of normal saline to assure patency and clear the system of heparin.
- (d) Withdraw 3cc blood/solution. Clamp the extension. Remove the syringe and discard.
- (e) Attach a new sterile syringe to the extension tube.
- (f) Open the clamp and withdraw the desired amount of blood.
- (g) Close the clamp. Remove the syringe.
- (h) Attach a 20cc syringe filled with normal saline to the extension tubing. Open the clamp and flush with 20cc of normal saline.
- (i) Close the clamp. Remove the syringe.
- (j) Attach a syringe containing heparinized saline. Open the clamp and heparinize the implanted port or connect an appropriate continuous solution and then open the clamp.
- (k) To avoid reflux, maintain positive injection pressure while closing the clamp on the extension tube during last .2cc of injection. Press down on the port with two fingers and remove the needle.
- (l) Cleanse the site and apply a light dressing (*e.g.*, Band-Aid/gauze).
- (m) Record procedure and medication according to institutional documentation policies.

- (n) Label blood with camper's name, date of birth, date and time of draw, and lab to be run, and name of person who drew sample.
 - (o) Place blood tube into biohazardous bag.
- (3) Maintaining patency in venous ports
- (a) Flush the implanted port with at least 20cc of normal saline initially and after each blood drawing.
 - (b) Flush the implanted port with heparin according to individualized institutional policies and procedures.

XIV. UNIVERSAL PRECAUTIONS

a) Purpose

The Medical Director will annually approve universal precaution procedures. Universal Precautions are to provide guidelines to prevent direct and indirect contact transmission of infectious agents in moist body substances via hands of personnel, or patients to personnel and personnel to patients.

b) Procedure

- i) Wear gloves for direct contact with mucous membranes, non-intact skin and any moist blood and body fluids in all patient care, for handling items or surfaces soiled with blood or body fluids and for performing vein puncture and other vascular access procedures. Discard gloves after single patient use and wash hands immediately.
- ii) Wash hands a minimum of 15 seconds after each patient contact and immediately if soiled with blood or body fluids. Refrain from direct patient care and handling patient care equipment if you have draining lesions or weeping dermatitis until the condition resolves.
- iii) Wear mask and protective eye wear if there is a high probability that the task performed may cause splashing of patient's secretions into your face such as intubation, endoscopy, suctioning copious amounts of oral secretions, etc.
- iv) Wear a gown or plastic apron if blood splattering is likely.
- v) Treat all blood specimens as infectious.
- vi) Dispose of needles properly in approved needle disposal containers. Exercise caution and avoid recapping, bending, breaking or slipping needles.
- vii) Place soiled disposal articles in regular trash in room.
- viii) Place soiled linen in a regular laundry bag.
- ix) Place soiled non-disposable articles in a plastic bag and return to the Medical Director or his or her designee for disposal.
- x) Wipe up blood spills promptly with a solution of 1:10 bleach to water.

c) **Bloodborne Pathogens Exposure Control Plan**

In accordance with the OSHA Bloodborne Pathogens standard, 29 C.F.R. § 1910.1030, the following exposure control has been developed.

i) ***Exposure Determination***

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (*i.e.*, employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility, the following job classifications are in this category:

- (1) Counselors;
- (2) Activity Team;
- (3) Medical Staff;
- (4) Maintenance Staff; and
- (5) Kitchen Staff.

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:

<u>Job Classification</u>	<u>Tasks/Procedures</u>
Medical Staff	Delivery of health care
Transportation Personnel	First Aid
Activity Staff	First Aid

ii) ***Implementation Schedule and Methodology***

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

(1) Compliance Methods

Universal precautions will be observed at this facility in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual. Engineering and work practice controls will be utilized to eliminate or minimize exposure to volunteers at this facility. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized in accordance with the standard. At this facility, the following engineering controls among others will be utilized:

- (a) Gloves
- (b) Bleach 1:10 Solution
- (c) Sharps containers
- (d) CPR protective airway devices
- (e) Hand washing

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows:

First aid kits will be stocked with equipment necessary for staff to appropriately manage biohazardous conditions. A first aid log is kept in each first aid kit. A report is to be completed by any volunteers utilizing equipment in the first aid kit, and they are responsible to see that the medical staff receives the first aid kit for restock purposes. The medical staff will review the first aid log to see that appropriate equipment and procedures have been followed. The medical staff will give written notification to the camp director of the event.

Hand washing facilities are also available and must be used by volunteers who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. After removal of personal protective gloves, volunteers shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

If volunteers incur exposure to their skin or mucous membranes, then those areas shall be washed or flushed with water as appropriate as soon as feasible following contact. Antiseptic towelettes are provided in first aid kits when hand washing facilities are not available.

(2) Needles

Contaminated needles and other contaminated sharps will not be bent, recapped, sheared or purposely broken. OSHA allows an exception to this if the procedure would require that the contaminated needle be recapped or removed and no alternative is feasible and the action is required by medical procedure. If such action is required then the recapping or removal of the needle must be done by the

use of a mechanical device or a one-handed technique. At this facility recapping or removal is not permitted. Needles must be equipped with safety devices.

(3) Containers for Non-Reusable Sharps

Contaminated sharps that are reusable are to be placed immediately, or as soon as possible, after use into appropriate sharps containers. At this facility the sharps containers are puncture resistant, labeled with a biohazard label and are leak proof.

Non-reusable sharps containers that are used for needle and other small biohazardous sharps are to be kept in the “Med Shed.” It is the responsibility of the Medical Director to inform the Camp Director when they become full. The Camp Director or his designee will transport the properly closed container which has been bagged in plastic to one of the local medical facilities for proper disposal.

(4) Work Area Restrictions

In work areas where there is a reasonable likelihood of exposure to blood or other potential infectious materials, volunteers are not to eat, drink, apply cosmetics or lip balm, smoke or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. One method that can be used to avoid splashing during clean up is the cover method. When you clean up a blood spill of any size do not spray the decontamination solution (1 part household bleach, 10 parts water) directly on the spill, as this can result in splattering. With gloved hands place paper towels over the spill and spray the top of the paper towel with the solution. Do not pat down, but wait for the blood and solution to be absorbed. Then pick up the paper towels and dispose of them as regulated trash. If only a residue remains spray the area with the decontamination solution and wipe up. Remove and care for gloves properly and wash your hands. Absorbing material can also be used to eliminate splashing if available.

(5) Personal Protective Equipment

All personal protective equipment required by the standard and used at this facility will be provided without charge to volunteers. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. Personal protective equipment will be as follows:

- (a) CPR Microshields;
- (b) Sharps Containers;
- (c) Goggles/Face Shield;
- (d) Gloves;
- (e) Utility Gloves;
- (f) Protective Gowns; and

(g) Masks.

Gloves shall be worn where it is reasonably anticipated that volunteers will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes. Volunteers are not to touch their face with gloves on, whether or not there is contamination of the glove. Gloves should always be removed before leaving the work area and hands thoroughly washed immediately upon glove removal. Gloves will be available from the health officer and program directors. Gloves are immediately available in each cabin, first aid kits, and the “Med Shed.” Gloves will be used for the following procedures:

- Cleaning up potentially infectious materials
- Handling soiled laundry
- Rendering first aid, etc.

Disposable gloves used at this facility are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Masks in combination with eye protection devices, such as goggles or glasses with solid side shield, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth contamination can reasonably be anticipated.

The OSHA standard also requires appropriate protective clothing to be used in certain situations such as lab coats, gowns, aprons, clinic jackets, or similar outer garments.

(6) Housekeeping

This facility will be cleaned and decontaminated according to the following schedule:

<u>Area</u>	<u>Frequency</u>
Bathrooms	Daily
“Med Shed”	Daily

These areas will be cleaned as designated when the facility is being actively used. If not completed while facility is in use, the Camp Director will be notified in writing as to reason not completed.

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

All bins, pails, cans and similar receptacles shall be inspected and cleaned on an as needed basis and at least monthly by either maintenance staff or their designee. Pails, bins and cans are to be cleaned with a small mop or a similarly fashioned device. Pails should not be hand scrubbed. Gloves should be worn for this task.

Any broken glassware which may be contaminated will not be picked up directly with the hands. Glassware and other sharp items should be picked up by use of a dust pan and broom. The sharps container is to be brought to the mess rather than carry the contaminated waste. The sharps container should always remain upright. The sharps container is not to be used as a dustpan. The sharps container should be closed whenever it is moved or not in use if possible.

(7) Regulated Waste Disposal

All contaminated sharps shall be discarded as soon as feasible in sharps containers which are located in the facility. Sharps containers are located in the "Med Shed." Regulated waste other than sharps shall be placed in appropriate containers.

(8) Laundry Procedures

Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked bags at the location where it was used. Such laundry will not be sorted or rinsed in the area of use. All volunteers who handle contaminated laundry will utilize personal protective equipment to prevent contact with blood or other potentially infectious materials.

(9) Hepatitis B Vaccine

All volunteers that have had a potential exposure to blood-borne pathogens (e.g., via a needle poke, a bite, bodily fluids) should have the Hepatitis B vaccine. Reporting procedure:

- All first aid incidents involving exposure are reported to the health officer/camp director before the end of the work shift or as soon as feasible.
- All first aid providers' names are given.
- The circumstances surrounding the incident are recorded including the date, time and exposure determination.
- This report must be included in a list of similar reports and available to volunteers and OSHA on demand.

OSHA amended its original ruling. It is a *de minimus* violation if volunteers who would be “reasonably anticipated” to come into contact with blood or other potentially infectious materials, but whose contact with blood or above-mentioned materials would only occur as a collateral duty to their routine work are not offered the Hepatitis B vaccine until after they give first aid involving the above-mentioned substances as long as proper reporting procedures are followed.

When the volunteer incurs an exposure incident, it should be reported to the Camp Director. All volunteers who incur an exposure incident will be offered post-exposure evaluation and the follow-up in accordance with the OSHA standard. The follow-up will include the following:

- The Camp Director and volunteer will document the route of exposure and the circumstances related to the incident.
- If possible, the Camp Director and volunteer will ascertain the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be tested (after consent is obtained) for HIV/HBV infection.
- Results of testing of the source individual will be made available to the exposed volunteer with the exposed volunteer informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.
- The volunteer will be offered the option of having their blood collected for testing of the volunteer’s HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the volunteer to decide if the blood should be tested for HIV serological status. However, if the volunteer decides prior to that time that testing will or will not be conducted then the appropriate action can be taken and the blood sample discarded.
- The volunteer will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The volunteer will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.
- The Camp Director has been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy.

(10) Record Keeping

All records required by the OSHA standard will be maintained by the Camp Director. Medical staff is required to acknowledge reading and approving of the above Bloodborne Pathogens Exposure Control Plan for the camp. Thus:

“I have read and approve the above Bloodborne Pathogens Exposure Control Plan for the Camp.”

Physician: Name/Signature Date

Medical Director: Name/Signature Date

Staff Nurse: Name/Signature Date

Staff Nurse: Name/Signature Date

Staff Nurse: Name/Signature Date

Staff Nurse: Name/Signature Date

Staff Nurse: Name/Signature Date

XV. STANDING ORDERS

a) Asthma

Give the camper her/his own medication as prescribed. Camp physician to evaluate any patient with greater than minimal symptoms, and any patient who does not respond to the administered therapy.

b) Bites

i) *In General*

Wash thoroughly with antiseptic soap and have the camp physician examine the bite. Dress wound with antibiotic ointment. Confirm tetanus immunization status and administer TD if most recent booster was not within five years. Watch for signs of infection.

ii) *Rabies*

High-risk bites for rabies include skunks, bats, foxes, and raccoons. Identify and capture the animal, if possible, without endangering other personnel. If animal has been killed, do not discard the carcass. The incubation period for rabies is four to six weeks, but varies widely. Report any animal bite to the Maryland Public Health Department at #311, which can help determine the appropriateness of immunoprophylactic therapy.

iii) *Nonpoisonous Snakes*

See above In General guidelines.

iv) *Poisonous Snakes*

In the event of poisonous snakebite, stabilize the patient by immobilizing the extremity, ice the bite, and transport directly to the emergency department.

v) *Insects*

Minimal-moderate swelling: Wash thoroughly. Remove stinger using a “brush” technique, not forceps. Apply meat tenderizer (“Adolph’s”) or baking soda paste. Apply ice pack. Calamine or Cortaid may reduce itching.

Significant swelling: As above. camp physician to evaluate child. Benadryl 1-2 mg/kg PO, may repeat every 4-6 hours as needed (typical adult dose: 25-50 mg). Severe swelling may benefit from epinephrine injection (Epi-pen or Epi-pen Jr. SQ).

Anaphylaxis: Anaphylactic reactions generally begin within 20 minutes after the sting. Symptoms include anxiety, difficulty breathing and/or speaking, generalized edema and urticaria (hives). Give epinephrine immediately (Epi-pen or Epi-pen Jr. SQ) and call camp doctor to see patient. Benadryl 1-2 mg/kg should be given IV if feasible, or PO if patient able to swallow safely. Call 911 for EMT assistance. Supplemental oxygen when available. Basic life support until EMT arrives.

vi) *Ticks*

Ticks should be removed as soon as possible after detection in order to reduce the risk of infection, including Lyme disease. Use appropriate technique to remove the entire tick including the head and pincers; incomplete removal increases the chance of secondary infection. Wash wound with antiseptic soap and apply an antibiotic ointment. The characteristic “Lyme rash,” erythema marginatum, may appear in about 3-7 days.

vii) ***Spiders***

Local reactions commonly occur following spider bites. Clean the wound with antiseptic soap and apply antibiotic ointment. Apply ice. Benadryl may reduce swelling (1-2 mg/kg/dose PO every 4-6 hours as needed). Identify the spider type if possible. Notify camp physician and arrange for emergency department treatment. Worrisome symptoms include muscle cramps, headache, hypertension, and skin necrosis.

c) **Burns**

Consider burns as serious injuries and the areas burned as open wounds. If possible, remove clothing that might come in contact with the wound. Flush the area with sterile water. Do not break blisters. Cover with sterile dressing. Encourage intake of liquids to maintain hydration. If burn is severe, notify the camp doctor or transport to the emergency department.

For sunburn, apply cool, moist packs, aloe and/or lanolin lotions if non-allergic, fluids, avoid the sun, wear loose, white clothing. Topical anesthetic over-the-counter spray may be applied judiciously. If severe, camp doctor to assess child.

d) **Common Cold**

Tylenol every four hours (weight-appropriate dose). Consider nasal decongestant, antihistamine. Encourage liquids, rest.

e) **Constipation**

This is a common problem among campers. For otherwise healthy children, encourage PO liquids and consider use of a mild laxative such as Miralax, Dulcolax, or Senekot. If child may have constipation related to her/his cancer therapy, s/he may have medications from home; discuss with camp doctor/nurse practitioner. Enemas and rectal medications are not to be used in any child without camp doctor/nurse practitioner approval, or unless it is part of the child's bowel program.

f) **Diarrhea**

Mild diarrhea may be managed with Kaopectate or Imodium AD. Encourage oral fluid intake to prevent dehydration. Remember that significant constipation may be accompanied by diarrhea. Camp doctor/nurse practitioner should assess any child with moderate-severe diarrhea, pain, blood in the stool, or fever. Notify camp doctor of any "clusters" of diarrhea amongst campers. Stress hygiene. Some cancer therapies may result in loose stools.

g) **Headache**

Mild headaches may be treated with Tylenol at a weight-appropriate dose. Any moderate-severe headache should be evaluated by the camp doctor/nurse practitioner. Remember that headache can accompany other disorders including dehydration, sleep deprivation, over-exertion, home sickness, and intracranial hemorrhage.

h) **Earache**

Camp doctor or nurse practitioner to assess for possible otitis media or externa.

i) **Fever**

A common cause of mild temperature elevation at camp is physical exertion in warm weather. In an otherwise healthy child, treat with rest, oral hydration, cool bath, and observation to ensure that the fever resolves readily. Avoid Tylenol unless camp doctor/nurse practitioner has seen the child. All other children with fever should be assessed by the camp doctor/nurse practitioner.

j) **Head Injury**

Every child with a head injury must be assessed by the camp physician. Obtain a complete history of the injury from the child and observers, including loss of consciousness. Monitor vital signs and neurologic status. Determine if patient may be at risk for internal bleeding (e.g., CNS tumors, recent myelosuppressive chemotherapy, thrombocytopenia). If the mechanism of injury suggests possible serious trauma, do not move the patient; call 911 for EMT management.

k) **Heat Illness**

Listed below are five manifestations of heat illness and their management:

- i) *Heat Edema:* This is a presentation of swelling in the lower extremities without other symptoms. It is commonly found in individuals who have not acclimated to the heat. Treatment is adequate utilizing elevation of the extremities, support stocking, rest and liquids. This usually will resolve itself within 24 to 48 hours.
- ii) *Heat Syncope:* This is defined as a sudden loss of consciousness incurred while the patient is standing in hot weather. These patients can be treated by laying the patient in a horizontal position until dizziness has resolved, then moving the patient to the infirmary where water and/or Gatorade can be given. The patient should rest for one to two hours. If symptom free, s/he can be allowed to return to full activity. If there are any associated injuries incurred from the fall, or if syncope recurs, the camp doctor/nurse practitioner should evaluate the child.
- iii) *Heat Exhaustion:* This is a slightly more advanced case of heat illness, characterized by minor symptoms of nausea, dizziness, headache and temperature elevation of less than 100 degrees orally. Exam will usually find the patient with cool, moist, pale skin. Treatment should consist of moving the patient to the infirmary, water and Gatorade supplementation and examination by the camp physician if symptoms persist. Patient should be allowed to rest in the infirmary for 24 hours and return to full activity after that time if symptom free. Encourage liquids to consist of water and Gatorade for next 48 to 72 hours.
- iv) *Muscle Cramps:* This is a very common presentation of heat illness consisting basically of “charley horses” and muscle cramps. Treatment consists simply of rest, water and Gatorade with returning to full activity in 24 hours if symptoms subside. Patient would need to be seen by camp doctor/nurse practitioner if symptoms persist.
- v) *Heat Stroke:* True heat stroke is a medical emergency. The usual clinical presentation will be that of a prostrate individual with major mental aberration including confusion, hallucinations and possible seizure activity. Exam will note an increased respiratory rate and increased heart rate, hot, dry skin as well as high fever. If frank heat stroke presents at the camp, treatment should be directed towards immediately reducing the temperature utilizing cool water bathing, moving the patient to a cool place, transporting via EMT to the emergency department. Check other campers who may also be at risk.

l) Nausea/Emesis

Mild episodes of nausea/vomiting in otherwise healthy campers may be treated with rest, oral clear liquids as tolerated, and observation. Those with moderate to severe episodes or with associated symptoms should be evaluated by the camp doctor/nurse practitioner. Remember that some children may have GI symptoms secondary to anticancer treatments. The counselor should be on alert for other campers with similar symptomatology suggesting possibility of communicable disease or food toxins.

m) Poison Ivy

Wash affected area thoroughly in the shower with warm soapy water and rinse thoroughly. All clothing should be washed. Apply calamine or Caladryl lotion. Oral Benadryl may be used; if so, avoid concurrent use of Caladryl. If rash persists or becomes more severe, notify camp doctor/nurse practitioner.

n) Poisoning

For ingested poisoning, call Poison Control Center at: 800-222-1222.

o) Sprains

Ice, elevate, rest and utilize Tylenol at weight-appropriate doses. Ibuprofen may be more effective, unless contraindicated for that patient's underlying condition or status. Ace wrap, crutches may be used as indicated. If severe pain or swelling occur or continue or if fracture is suspected, notify camp doctor/nurse practitioner.

p) Fractures

Splint and transport to "Med Shed" for evaluation and stabilization of extremities. Then transport directly to the Emergency Department.

q) Sore Throat

Mild sore throat without fever, tonsillar exudate, or oropharyngeal erythema may be treated symptomatically. Tylenol, throat lozenges, and decongestants may all be helpful. If symptoms are moderate/severe or may need culturing, notify camp doctor/nurse practitioner.

r) Stomachache

Common causes of mild abdominal complaints in otherwise healthy children include dyspepsia, constipation, viral gastroenteritis, over-exertion, and homesickness. Any child with more severe pain, associated symptoms (fever, nausea/vomiting, abdominal tenderness or distention) and/or persisting pain must be seen by the camp physician.

s) **Abrasions**

- i) *Minor Cuts:* Clean with antiseptic soap. Apply clean dressing with antibiotic ointment. Observe.
- ii) *Moderate Cut:* Apply direct pressure until bleeding is controlled. Then clean and dress with pressure dressing. Consult with camp physician. Family and/or referring physician will be contacted and care will be arranged according to mutual decision.
- iii) *Large Lacerations (threat to life or limb):* Transport directly to Emergency Department via ambulance.

t) **Bumps/Bruises**

Determine if child is at risk for bleeding (low platelet count or coagulopathy) and notify camp doctor if so. All head trauma requires assessment by camp doctor/nurse practitioner. General management of extremity injury: apply ice or cool compress. Check to assure there are no bony fractures. Tylenol as needed for pain. Elevation of limb. Recheck in 24 hours. If pain is severe or persists, present to the camp physician for evaluation.

u) **Eye Object**

- i) *Non-Corneal:* Remove foreign body if possible with sterile cotton swab. Normal saline irrigation. If pain persists, have camp physician evaluate. Assess for possible viral or bacterial conjunctivitis.
- ii) *Corneal:* Camp physician to evaluate. Consider gentle irrigation. Ophthalmic antibiotic and 24-48 hour. Eye patch recommended. May require Emergency Department referral.

v) **Infection**

Any patient with suspected infection must be seen by the camp physician. Any child with a communicable disease (*i.e.*, measles, chicken pox) must be kept in isolation and treated symptomatically until arrangements can be made for child to be taken home. Determine the child's immune status for the suspected infection. Document any possible exposures of other campers.

w) **Splinters**

Clean skin with antiseptic soap. Attempt removal with forceps. If unable to remove, notify camp physician.

x) **Toothache**

Rinse mouth thoroughly with warm saline or peroxide. Use Tylenol as needed for pain. Contact family and/or home dentist to arrange dental care.

y) **Athlete's Foot/Jock Itch**

i) *Athlete's Foot:* Wash and thoroughly dry 2-3 times daily. Apply antifungal cream. Use absorbent socks (ex: cotton tube socks).

ii) *Jock Itch:* Wash and dry the area thoroughly. Apply antifungal cream three to four times a day.

z) **Medications**

Before any medications are given, always ask the patient if they are allergic to any medications and check the ingredients on the label. Always use medications only as prescribed or instructed on the label. Medications from home should be administered as per parent/local physician instruction.