

PHARMACY DISASTER PLAN

Tab V

PURPOSE

The purpose of this plan is to delineate the responsibility of the Department of Pharmacy Services and its staff in the event of a disaster.

POLICY

The Department of Pharmacy Services will acquire and distribute needed medications and medication related products for patients, personnel and other in the event of a disaster.

PROCEDURE

1. In the event of a disaster, the pharmacist on duty must immediately notify the Director of Pharmacy Services and the Clinical Coordinator.
2. The Administrative Assistant or Secretary will maintain a current listing of all employees' names, addresses, and telephone numbers. This list will be used to contact additional personnel as deemed necessary by the Director or their designee. This list will be maintained in the Position Control Book located in Pharmacy Administration.
3. Personnel contacted to report to duty will be given specific assignments for their shift by the Supervisor or their designee. The shifts may be designated for 12 hour shifts.
4. Assessment of personnel needs will be conducted throughout the disaster period. Schedules will be made based on the greatest influx of patients and patient care needs or as other needs arise. Couriers may be obtained from the institution' manpower pool as designated by Incident Command.
5. Pharmacy will maintain an accurate inventory of Centers for Poison Control mandated disaster medications within the pharmacy. This inventory count will be no less than every month. **See Appendix V**
6. In the event of a disaster and based on the disaster type, the medications required may differ. Ascertainment of the types and numbers of patients that are expected will be made from Incident Command. Then an assessment of the medication inventory will be conducted. Needed medications will then be ordered from the Wholesaler by the Purchasing Agent(s).
7. At the discretion of the **Incident Command Chief Executive Officer**, the Mississippi State Department of Health will be contacted for additional medication and supply needs. This is in the event that other institutions within the Jackson city area are also involved in the disaster event and are unable to assist as well.

8. In the event that the Strategic National Stockpile (SNS) is released, the Department of Pharmacy Services will take receipt of the SNS and store in a secure location. The SNS would then be dispersed to the appropriate areas for use.
9. The Central Pharmacist in Charge along with the Controlled Substance Technician will coordinate the dispensing of controlled substance and maintenance of the disposition records.
10. The Pharmacy Department will coordinate with the Storeroom regarding the distribution of intravenous fluids throughout the facility.
11. As soon as possible and throughout the day an inventory of all automated dispensing machines will be conducted to provide for stocking of the machines as necessary to maintain adequate supplies.
12. The Disaster Carts located in the Central Pharmacy will be dispersed to the needed areas, such as Emergency Departments or other areas of critical needs. The pharmacist in the Emergency Department will assess the need for the Disaster Carts in this area. In the event that the automated dispensing machines are not operational, the medication carts can be distributed to the Emergency Department. The carts will be checked every month for expiration of medications. The contents of the carts are listed in Exhibit B of this section.

Specific Events Requiring Special Distribution Centers

Biological Events

1. In the case of a biological event, a dispensing center will be established. The Dispensing Center can be configured as described in Appendix V. This center will be staffed by pharmacists, pharmacy technicians, and volunteers. Campus Police will provide security of the area as warranted to ensure security medications and prevent masses of people from overwhelming the area.
2. We are to provide at least a 3 day up to a 10 day therapy of the appropriate medication(s). See Tab G Biological Disaster. This section provides dosing information related to the medication and patient handouts related to biological events. See Exhibit C of this section for a table with dosing guidelines for medications and patient handouts in both English and Spanish. A sheet for Anthrax Exposure is also included in this section. Additional Fact Sheets about biological events can be obtained from the following resources (See Appendix D):
 - a. www.hopkins-biodefense.org – John Hopkins University Center for Civilian Biodefense Studies web site

- b. www.apic.org/bioterror/agentsheets.cfm - Association for Professionals in Infection Control and Epidemiology
 - c. www.usamriid.army.mil/education/bluebook.html - United States Army Medical Research Institute of Infectious Diseases handbook on medical management of biological casualties
 - d. www.bt.cdc.gov – CDC web site
 - e. www.aphanet.org/pharmacare/ResponseCenter.htm - APHA Pharmacist Response Center
 - f. www.ashp.org – ASHP Counterterrorism Resource Center for Pharmacists
3. Disaster Carts will be dispersed to areas on an as needed basis. The automated dispensers stock will be assessed in the critical care and emergency departments frequently throughout the day. Based on these assessments and the medication on hand – orders will be placed with the wholesaler and / or Health Department.

Chemical Events

1. In the event of a chemical disaster, the disaster carts will be dispersed to the needed areas which include but are not limited to the Emergency Departments. These carts will have medications for treating most emergencies.
2. Most chemical events will require Atropine and Pralidoxime as antidotes.
3. Due to the often experienced shortages of Pralidoxime (2-PAM; Protopam), this medication will be part of the Bulk Supply in the Central Pharmacy. As indicated for the management of a chemical event then the Pharmacy will be contacted to bring the supply of pralidoxime to the needed area(s).
4. Atropine is available in the automated dispensers and emergency preparedness pharmacy carts as 1mg/10ml syringes. The Bulk Pharmacy Storage area also has the 8mg / 20ml vials. In the event of a chemical exposure, these vials will also be delivered to the needed areas.
5. **Appendix F** – has the common types of Chemical Agents utilized as well as the Treatment and antidotes needed.

Radiation Disasters

1. The most high yield exposure would be through use of a dirty bomb. First responders will be at minimal risk of low-level radiation.
2. The primary risk from a dirty bomb is the psychological impact in the population.

3. The longer the person is exposed the greater the dose will be to that person. Immediate removal of person from the source is needed. The further away from the source the lower the exposure.
4. Lead and concrete are the best sources to shield from gamma rays and x-rays. Plastics shield for beta particles. Water and concrete for shielding neutrons. Concrete or earth is the best all around for shielding from any material.
5. Treatment consists of **removal of clothing and washing with copious amounts of water and soap and water**. Those patients with severe external burns are subject to secondary infections and should receive **antiseptic wound care**. The life-threatening injuries should be addressed first and then the radiation treatment except decontamination. **Antibiotics** are needed for patients with neutropenic fever. **For the radiation exposure – Potassium Iodide-** should be administered empirically as a single dose for 3 days
 - Adult and children > 1 year:** 130 mg/ day
 - Children <1 year old:** 65 mg/day**Aggressive oral or intravenous** hydration facilitates excretion of radioactive materials.

Natural Disasters

Natural disasters include but are not limited to tornadoes, hurricanes, earthquakes, and floods. Preparation for the initial trauma patients will be paramount. In most all of these incidences the trauma will be hypothermic/hyperthermic, burn, orthopedic, neurologic, and/ or multi-system trauma. It will involve patients from all ages and patients with special needs such as pregnant patients, paralyzed patients, etc.

Issues that are addressed in these patients will initially be cardiovascular support; anti-infectives – including vaccination prophylaxis and psychological support to name a few.

1. The system may or may not be overwhelmed with trauma or patients utilizing the bulk of the systems supplies including medications. In the event that this occurs, **immediate needs will be assessed and additional supplies obtained by any means available**.
2. Many patients will need antibiotics and prophylactic tetanus diphtheria vaccination. Considering the ethnic diversity of the population, many patients may also require **Tetanus Immune Globulin – dose for Tetanus prone wound is 250 units IM for adult or pediatric patient**.
3. **Water decontamination**

- a. Safest method is to boil the water for 1 minute. Let cool before drinking – pouring the water back and forth between 2 containers will improve the taste (adds oxygen back to the water).
- b. Alternate method, chlorine bleach – only regular household bleach can be used – none of the color safe products. The following dilutions are recommended:
 - i. 4 drops bleach per quart or liter container
 - ii. 8 drops per 2 quart or 2 liter or ½ gallon container
 - iii. 16 drops (1/4 teaspoonful) per gallon or 4 liter container.
 Stir and then let stand for 30 minutes to allow for purification.

After the initial crisis, is the long term care of the patients and families. This can often lead to overwhelming an already over taxed ambulatory clinic(s). The providing of maintenance medications can be challenging. As demonstrated by Hurricane Katrina in August 2005, a system can be overwhelmed not by critical patients but the patients that were evacuated and would be present for an extended period of time.

1. The **most needed medications were those for chronic diseases and maintenance use**. Disaster preparedness has not typically included patients of this type. The medications were often expensive and the evacuees had no method of procuring future products. Many left their medications with thoughts of returning the next day. The widespread unpreparedness was demonstrated in the length of time it took to obtain extensive supplies of the most needed medications.
2. Many instances, the patients were unaware of the names and the dosage regimen for their medication. This also resulted in extensive therapeutic initiation of therapy and extensive therapeutic exchange in many patients.
3. A **Therapeutic Exchange Clinic** may be established at the discretion of the Director of Pharmacy in conjunction with the Hospital Administration.
4. The **acute needs** seemed to most be medications for hypertension; dyslipidemia; diabetes; gastrointestinal disorders; asthma; psychiatric illnesses. Chronic pain medications became a large portion of the visits to the Emergency Department as well as the clinics.
5. Medications for **HIV, dialysis and methadone** therapy can be referred the most appropriate areas. Currently there is a **Methadone Clinic in Jackson, MS – the telephone number is 601-362-3131**.
6. **Medication samples** can be collected from throughout the institution to fill the needs of as many patients as possible. Donations from pharmaceutical manufacturers can be utilized as they are received. **Spreadsheet** can be utilized based on the supply – categorized by therapeutic category and updated daily.

7. Once the all clear to return to the evacuated areas, many challenges arose to **vaccinate and provide prophylaxis for patients and health care providers as well as other volunteers**. Supplies of **Tetanus, Hepatitis B and Hepatitis A** supplies need to be sufficient to vaccinate as needed versus the rationing that had to occur during Hurricane Katrina.
8. Donations of medications from sources other than pharmaceutical manufacturers and wholesalers, must be assess as to expiration, damage, need, and storage availability. Many supplies from alternate sources were not in a condition to be dispensed to the public. **Donations must be specific and designated that only the identified medications will be accepted.**

Exhibit C - Antidotes Stocked in the Central Pharmacy Bulk Room

Acetylcysteine (Mucomyst ®) inhalation solution
Acetylcysteine (Acetadote ®)
Activated Charcoal
Activated Charcoal with Sorbitol
Atropine
Fomepizole (Antizol ®)
Calcium Gluconate
Coral Snake Antivenin (*Micururus fulvius*)
Polyvalent Crotalid Antivenin Ovine FAB (CroFab ®)
Cyanide Antidote Kit
Penicillamine
Deferoxamine mesylate (Desferral ®)
Digoxin Immune Fab (Digibind ® / Digifab ®)
Dimercaprol (BAL in Peanut Oil ®)
Edetate sodium (EDTA ®)
Ethanol infusion
Glucagon
Methylene Blue
Naloxone (Narcan ®)
Pralidoxime (Protopam ® / 2 PAM)
Flumazenil (Romazicon ®)
Pyridoxine (Vitamin B6)
Succimer (Chemet ®/ DMSA)
Phytonadione (Vitamin K)

These medications are inventoried at least monthly. Based on the type of disaster, the required medications will be immediately inventoried and additional supplies procured as needed.

Exhibit B Pharmacy Disaster Cart Contents

Pediatric Emergency Department Cart

Date Cart Replaced						
Date Cart Expires						
RPH Initials						
Medication	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date
Acetaminophen 325mg U/D tabs X 50						
Acetaminophen Elixir, 120mg/5ml; 8 oz bottle X 6						
Ampicillin 2gm minibag system X 8						
Ampicillin/ sulbactam 3 gm minibag system X 6						
Ampicillin/ sulbactam 3 gm vial X 6						
Aspirin 325mg U/D tabs X 30						
Atropine 1 mg syringe X 6						
Atropine 0.4mg/ 1ml vial X 6						
Calcium Chloride 1 gm syringe X 6						
Cefazolin 1 gm minibag system X12						
Cefazolin 1 gm vial x 6						
Clindamycin 600mg minibag system X 6						
Clindamycin 900mg minibag system x 6						
Clindamycin 600mg vial X 4						
Dexamethasone 4mg/ml vial X 6						
Dextrose 50%, 50ml syringe X 6						
**Diazepam 5mg/ml, 2ml X 10						
Diphenhydramine 50mg/ml vial X 25						
Epinephrine 1mg/10ml syringe X 12						
Epinephrine 1mg/ml, 30ml vial X 4						
Etomidate 20mg /10ml vial x 10						
Flumazenil 1mg/10ml vial x 2						
*Fosphenytoin 500mg vials X 6						
Gentamicin 80mg/2ml vial X 6						
Gentamicin 80mg minibag X 10						
Gentamicin 100mg minibag x 10						

Pharmacy Disaster Cart Contents

Pediatric Emergency Department Cart

Date Cart Replaced						
Date Cart Expires						
RPH Initials						
Medication	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date
Haloperidol 5mg vial X 10						
Hydralazine 20mg vial X 10						
Hydrocortisone 100mg vial X 8						
Hydroxyzine 50mg vial x 8						
*Insulin Human Regular U-100, 10ml X 2						
*Insulin Human NPH U-100, 10ml X 2						
*Insulin Human 70/30 U-100, 10ml X 2						
Labetalol 100mg vial x 6						
** / *Lorazepam 2mg vial x 20						
Metoprolol 5mg vial x 6						
**Midazolam 5mg vial x 20						
**Morphine 10mg syringes X 40						
Naloxone 4mg/ 10ml vial X 8						
Norepinephrine 4mg/4ml vial X 12						
*Pancuronium 4mg vial X 10						
Penicillin G Potassium 5 Million units x 10						
**Phenobarbital 130mg vial X 4						
Phenylephrine 10mg vial X 6						
Phytonadione 10mg amp X 4						
Promethazine 25mg vial x 20						
*Rocuronium 100mg vial X 10						
Sodium Bicarbonate 50meq syringe X 10						
Sodium Chloride Preservative free 10ml vial x 50						
Sodium Chloride 100ml minibag plus system x 12						
*Succinylcholine 200mg vial x 10						
*Tetanus Immunoglobulin 250 units X 6						
Tetanus Diphtheria Adult 0.5ml syringe X 40						
Vecuronium 10mg vial X 10						

* Refrigerated items

** Controlled Substances – all controlled substances must be recorded on records provided

Pharmacy Disaster Cart Contents
Adult Emergency Cart - 3 carts each with same supplies

Date Cart Replaced						
Date Cart Expires						
RPH Initials						
Medication	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date
Acetaminophen 325mg U/D tabs X 50						
Adenosine 6mg/2ml vial x 6						
Amiodarone 150mg vial x 6						
Ampicillin 2gm minibag system X 8						
Ampicillin/ sulbactam 3 gm minibag system X 10						
Ampicillin/ sulbactam 3 gm vial X 6						
Aspirin 325mg U/D tabs X 30						
Atropine 1 mg syringe X 20						
Atropine 0.4mg/ 1ml vial X 10						
Calcium Chloride 1 gm syringe X 10						
Cefazolin 1 gm minibag system X12						
Cefazolin 1 gm vial x 10						
Clindamycin 600mg minibag system X 8						
Clindamycin 900mg minibag system x 8						
Dexamethasone 4mg/ml vial X 20						
Dextrose 50%, 50ml syringe X 10						
**Diazepam 5mg/ml, 2ml X 10						
Digoxin 0.5mg /2ml amp x 4						
Diphenhydramine 50mg/ml vial X 25						
Dobutamine 500mg/ 250ml D5W x 4						
Dopamine 400mg/250ml D5W infusion x 6						
Enoxaparin 120mg syringe X 10						
Epinephrine 1mg/10ml syringe X 20						
Epinephrine 1mg/ml,30ml vial X 6						
Etomidate 20mg /10ml vial x 10						
Flumazenil 1mg/10ml vial x 2						
*Fosphenytoin 500mg vials X 10						
Gentamicin 80mg minibag X 10						
Gentamicin 100mg minibag x 10						

Pharmacy Disaster Cart Contents
Adult Emergency Cart - 3 carts each with same supplies

Date Cart Replaced						
Date Cart Expires						
RPH Initials						
Medication	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date	Exp Date
Haloperidol 5mg vial X 10						
Heparin 10,000 unit vial X 6						
Heparin 25,000 units/250ml D5W x 2						
Hydralazine 20mg vial X 10						
Hydrocortisone 100mg vial X 8						
Hydroxyzine 50mg vial x 8						
*Insulin Human Regular U-100, 10ml X 2						
*Insulin Human NPH U-100, 10ml X 2						
*Insulin Human 70/30 U-100, 10ml X 2						
Labetalol 100mg vial x 6						
Lidocaine 100mg syringe x 6						
Lidocaine 1 gram/250ml D5W x 4						
** / *Lorazepam 2mg vial x 20						
Metoprolol 5mg vial x 6						
**Midazolam 5mg vial x 20						
**Morphine 10mg syringes X 40						
Naloxone 4mg/ 10ml vial X 8						
Norepinephrine 4mg/4ml vial x 12						
*Pancuronium 4mg vial X 10						
Penicillin G Potassium 5 Million units x 8						
**Phenobarbital 130mg vial X 4						
Phenylephrine 10mg vial X 8						
Phytonadione 10mg amp X 4						
Promethazine 25mg vial x 20						
*Rocuronium 100mg vial X 10						
Sodium Bicarbonate 50meq syringe X 10						
Sodium Chloride Preservative free 10ml vial x 50						
Sodium Chloride 100ml minibag plus system x 12						
*Succinylcholine 200mg vial x 10						
*Tetanus Immunoglobulin 250 units X 6						
Tetanus Diphtheria Adult 0.5ml syringe X 40						
Vecuronium 10mg vial X 10						
Ziprasidone 20mg vial x4						

* Refrigerated items

** Controlled Substances – all controlled substances must be recorded on records provided

Biological Events – Medication Treatment and Prophylaxis

Post Exposure Prophylaxis

Disease Or Agent	Preferred Medication	Adults	Children	Alternate Medication	Adults	Children
Anthrax (<i>Bacillus anthracis</i>)	Ciprofloxacin X 60 days	500mg twice daily	20-30 mg/kg/ body weight divided into 2 doses	Doxycycline X 60 days	100mg twice daily	5 mg/kg/body weight divided into 2 doses
	Levofloxacin X 60 days	500mg once daily	Not recommended			
Botulism (<i>Clostridium botulinum</i>)	Investigational Trivalent botulinum antitoxin available from CDC or MS Health Department					
Influenza / Avian Influenza	Oseltamivir (Tamiflu ®)	75 mg once a day x 7-10 days	13 + y/o = 75mg once a day x 7 days <13 y/o Not recommended			
Plague (<i>Yersinia pestis</i>)	Doxycycline	100mg twice a day	5 mg/kg/body weight divided into 2 doses	Ciprofloxacin	500mg twice a day	20-30 mg/kg/ body weight divided into 2 doses
Smallpox (Variola virus)	Intradermal vaccination available from the CDC and MS Health Department					

Biological Events – Medication Treatment and Prophylaxis

Medication Treatment

Disease or Agent	Preferred Medication	Adults	Children	Alternate Medication	Adults	Children
Anthrax (<i>Bacillus anthracis</i>)	Ciprofloxacin + 2 drugs Vancomycin or Rifampin or AMG or Clindamycin	400mg IV q12 hr	10-15 mg/kg q 12hr	Doxycycline + 2 drugs Vancomycin or Rifampin or AMG or Clindamycin	100mg IV q12 hr	>45 kg = 100mg IV q12 hr <45 kg = 2.2 mg/kg q12hr
Botulism (<i>Clostridium botulinum</i>)	Investigational Trivalent botulinum antitoxin available from CDC or MS Health Department					
Influenza / Avian Influenza	Oseltamivir (Tamiflu ®) X 5 days Avian Influenza – Increase length of therapy	75 mg twice daily	<15 kg = 30mg twice day 15-23 kg = 45 mg twice a day 23-40 kg = 60mg twice a day >40 kg = 75mg twice a day			
Plague (<i>Yersinia pestis</i>)	Gentamicin Or Streptomycin	2 mg/kg IV LD then 1.7 mg/kg IV q8hr 1 gram IM twice a day	2.5 mg/kg IV q 8hr 15 mg/kg IM twice a day – Max 2 gm	Doxycycline	100mg IV q12hr	100mg IV q12hr <45 kg = 2.2 mg/kg IV q12 hr
Smallpox (Variola virus)	Cidofivir	5 mg/kg IV once	NA			

Emergency Preparedness Resources

www.hopkins-biodefense.org – John Hopkins University Center for Civilian Biodefense Studies web site

www.apic.org/bioterror/agentsheets.cfm - Association for Professionals in Infection Control and Epidemiology

www.usamriid.army.mil/education/bluebook.html - United States Army Medical Research Institute of Infectious Diseases handbook on medical management of biological casualties

www.bt.cdc.gov – CDC web site

www.aphanet.org/pharmacare/ResponseCenter.htm - APHA Pharmacist Response Center

www.ashp.org – ASHP Counterterrorism Resource Center for Pharmacists

Chemical Agents and Treatment

Nerve Agents

Agents: Tabun, sarin, soman. GF, VX

Type of Agent: Vapor – fast onset; liquid- slow onset

Mechanism of Action: inhibit acetylcholinesterase resulting in excessive acetylcholine (Ach)

Symptoms: nausea and vomiting; nose running; sweating; weakness; miosis; dyspnea; fasciculations; diarrhea; seizures; respiratory center paralysis; apnea – Neurological symptoms may persist for weeks after treatment

Treatment: Atropine and Pralidoxime – reassess every 3-5 minutes until secretions decrease and breathing is easier

Medication	Adult Dose Initial	Adult Dose Repeat	Pediatric Dose Initial	Pediatric Dose Repeat
Atropine	1mg then 6mg IV or IM	Up to 6mg IV or IM in 1 mg doses	0.05 mg/kg IV	0.02 – 0.05 mg/kg IV
Diazepam	10 mg slow IV		0.2 mg/kg slow IV	
Lorazepam	2 – 4mg slow IV	2mg IV as needed	0.05 – 0.1 mg/kg slow IV	0.05 mg/kg IV as needed
Pralidoxime (2-PAM)*	600 -1000 mg IM or slow IV Reassess every 3-5 mins	1-2 grams slow IV	25-50 mg/kg slow IV Reassess every 3-5 mins	25-50 mg/kg slow IV in 1 hour if symptomatic

* Preparation of Pralidoxime for intravenous infusion. Vial is 1 gram powder – dilute with 20ml of Normal Saline or Sterile Water for Injection. Then for Adults and adolescents - dilute further with 100ml NS over 15 – 30 minutes. Dilute for pediatric patients to concentration of 10 mg/ml of Normal Saline.

Chemical Agents and Treatment

Vesicant Agents

Agents: Mustards like HD and HN

Type of Agent: Liquid and vapor; color and smell variable – insidious onset

Mechanism of action: destroys DNA, RBC and WBC, platelets; and skin

Symptoms: blister formation; sloughing of skin; respiratory tissue damage; cough; pulmonary edema; GI irritation

Treatment: Decontaminate and flush eyes and skin well; **topical calamine** is useful; **sulfadiazine, topical antibiotics (Bacitracin and Neosporin)**; and supportive blood products.

Pulmonary Agents

Agents: Phosgene, diphosgene. Chlorine, chloropicrin

Type of Agent: liquid or vapor – odor variable

Mechanism of action: Direct irritant to the pulmonary system – alveolar- capillary membrane damage and fluid leakage

Symptoms: symptom free interval followed by dyspnea; productive cough; chest tightness; pulmonary edema; hypoxemia; hypovolemia; hypotension; laryngeal spasm

Treatment: Decontamination and supportive care – **mechanical ventilation; vasopressors** – if survive x 48 hrs then recovery possible

Chemical Agents and Treatment

Cyanogen Agents

Agents: Hydrogen cyanide and cyanogens chloride

Type of Agent: volatile gas or colorless liquid – odor of bitter almonds – least toxic of the lethal chemical agents – ingestion – slow onset; rapid inhalation – rapid onset

Mechanism of action: inhibits metal containing enzymes – forces cells into anaerobic metabolism to create metabolic acidosis

Symptoms: restlessness; hyperpnea; vomiting; seizures; respiratory failure; cardiac depression

Treatment: Therapy is directed at eliminating from the body and preventing re-entrance into the cells. This is accomplished via the production of Thiocyanate from cyanide and sodium thiosulfate reaction. These agents are available in the **Cyanide Kit** – refrigerated in the Bulk Storage area of the Pharmacy.

Adult

Sodium Nitrite – 300mg in 10ml diluent injected over 5-20 minutes

Thiosulfate – 12.5 grams IV after Sodium Nitrite over 10 minutes

May repeat with ½ the dose of each if needed.

Pediatric

Sodium Nitrite – 300mg IV in 10ml diluent over 5-20 minutes

Thiosulfate - 412.5 mg/kg over 10minutes

Riot Control Agents

Agents: Adamsite and chloroacetophenone(Mace)

Type of Agent: Adamsite – emetic agent; yellow to green solid with little odor; Mace solid with odor of apple blossoms

Mechanism of Action: causes bradykinin release and pain

Symptoms: pain on skin and upper airways; tearing; nose running; cough; vomiting; bronchospasms

Treatment: symptomatic – evaluate the eyes; topical irrigation and **topical antibiotics; calamine lotion**

Departmental Procedure:

A. Upon notification of a disaster, the pharmacist on duty must immediately notify the Director and Assistant Director of Pharmacy Services.

B. The Administrative Secretary shall maintain an up-to-date list of all employees' names, addresses and telephone numbers which may be used to contact additional professional and supportive staff. This list will be stored in the Position Control book.

C. Three mobile disaster carts will be stored in Room H031. Keys to the carts will be stored in the Pharmacy in the locked section of the bulk room. Pharmacy personnel must be familiar with each cart, its location, and its contents. The carts will be checked monthly for out-of-date drugs. A supply of disaster medications requiring refrigeration will be kept under proper storage conditions until carts are retrieved.

D. The Pharmacy will maintain an accurate inventory of CPC mandated disaster medications located in the pharmacy. This inventory count will be no less than every month.

E. In the event of a disaster, a pharmacist shall deliver the carts (including the refrigerated items) and the keys to the Emergency Room and unlock the carts with the corresponding keys.

F. The Director or Assistant Director of Pharmacy Services will act as a consultant to the Hospital Disaster Coordinator on needed drugs and supplies.

G. Emergency drug orders will be placed or borrowed from other institutions as needed.

H. The pharmacist in charge will coordinate the dispensing of controlled drugs and disposition records.

I. The pharmacy will cooperate with the Storeroom regarding the distribution of intravenous fluids.

J. Couriers may be obtained from the hospital's manpower pool in S-123.

K. If necessary, the pharmacy staff may be scheduled on 12-hour shifts.