Focused Administration of Vaccine and Prophylactic Medications
March 2002

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INTRODUCTION

Advance planning for a coordinated public health response to a bioterrorist (BT) event is essential. Tremendous resources would be required during such a response to ensure coverage of large target populations. Warning periods would be relatively short, demanding a rapid response for distribution and administration of vaccine/prophylactic medication. Mechanisms must be in place to allocate and distribute limited quantities of vaccine/prophylactic medication to areas in greatest need during a crisis. Distribution procedures, as well as plans for organizing and conducting clinics to dispense medication and/or vaccinate, must be developed prior to the event.

This document addresses both advance planning and managing an actual response should an event occur. As much as possible both the planning and implementation were formatted into simple checklists. Obviously, it is impossible to develop a common plan covering all disease agents and every local situation. Each community must adapt these basic plans to their own needs. The most important point is that communities must prepare now for potential BT threats.

It is assumed that the major BT agents include anthrax, plague, smallpox, tularemia, and botulism. Antibiotics would be used in a response to events involving anthrax, tularemia, or plague. Vaccine would be used in response to a smallpox event. Antitoxin for botulism is available from the Centers for Disease Control and Prevention (CDC) in limited supply.

SUMMARY OF STATEWIDE ORGANIZATIONAL RESPONSIBILITIES

In preparation, the Bureau of Immunization and Pharmacy (BIP) will:

- Assist TDH Regional Programs and Local Health Departments in developing plans for focused prophylaxis and vaccination delivery.
- Coordinate statewide planning with appropriate state agencies (e.g. DPS, Governor's Office), other TDH Regional Programs, and Local Health Departments.
- Assist TDH Regional Programs and Local Health Departments in identifying high-risk populations to receive vaccine/prophylactic medication first.
- Assist TDH Regional Programs and Local Health Departments in developing a training plan and supporting documentation (e.g. manuals, brochures, on-line or computer based training).
- Serve as primary point of contact with the Centers for Disease Control and Prevention (CDC) for vaccine/prophylactic medication ordering and national program updates. Communicate CDC updates to Regional Programs and Local Health Departments.
- Assist the CDC in identifying mass media channels in Texas and facilitate the dissemination of CDC news releases.

In response to a BT event, the Bureau of Immunization and Pharmacy (BIP) will:

- Provide support to TDH Regional Programs and Local Health Departments when necessary in securing and processing materials from the National Pharmaceutical Stockpile. Ensure timely and equitable distribution and redistribution of vaccine/prophylactic medication throughout state during the crisis.
- Coordinate overall evaluation of prophylaxis/vaccination efforts statewide. Consolidate clinic records and provide feedback to TDH Regional Programs and Local Health Departments concerning effectiveness of control measures, summary morbidity and mortality data, and vaccine/prophylactic medication inventories.

SUMMARY OF STATEWIDE ORGANIZATIONAL RESPONSIBILITES

In preparation, TDH Regional Programs and Local Health Departments will:

- Develop a comprehensive plan to prepare for and respond to a BT event. Coordinate planning activities with State government offices and other local agencies.
- Identify clinic sites and vaccine/prophylactic medication storage sites in advance.
- Create a command structure with clear delineation of assignments and responsibilities. Assign primary contact(s) for communication with BIP.
- Assess partnerships with local organizations which may be involved: EMS, private providers, nursing homes, Human Services, schools, universities, university health centers, businesses, media, hospitals, and voluntary organizations.
- Ensure resources (other than vaccine/prophylactic medication) are readily available locally before an attack occurs.
- Obtain authorization/standing orders for administration of vaccine/prophylactic medication for responding to medical emergencies. Obtain approval of content of informational materials.

In response to a BT event, TDH Regional Programs and Local Health Departments will:

- Request necessary materials from BIP and conduct prophylaxis/vaccination clinics according to plan in the event of an attack.
- Activate plan to run clinics for high-risk individuals and the general public.
- Ensure timely and equitable distribution and redistribution of vaccine/prophylactic medication within their regions.
- Communicate with local media partners.
- Send in inventory and doses administered reports to BIP.
- Distribute informational memorandums to physicians, hospitals, long-term care facilities, schools, universities, and major employers when necessary with assistance if needed from BIP.
- Evaluate effectiveness of clinics and overall response.

ADVANCE PLANNING

I. Scope of Response

Command structures for establishing the scope of a response must be established in advance. Contact lists should be distributed identifying technical staff responsible for surveillance and control measures during an outbreak. Standardized procedures for who should be informed must be created to ensure a coordinated response. Data from epidemiological investigations by state and local health officials, in collaboration with CDC epidemiologists will delineate the size of the outbreak. The amount of vaccine/prophylactic medication available, and the possibility that additional new and epidemiologically related cases will be identified in subsequent days will influence the response.

In addition to a contact list for technical staff the following lists should be created prior to a BT event:

- High-risk individuals
- Regional/Local Health Department Personnel
- Clinic personnel and volunteers
- Clinic location contacts
- Clinic support services (emergency services, law enforcement, sanitation, water,)
- Hospitals
- Clinical laboratories
- Pharmacies
- Translators/Language lines

II. Vaccination/Prophylactic Medication Estimates

High Risk Individuals

For any level of response, there should be a plan for prioritizing selected groups to receive vaccine/prophylactic medication. Assess the potential number of clients based on the identified target population (high risk, geographic boundaries, etc…). Individuals classified as "high risk" are those workers deemed necessary to ensure a sustained response to a BT event.

High-risk workers include the following:

- Health-care workers and public health personnel involved in the distribution of vaccine/prophylactic medication
- Personnel involved with direct medical or public health evaluation, care, or transportation of confirmed, probable, or suspected patients
- Laboratory personnel collecting or processing clinical specimens from confirmed, probable, or suspected patients
- Persons responsible for community safety and security (e.g. police and firefighters)
- Groups likely to come into contact with infectious materials (e.g. laundry workers and medical waste handlers)

- Highly skilled persons who provide essential community services (e.g. nuclear power plant, telecommunications and electrical grid operators).

Local hospitals, clinics, public utilities, and other key agencies and businesses, should be directed to establish lists of high-risk employees. Information about immediate family size should also be collected. Vaccine/prophylactic medication estimates (high-risk + immediate family members) for key agencies and businesses should be given to the planning authority.

Figure 1. Example of form used to estimate vaccine/prophylactic medication needs for high-risk population

Vaccine/Prophylactic Medication Estimates
High-Risk Populations

Area of Responsibility:_____Date:_____
Contact Name:_____ Telephone:_____

Organization	**Estimated High-risk Personnel (Include Immediate Family Members)**	**Vaccine/Prophylactic Medication Estimations**
Hospitals		
Private Clinics		
Laboratories		
Public Health Personnel		
EMS		
Law Enforcement		
Fire Department		
Telecommunications		
Utilities		
Public Transportation		
Businesses		
TOTALS		

Figure 2. Example of clinic contact list with capacity and vaccine/prophylactic medication estimates

Clinic Information Sheet

Clinic Name:
Clinic Address:
Clinic Telephone:
Clinic FAX:
24/7 Contact:

Total Population Covered:
Estimated Capacity:
Days Required to Vaccinate Target Population:

Estimated Vaccine/Prophylactic Medication Requirements:

Clinic Personnel	**Telephone #1**	**Telephone #2**	**Email**
Physician-in-charge			
Nurse Clinic Manager			
Supply Manager			
Security Coordinator			
Volunteer Coordinator			
Other contacts (sanitation, EMS,)			

Comments (special needs or requirements for site):

Figure 3. Summary List of Clinics

XYZ County Clinics

Clinic Name	Address	24/7 Contact Telephone	Vaccine/ Medication Estimate
TOTAL			

Based on the estimates provided by key agencies and businesses, select sites for high-risk clinics. Estimate capacity and vaccine/prophylactic medications required by proposed clinic site.

Capacity (clients/hour)=Number of Clinicians (6 clients per hour)

Capacity may vary depending on the physical layout of each clinic, the speed of screeners and immunizers, and other factors. During an actual response to a BT event the vaccine/prophylactic medication estimates might be scaled back based on the epidemiologic investigation. It may not be necessary to vaccinate and/or treat all high-risk persons. Initial estimates reflect a "worst-case", community wide scenario. Local planning authorities may want to create high-risk lists for smaller, more manageable geographic areas within their jurisdiction.

General Population Assessment

During an actual event the high-risk category would also include persons exposed to the initial release. Face to face contacts of cases, household, or close contacts may be considered high-risk depending on the scope of response as determined by technical staff investigating the outbreak. All residents may be at risk depending on the biological or chemical agent used. For this scenario, general population estimates should be used to determine vaccine/prophylactic medication requirements by proposed clinic site. These estimates should be recorded in advance for each clinic site (see figures 2 and 3). These estimates may differ throughout the year if an area has large transient populations (e.g. university students, seasonal workers). Since some of these fluctuations are predictable, they should be considered in the plan's estimates.

Agencies should plan for a high percentage of persons to attend clinic due to "fear factor". (Those from outlying or bordering areas will possibly replace the number of people in a community that choose not to attend clinic). Plans should also consider distribution procedures in the presence of severe vaccine/prophylactic medication shortages, moderate shortages, and in the presence of no shortage.

III. Clinic Site Selection and Design

Determine non-hospital locations where vaccine and/or prophylactic medications could be administered for case contacts and large numbers of the general public. Visit proposed sites before making final selections. For each site selected prepare the following:

- Written plan for physical layout
- Clinic information sheet (see figure 2)
- Clinic site selection criteria sheet (see figure 4)

Schools are the preferred location for any clinic larger than can be held in the local health department. Schools have parking lots, long corridors, large classrooms, cafeterias, private offices, and other immediately available resources such as tables, chairs, restrooms, and offer an ideal physical structure that can meet most clinics needs. Enclosed sports arenas and other facilities at universities should be considered. Also, local employers may offer sites to vaccinate staff and family members.

Figure 4. Clinic Site Selection Criteria

Clinic Site Selection Criteria Sheet

Clinic Name:

Ö	**Selection Criteria**
	Protected from weather; adequate climate control (heating and air conditioning)
	Adequate space for large crowds, intake, briefing, screening, vaccine or prophylaxis administration, and medical emergencies. There should be space enough to contain long lines inside. The site should be large enough to handle the target population with "room to spare".
	Adequate power sources for equipment and hygiene for workers and public; access to water and electricity
	Familiar and accessible to the public
	Adequate parking and/or public transportation
	Storage for large amounts of supplies and biohazardous waste
	Refrigeration as indicated for storage of vaccine/prophylactic medication
	Adequate restrooms/space for portable restrooms if necessary
	Accommodation available for special needs (e.g. wheelchairs)
	Communication including telephone and FAX
	Secure or can be made secure with adequate law enforcement personnel

Station set-up
Prophylaxis/Vaccination Clinic Model

Pre-Screening

Highly trained volunteers or clinical staff observe clients as they arrive at the client to screen for obvious signs of illness. Standard precautions (protective gear, etc.) should be followed in accordance with EMS and HAZMAT guidelines. Those with illness and symptoms are directed IMMEDIATELY to the Sick Station.

Initial Screening

Establish eligibility to receive vaccine/prophylactic medication. Review address, identification, referrals, or any information needed to determine eligibility.

Triage Station
First point of entry for clients who need administration of vaccine/prophylactic medication. Separate and direct clients to the appropriate station according to the following:

- Those who are pregnant females (Pregnant Station)
- Those who are "well" males and females (Interpretation Station)
- Those with documentation of previous prophylaxis/vaccination (Refer out of receiving line to Problem Station)
- Distribute Information Statements to those receiving vaccine/prophylactic medication.

Interpretation Station
All clients (males & females) who are "well" should receive vaccine/prophylactic medication and be referred to this station for the following:

- Conduct counseling and review of the most current Information Statements. Two-way verbal communication is essential to obtain informed consent especially with non-English speaking individuals.
- Ask females about pregnant status or suspect pregnancy. If a positive response is received about pregnancy status, refer client to the Pregnant Station.
- Discuss precautions and contraindications prior to administration according to the latest CDC recommendations.
- Refer clients to the next Registration and Sign-in Station.

Registration and Sign-In Station
Clients should verify personal information.

- Verify personal information and recording date of Information Statements.
- This list may be used for consent of prophylaxis/vaccination if clinic policies have this requirement.
- After obtaining signature and verifying information from client, refer to the Prophylaxis/Vaccination Station.

Prophylaxis/Vaccination Station
Clients should receive prophylaxis/vaccination at this station.

- Assure counseling was given to client prior to administering vaccine/prophylactic medication
- Give documentation of vaccine/prophylactic medication.
- Give instructions regarding importance of completing medication, or returning for additional doses of vaccine. Inform patients of tracking/recall procedures.
- Make available Standing Orders and an Emergency Kit for possible reactions to vaccine/first dose of medication.

Vaccine/Prophylactic Medication Prep Area

- Staff prepares vaccine for administration.
- Staff repackages medications into individual doses/quantities.
- Supply Manager or Pharmacy Manager maintains centralized inventory of vaccine/prophylactic medication

Pregnant Station
Women who are known to be pregnant or in whom pregnancy is suspected should be referred to this station for the following:

- Determine name of Prenatal Provider.
- Provide necessary counseling

Sick Station
Clients who have a history or symptoms of illness (e.g. rash or obvious signs of illness) should be referred to the Sick Station for an evaluation that includes the following:

- Arrange for clients with rash illness to exit building and transport to nearest care facility with the least exposure to others clients.
- Fill out case investigation form

Clinic Design

III. Resources/Supplies

Create a supply list (see figure 6) for the entire jurisdiction. Maintain centralized inventory of difficult to obtain items. Identify appropriate storage facilities. Ensure personnel and protocols are in-place for quality assurance: monitoring and maintaining appropriate storage temperatures, checking lot numbers and expiration dates. Develop guidelines for vaccine/prophylactic medication distribution and redistribution within the region/county or to surrounding counties with the assistance of the BIP.

Establish contacts and procedures for obtaining all other necessary supplies within 24 hours of an emergency. When appropriate, share clinic site plans and anticipated needs with contractors (i.e. for delivery of refrigerators, portable restrooms, tables, chairs, etc…) in advance.

Establish inventory control systems. Use a form similar to Figure 6 to distribute supplies to clinics. BIP recommends using existing forms for managing vaccine inventories (see FORMS AND DOCUMENTATION). Establish a primary point of contact for clinic Supply Managers. Procedures should be developed to check each request for supplies carefully based on available information about the scope of response, clinic capacity, and existing on-site inventory. The Supply Manager at each clinic is responsible for maintaining inventory at each clinic. Supply Managers should be trained in advance on procedures for ordering supplies and maintaining inventory. The correct procedures for handling medications and vaccines should be emphasized.

Develop security procedures for storage facilities and transportation systems. Determine criteria for entry into centralized storage depots for vaccines, prophylactic medications, and other supplies. Work with law enforcement to develop a transportation plan to service clinics in the event of a crisis.

Figure 6. Advance Planning Supply List for Region/ Local Health Department

Ö	AMOUNT	ITEM
		VACCINES/PROPHYLAXIS
		INFORMATION STATEMENTS
		Informed consent slips
		Vaccine/Drug Information Statements
		SUPPLIES
		Biological waste containers (i.e. 12 gallon size)
		Syringes, needles
		Sterilized bifurcated needles (smallpox clinics)
		Latex gloves
		Latex-free gloves

		Alcohol wipes
		Acetone
		Spot band aids
		Rectangle band aids
		Rectal thermometer
		Oral thermometer
		Probe covers for thermometers
		Table pads and clean paper to cover table for work site
		Antibacterial hand washing solutions
		Cloth towels
		Paper towels
		Gauze
		Adhesive tape
		Bleach solution and spray bottle
		Acetaminophen elixir samples
		Acetaminophen drops samples
		Acetaminophen children's chewable (80 mg)
		Acetaminophen adult tablets
		Refrigeration; storage for vaccine; storage for transport/handling of vaccine
		Pill-counting machines and/or trays (if needed)
		Pill Bottles and Lids
		Spatulas
		Labels
		Box cutters
		Hand Truck
		Small two tiered cart for moving supplies
		Janitorial supplies (mop, bucket, broom, etc.)
		Reusable ice packs (3-5 per station)
		Yellow "caution" tape or something similar to define waiting lines/areas
		EMERGENCY KIT
		Standing orders for emergencies
		Ampules epinephrine 1:1000 SQ
		Ampules diphenhydramine (Benadryl) 50 mg IM
		3cc syringes with 1", 25-gauge needles
		1 ½" needles
		tuberculin syringes with 5/8" needle, for epinephrine
		0.9% Sodium Chloride
		5% Dextrose
		IV Starter Kits

		Spirit of ammonia
		Alcohol swabs
		Tongue depressors
		Pediatric pocket mask with one-way valve
		Adult pocket mask with one-way valve
		Pediatric airways
		Adult airways
		Tourniquets
		Flashlights and extra batteries
		Portable power sources for backup—portable generators
		Radio (preferably at least one hand crank radio or radio with fresh batteries)
		Gurney
		Stethoscope
		Blood Pressure Cuff (Adult and pediatric)
		Cots
		Blankets
		Pillows
		PAPERWORK AND OFFICE SUPPLIES
		Standing orders for prophylaxis/vaccination
		Regional contact list (multiple copies)
		Signage (English, Spanish, and other languages) *External—entrances and exits *Internal—Clearly marked areas, lines, stations *Biohazard *TDH contraindications posters, other posters specific to vaccine/prophylactic medication
		Public information materials in English, Spanish, and other languages
		Screening questionnaires
		Clinic vaccination administration record
		Reminder/recall/vaccine "take" cards for clients—specific to Vaccine/Prophylactic Medication being administered
		Vaccine Adverse Event Report (VAERS) forms
		Calendars
		Sound systems
		Sound barriers
		Clipboards
		Extra pens
		Envelopes
		Rubber bands
		Tape

		Post-it notes
		Date stamps
		Paper Clips
		Staplers/staples
		Scissors
		Cell phones, Extra plug-in telephone
		Two-way radios
		Pagers
		Boxes/ice chests for storage and transport
		File boxes
		MISCELLANEOUS MATERIALS
		Containers for drinking water; cups
		Portable restrooms
		Snacks
		Toys, stickers, children's books; small TV with VCR and children's tapes
		Garbage containers and trash bags

V. Personnel and Logistics

Solicit enough staff in advance. Make sure individuals understand their roles and responsibilities at all levels: health authority, regional office, and clinic. Many individuals will require advance training, including administrative staff assigned to answer hotlines, process paper work from clinics, and carry out "normal" public health functions.

Figure 7. Personnel and Logistics—Advance Planning Checklist

	Create contact lists for clinic personnel: *Medical (physicians, nurses, EMTs, PAs, pharmacists, social workers) *Logistical (clerks, record keeping, materials and supply management, messengers/couriers, people movers) *Communication *Security (police, military, traffic control) *Volunteers
	Designate personnel with authority to direct operations: medical, logistics, communications, and security. Create command structure with clear delineation of assignments and responsibility. Create organizational chart delineating command structure.
	Assess current partnerships with organizations (i.e. Emergency Management, Private Healthcare, Skilled Nursing/Long Term Care, Human Services, Schools, Business and Industry, Media, Voluntary Organizations, Hospitals, Home Health)
	Write clinic job descriptions with qualifications
	Produce set-up diagrams for clinics, showing location of personnel by job title
	Identify contact personnel within your department who will assume responsibility for direct contact with the BIP. Establish communication channels and designate contacts with vaccine administration partners (i.e. LHDs)
	Amend policies and procedures to ensure that all non-health department personnel administering vaccine/prophylactic medication such as volunteers are working under the auspices of the regional office and/or the local health department
	Establish policies and financial support to ensure personnel will be fairly compensated for working overtime
	Establish back-up plan for provision of "regular" public health services in the event of personnel reduction in force
	Ensure availability of translators for all levels of clinic (i.e. security, screeners, nurses, emergency)
	Hold advance training sessions (i.e. smallpox vaccination, VAERS, precautionary measures and guidelines)
	Pre-arrange security procedures for vaccine distribution and storage. Review procedures for vaccine/prophylactic medication transport
	Develop security plans for crowd control, traffic control, clinic personnel, materials/supplies/equipment at each clinic site.
	Develop plan to transport workers, supplies/materials/equipment to clinic
	Develop procedures for transferring people to a definitive care site if necessary
	Review public transportation system, and other issues related to clinic access

	Establish procedures for the distribution of medications to people that cannot come to the mass medication dispensing centers (can a family member obtain medication for children at home or for an invalid family member)
	Establish procedures for segregating sick people from exposed but asymptomatic people at clinics
	Develop Quality Assurance plan
	Develop procedures and strategies for tracking, follow-up, and recall if second clinic visit required (e.g. recognition of expected vaccine reactions/take)
	Develop procedures for shutting down clinic

Administrative Personnel

Depending on scope and size of the response, significant administrative resources may be needed to process doses administered forms, vaccination records (including data entry), and information requests from the medical community and the general public. Policies must be in place for awarding compensatory time and/or paying overtime. New priorities for duties and responsibilities must be established and communicated to front line staff as quickly as possible.

Clinic Personnel

Assumption: immunizations is most labor intensive. If the clinic projection is to see 750 clients for immunizations in one 7 hour clinic day and it takes on average 10 minutes per client, the clinic will need 18 immunizers seeing 108 clients every hour to deliver care that one day.

$$\frac{1 \text{ (clinician)}}{X \text{ (unknown number of clinicians)}} = \frac{6 \text{ (clients served/hr)}}{107 \text{ (clients to be served per hour if the clinic day is 7 hours)}}$$

$$6X = 107$$

$$X = 17.8 \text{ (18) immunizers needed to see 107 clients per hour}$$

Each program should develop its own formula based on past experience with mass clinics.

Clinic Job Descriptions

Physician-in-Charge: Final authority on all medical questions, primary media contact.

Nurse Clinic Manager: Assigns/directs all those administering vaccines and prophylactic medication; assists on-duty staff at all stations (e.g. vaccine/prophylactic medication, sick, and screening) as needed.

Pharmacy Manager: Oversees repackaging of all medications and all other pharmacy related activities. In charge of vaccine/prophylactic preparation station.

Supply Manager: Ensures adequate vaccine/prophylactic medications and supplies are taken to the clinic site. Maintains all supplies in a temporary "warehouse" on site and maintains vaccine cold-chain. Issues supplies/vaccines to supply distributors as required. Sees that all unused supplies and vaccines are transported back to point or origin and properly stored.

Security Coordinator: Oversees personnel assigned to security activities at the clinic site; assists the clinic manager in making duty assignments of security personnel; determines appropriate number of security staff necessary according to clinic size and location; maintains a list of authorized clinic staff and their phone numbers; assigns and coordinates use of cell phones and pagers; establishes staff check-in and check-out procedures; ensures all staff wear ID badges; maintains communication with local law enforcement and EMS officials.

Volunteer Coordinator: Oversees volunteer activity at the clinic site. Coordinates recruitment and training of volunteers. Provides job descriptions and defines roles/responsibilities. Maintains volunteer roster and activates volunteer network when needed. Maintains accurate records of volunteer hours.

Medical Gatekeeper: Assist security in assessing clients as they first arrive at the clinic site. Should be a highly trained volunteer or clinician who screens for obvious signs of illness. Obtain information about possible contacts from ill persons (i.e.; family members, possible contact with pregnant women, address, work place and other pertinent information). Directs sick persons to Sick Station or arranges transportation to primary care site.

Greeters: Greet and conduct initial orientation of potential Vaccine/Prophylactic Medication recipients upon their arrival; provide basic information (verbally or with a video presentation); distribute informational material and forms (and pens?) to be filled out. Send ill persons and persons with recent case contact to Sick Station.

Registration Staff: Review each vaccine recipient's forms for completeness and accuracy; assist clients with completing documents. Send ill persons and persons with recent case contact to Sick Station.

Medical Screeners: Assess clients for contraindications to treatment/vaccination; when necessary perform physical examination of patients who state they have conditions that may constitute contraindications; and answer medical questions. Should be a physician, nurse, or paraprofessional.

Immunizers: (Nurses, EMS personnel, Physicians) Medically screen, vaccinate, complete documentation. Oversee the vaccination process; sign the clinic record; observe vaccine recipients for immediate reaction or complications.

Immunizer Assistants: Assist the immunizer with all aspects of pre- and post- vaccination activities. Ensure that vaccination station maintains adequate supplies; assist vaccine recipients in preparing the vaccination site (roll up sleeve, remove arm from shirt/blouse,); clean vaccination site, if necessary; apply dressing to the vaccination site; instructs clients about care and changing of the dressing.

Forms Collectors: Verify that forms are correctly completed; collect all necessary forms from recipients before departure.

Supply Distributor(s): Obtains supplies from Supply Manager to keep vaccination stations adequately supplied. Also, transports pre-drawn syringes from the "mixing station" to the Immunizers as needed (if this method is used in the clinic).

Crowd Controllers: Personnel should be stationed every few yards along waiting line to distribute VISs, answer questions, monitor clinic flow, and check for ill persons.

Security: Ensure an orderly flow of traffic and parking at the clinic site; assist in maintaining orderly movement of Vaccine/Prophylactic Medication recipients through the clinic; provide necessary control if persons become unruly; assist supply officer in maintaining security of prophylaxis /vaccine and other clinic supplies.

EMS: Local EMS should be on site or in very close proximity during clinics to respond to medical emergencies.

Recovery Area Staff: Available to client who is faint or having a reaction to a vaccine; assesses client condition and provides care as needed.

Role of Volunteers at Various Stations

Triage Station:

- Help separate people to be vaccinated - direct to appropriate holding area:
    - Pregnant
    - Child-bearing age
    - Sick
    - Well, susceptible

Interpretation Station:

- Staffed by trained volunteers who:
    - Provide verbal information about vaccine/prophylactic medication
    - Read Drug Information Sheets/VIS to those unable to read
    - Determine possible contraindications or previous allergic reactions to vaccine/prophylactic medication components.

Registration and sign-in station:

- Document name of person. Confirm review of current VIS
- Have individuals sign-in on clinic roster
- Direct to appropriate vaccination station

Vaccination station:

- Translate for staff
- Assist in completing prophylaxis/vaccination records
- Encourage individuals to keep records on their person at all times
- Inform individuals about vaccine "take" and any additional doses needed of medicine/vaccine.

Pregnant station:

- Provide translation as needed

Sick station:

- Provide translation

Support Personnel

Support personnel include fire fighters (including HAZMAT), law enforcement, private suppliers (portable restrooms, tables, chairs), courier services, mail delivery (US, UPS, FedEx,), laundry services, medical supply companies, hospital and private clinic personnel, public transportation management and workers, and sanitation workers.

VI. TRAINING MODULES

Figure 8. Training Modules

Ö	**TRAINING MODULE**
	Scope of Response/Control Measures—Epidemiologists, Physicians
	Inventory and Control—Supply Managers, Centralized Admin. Personnel, Immunizer Assistants
	Vaccine/Prophylactic Medication Administration—Physicians, Nurses, Pharmacists, Immunizer Assistants
	Screening, Registration*—Medical screeners, Registration Staff, Forms Collectors
	Vaccine/Prophylactic Medication Management—Supply Managers, Physicians, Nurses, Pharmacists
	Clinic Management—Physicians-in-charge, Nurse Clinic Manager, Pharmacy Manager
	Security—Physician-in-charge, Nurse Clinic Manager, Pharmacy Manager, Crowd Controllers, Security Staff (law enforcement), Transportation Support Staff
	Emergency Procedures—ALL
	Vaccine Safety-- Physicians, Nurses, Pharmacists, Immunizer Assistants, Medical screeners

*Training on information statements, reviewing forms, how to screen and ask questions

RESPONSE

I. Response Steps

Ö	**Action**
	Investigate outbreak and determine scope of response
	Select sites and times for high-risk clinics. Use contact lists to activate clinic personnel
	Select sites and times for general populations clinics. Use contact lists to activate clinic personnel
	Fill out clinic supply lists (see figure 6) based on population estimates at each clinic site
	Order vaccine/prophylactic medication and necessary supplies
	Arrange delivery of supplies to clinics
	Activate security plan to protect supply depots and deliveries of clinic supplies.
	Inform media partners of scope of response; date, time, location of clinics. Also, appropriate clothing if vaccination being given. Reassuring message that all possible measures are being taken to prevent further spread. State clearly what criteria are for whom will/will not be accepted for prophylaxis/vaccination.
	Conduct clinics for high-risk personnel
	Fill out daily tally sheets at each clinic and submit to centralized supply depot and/or immunization program
	Consolidate daily tally sheets onto one doses administered form and submit to BIP
	Conduct clinics for general population.
	Fill out daily tally sheets and supply orders at each clinic and submit to centralized supply depot and/or immunization program.
	Consolidate daily tally sheets onto one doses administered form and submit on regular intervals to BIP
	Monitor inventory levels and re-order supplies as necessary
	Conduct random checks of clients to ensure vaccine take
	Arrange re-vaccination clinics if necessary
	Evaluate effectiveness of clinics and overall response
	Update policies and procedures based on experience and feedback from participants

II. Clinic Set-up

Clinics should have clearly marked entrance and exit points with adequate "waiting" space for groups of people seeking prophylaxis/vaccination. Security staff should be posted at both locations to maintain order. It is vital that sick individuals be identified quickly and removed from the clinic site to avoid exposing large amounts of people. At least one trained volunteer or clinician should be dedicated to observing clients for signs of illness as they arrive at the clinic. Traffic flow within the clinic should be controlled and should follow a logical path from the clinic entry to the exit. The best approach to crowd control is to never let people "sit down". Keep the line(s) moving at all times. A linear path of traffic flow from entry to exit on opposite sides of the facility its optimal. However, it may be necessary to set up serpentine lines (similar to those used by amusement parks) using rope or some other temporary barrier.

Ideally, greeter-educators and registration staff should be located in a separate room from the vaccine administration station.

It is likely that the registration and medical screening processes will be the most time-consuming clinic activities. Sufficient staff should be assigned to move person through these areas quickly, to keep a steady flow of persons to the vaccination/dispensing area.

Trained employees should monitor the vaccine supply to ensure that vaccine is not left un-refrigerated for extended periods of time, and to ensure that excess amounts of vaccine are not drawn up "ahead" and then possibly left over, and wasted, at the end of the clinic.

It is advisable to have one person monitor all supplies. Each station should be set up with adequate supplies at the beginning of the clinic, and then replenished as needed. Having one person in charge of supplies helps to avoid wastage and to keep people from "helping themselves" to supplies and opening multiple boxes/packages of the same item.

TRAINING GUIDES

CDC Resources for Smallpox

http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5010a1.htm

TDH Site for Vaccine Adverse Event Reporting System with links to the FDA and CDC:

http://www.tdh.state.tx.us/immunize/vaersweb.htm

TDH Site for Vaccine Management:

http://www.tdh.state.tx.us/immunize/vac_manage.htm

FORMS AND DOCUMENTATION

Biological Order and Transfer Form (C-68)—Used to order and transfer vaccine. Used as needed by clinics and depots.

Texas Department of Health Monthly Biological Report (C-33A)—Used to record vaccine inventory by lot number for each storage site or depot. Submitted monthly to BIP.

Texas Department of Health Daily Tally Sheet (C-88)—Used to record doses administered by age for each clinic site. Submitted after completion of clinic to centralized supply depot or immunization program.

Texas Department of Health Doses Administered (C-5)—Used to report doses administered by age for jurisdiction or public health region. Submitted monthly to BIP.

To order or print TDH forms go to: http://www.tdh.state.tx.us/immunize/doseform.htm

TDH Personal Immunization Records (C-102 and C-100 for child; C-104 for adults)—Client's personal record of vaccines they received at clinics.

VAERS (Vaccine Adverse Event Reporting System) Form:

http://www.fda.gov/medwatch/safety/vaers1.pdf

Vaccina Vaccine Information Statement (VIS)

TDH Addendum to Vaccina VIS (includes consent form)

Clinic Registration Sheet

Screening Tool for Smallpox

Clinic Sign-in Sheet

Clinic Name: _____ Page ____ of ____

Clinic Address: _____ County: _____

Contact Person: Contact Phone: (_____) _____-_____

Patient Name Last, First, MI	Birthdate MM/DD/YR	Address	City	Telephone	Vaccination Date	Lot #	Vaccine Check