WESTERN NEW YORK PUBLIC HEALTH ALLIANCE, INC.
A Regional Partnership for Public Health

Rural Preparedness Planning Guide

Planning for Population Surge Following Urban Disasters

APC Advancing Public Health Preparedness Through Innovation
Advanced Practice Centers

NORC at the University of Chicago

ABOUT US

The Western New York Public Health Alliance (WNYPHA) is a regional public health partnership comprised of eight county health departments in Western New York: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming. Originally established in 1992 as the Western New York Public Health Coalition, the partnership has grown over the years, leading to the eventual incorporation of the WNYPHA as a 501(c)(3) organization. More information can be found at www.wnypha.org.

As one of eight National Association of County and City Health Officials Advanced Practice Centers (NACCHO APCs), the WNYPHA APC works to develop cutting-edge tools and resources that will help it and other local health departments (LHDs) nationwide prepare for, respond to, and recover from major emergencies. NACCHO's Advanced Practice Centers provide unique contributions to equip the nation for a preparedness emergency. The tools they create and the training they provide are geared explicitly to LHD personnel — staff that work every day on the front lines of public health emergency preparedness. More information about the NACCHO APC program can be found at http://www.naccho.org/topics/emergency/APC.cfm.

The NORC Walsh Center for Rural Health Analysis was established in 1996 to study policy issues affecting public health and health care systems in rural America. One of eight rural research centers funded by the Health Resources and Services Administration, Federal Office of Rural Health Policy, the Walsh Center is actively conducting research on public health issues related to emergency preparedness, health department financing, and public health agency accreditation, among other topics. More information on the Walsh Center can be found at http://walshcenter.norc.org.

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The Western New York Public Health Alliance Advanced Practice Center (WNYPHA APC) is pleased to provide this planning guide for rural and suburban preparedness officials. We offer the guide as a complement to our map-based Urban to Rural Evacuation Tool (found at http://www.cei.psu.edu/evac/). After using the online tool to estimate numbers of expected evacuees, the planning guidelines will assist communities in developing response plans to address the anticipated population surge. Included guidelines are based on findings from an expert panel of rural and suburban emergency preparedness planners that was convened in early 2008.

As the only National Association of County and City Health Officials (NACCHO) Advanced Practice Center specifically funded to address rural issues, the WNYPHA APC has placed an emphasis on addressing the emergency preparedness and public health implications of urban citizens evacuating to surrounding rural and suburban communities.

- WNYPHA APC partners at the University at Albany School of Public Health, Center for Public Health Preparedness (CPHP) have hosted two satellite broadcasts on the topic of urban to rural evacuation. Both broadcasts are archived and can be viewed via the CPHP web site at http://www.ualbanycphp.org/broadcasts.cfm. The APC will also be making CD versions of the broadcasts for wider distribution.

- WNYPHA APC partners at the NORC Walsh Center for Rural Health Analysis and the Pennsylvania State University Center for Environmental Informatics have developed a map-based online tool for use by LHDs and emergency planners to predict rural and suburban population surge following urban disasters. The tool models expected numbers of evacuees and evacuee characteristics (such as the number of children or seniors, disability status, etc.) for various planning scenarios, and provides county-level planning information for areas surrounding more than 100 of the nation's largest urban centers and state capitals.

- WNYPHA APC partners at the NORC Walsh Center for Rural Health Analysis have developed two policy briefs related to rural preparedness and population surge issues. "Urban-to-Rural Evacuation: Planning for Population Surge" details results from a series of interviews the NORC Walsh Center conducted with national experts and local emergency preparedness planners (including 5 pairs of urban and rural counterparts). The brief identifies major issues that national, urban and rural planners should consider as they prepare for a potential population surge following an urban disaster. A second policy brief, "Spontaneous Evacuation Following a Dirty Bomb or Pandemic Influenza: Highlights from a National Survey of Urban Residents' Intended Behavior", summarizes findings from a nationally-representative survey of urban residents regarding their evacuation intentions. Survey results informed the modeling of the map-based online tool to predict evacuation patterns. Both policy briefs can be found at http://walshcenter.norc.org.

If you have additional questions, please contact Tracy Chalmers, the WNYPHA APC Program Manager, at tracy.chalmers@erie.gov. For additional copies of this guide, please contact Walsh Center Deputy Director Michael Meit at meit-michael@norc.org.

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PRE-EVENT PLANNING

Response Partners	Responsible Entity/Person	Date Assigned	Date Completed
Identify response partners, keeping in mind that partners may vary depending on type of scenario. Form population surge response team. ▶ Consider including members of the following sectors: environmental health, mental health, faith community, local media, local pharmacies, and transportation, in addition to traditional response partners such as law enforcement, EMS, American Red Cross, etc. ▶ Consider professionals outside of traditional medical partners (e.g. dentists, veterinarians).			
Identify and establish an agreement with a local facility to serve as a quarantine site or alternate care facility in the event of an infectious disease outbreak. ▶ Ensure that the facility has laundry facilities, a kitchen, and space to establish a medical clinic.			
Establish agreements for evacuee sheltering—determine locations and necessary capacities to address population surge. ▶ Consider number of likely evacuees that may settle in your community without existing shelter arrangements (plan for at least 20% of evacuees needing shelter). ▶ Identify and engage partners in planning for necessary food, medicine, medical care, security, transportation, etc.			

General recommendations for pre-event partnership planning:

- Building trust among community partners in advance of the crisis is critical. Relationships must be established before an emergency occurs.
- Consider everyone a potential partner and reach out in order of perceived priority. Also, if there are keystone players whose participation is essential to convince others in the community to get on board, make them a top priority.
- Work to ensure that all partners are engaged and invested in the planning process.
- Include public, private and not-for-profit entitles but also recognize that their roles and responsibilities during an emergency may differ.
- Be cognizant of what services various partners and organizations can provide before incorporating them into a response plan. For example, Red Cross provides shelter, but not extensive medical services.
- Partners may vary by scenario. Communities should plan using an all-hazards approach while identifying those issues that may only be applicable during certain events.
- Identify community transportation resources/partners that can facilitate continued movement of evacuees to ensure better overall distribution (see Event Planning section for more information on facilitated movement).
- Remember that even if a county has federal resources (e.g., a military base), those resources might be reallocated or relocated in a disaster situation.
- Reach out to local cable operators and radio stations so that they are part of the planning team. They can assist in communication efforts. Remember that radio stations are often rural communities' main source of real time local information.
- Incorporate local pharmacists into the response team. Know local pharmacies, their hours and supply capacities.

PRE-EVENT PLANNING

Volunteers	Responsible Entity/Person	Date Assigned	Date Completed
Establish a process to recruit volunteers to address population surge issues, including the needs of both evacuees and citizens. ▶ Provide incentives, such as education and training, to recruit volunteers. ▶ Tap existing resources. For example, many county, government, and school employees are designated disaster service workers. ▶ Recognize that you may be more likely to find willing volunteers for certain scenarios than others (e.g., flood versus infectious disease outbreak). Providing personal protective equipment (PPE) and training in minimizing exposure may allay concerns and fears. Also distribute needed medications or vaccines to volunteers and their families first. ▶ Seek out those volunteer organizations that pre-credential their members. ▶ Develop pre-credentialing protocols for all licensed volunteers. ▶ Recognize that many volunteers may not show up during an emergency and recruit extras if possible.			
Have on hand a one-page information sheet prepared by legal staff, so that volunteers have easy access to their legal rights and protections.			

General recommendations for pre-event recruitment of volunteers:

- Assure volunteers in advance that they will receive protection and will be the community's top priority (e.g., they will receive immunizations first in the event of infectious disease).
- Be sure volunteers are who they say they are. Unqualified volunteers can be a hindrance to disaster relief. The Emergency Management Assistance Compact (EMAC) has been ratified by all states and can assist in ensuring that credentials are standard across state boundaries.
- Volunteer liability varies by state. Know your state's rules—potential volunteers will ask.
- Pay particular attention to recruiting volunteers with multi-lingual capabilities if possible, and maintain a database of those capabilities (including American Sign Language).

PRE-EVENT PLANNING

Regional Coordination	Responsible Entity/Person	Date Assigned	Date Completed
Establish mutual aid agreements with nearby locales (See Appendix A for sample mutual aid agreement). ▶ If nearby urban area is experiencing disaster simultaneously, expect no assistance from that jurisdiction.			
Set up ongoing, systematic, scheduled communication with surrounding urban communities to ensure that messages can be sent and received effectively during a disaster.			
Prepare portable trailers containing supplies and locate them strategically for regional deployment (See Appendix B for sample supply list).			
Plan exercises both to engage regional partners and to test regional response (see training/exercising section for more information). ▶ Include urban partners to ensure their active involvement.			

General recommendations for pre-event regional coordination:

- The City Readiness Initiative (CRI) and Metropolitan Medical Response System (MMRS) compel urban areas to think about reaching out to rural areas. Capitalize on these initiatives.
- Rural areas must be proactive in developing relationships with urban counterparts. They are not likely to come to you, so you need to make the first move.
- Regional collaboration can facilitate consistency in licensing and protocols and resolve cross-border issues prior to disaster.
- Incident Management Programs (i.e. WebEOC) enable users to link multiple layers of communication. Due to the expense of some of these programs, rural communities should reach out to larger counties for incorporation into their systems.
- For communities adjacent to reservations, note that American Indian communities are sovereign nations. Following special protocols might be necessary to engage them in regional coordination efforts.

PRE-EVENT PLANNING

Vulnerability Assessment	Responsible Entity/Person	Date Assigned	Date Completed
Assess communities' overall vulnerabilities to population influx. Follow this assessment with revised assessments taking into account added population numbers. For example, note if the identified vulnerabilities change substantively if the population increases by 10 percent, 20 percent, etc. Determine if response capacities change given added population. ▶ Consider staff/volunteer issues such as ensuring that they remain healthy in disaster scenarios. Provide child, elder and pet care so staff/volunteers are able to respond without worry. ▶ Consider other aspects of the response infrastructure such as: • Basics: food, water, shelter, fuel • Communications • Information technology systems of health care providers • Transportation and signage • Pharmaceuticals • Emergency services infrastructure (does your county have a 911 line?) • Law enforcement • Health services			

General recommendation for pre-event vulnerability assessment:

▶ Consider unique features of your community when determining vulnerabilities related to population surge:
- Large numbers of vacation/second homes to which evacuees may travel
- Altitude or weather extremes
- Seasonal workforces
- Hotel/motel capacity

Training/Exercising Needs	Responsible Entity/Person	Date Assigned	Date Completed
Plan exercises to both engage regional partners and test regional response. ▶ Include urban partners to ensure their active involvement. ▶ Look for natural opportunities to conduct an exercise. These may include community events, such as festivals, when visitors and tourists may be present in large numbers. ▶ Offering free flu vaccines can be a good opportunity to practice distributing medication. ▶ Include groups likely to have special needs during an event if possible, such as children, the elderly, and the disabled.			

PRE-EVENT PLANNING

Communications	Responsible Entity/Person	Date Assigned	Date Completed
Set up an emergency phone line that residents and evacuees can call to receive a recorded message with current information. ▶ If your community has a reverse 911 system, use it.			
Encourage residents to stockpile several days of supplies. ▶ Residents may need to take care of themselves and their families as responders will be focused on evacuees. ▶ Prepare and distribute supply check-lists for community members. (See Appendix C for sample check-list).			
Develop process to test communication systems regularly to ensure that they are ready for a disaster.			
Identify and recruit amateur ham radio operators to disseminate emergency response information. ▶ Radio groups that are focused on disseminating information during emergency situations include the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), which is a government affiliated radio group, and Radio Emergency Associated Communication Teams (REACT), a National Voluntary Organization Active in Disaster (NVOAD).			

CASE STUDIES

Punxsutawney, Pennsylvania—Groundhog Day Training Exercise

Planning for a spontaneous evacuation into your jurisdiction is difficult, but conducting a full-scale exercise for such an event can be almost impossible. In order to tackle this problem, the Jefferson County Department of Emergency Services (DES) came up with the creative solution of practicing during the Groundhog Day celebrations in Punxsutawney, Pennsylvania, which draw approximately 30,000 people to the area. For the 2008 celebration, the Jefferson County DES reached out to the regional Counter-Terrorism Task Force (CTTF). Together, the County DES and the regional CTTF conducted pre-planning meetings, wrote an incident action plan, completed medical plans and assigned staff to assist in the command post during the event for multiple operational periods. Following the completion of the celebrations, an after action report was completed and reviewed among the assisting agencies. As it is difficult to train for population surges, using planned events where population surge will occur provides the opportunity to exercise existing plans.

Contributor: Adam Johnson, Agosti Fire & Safety Services, Northwest Central Pennsylvania

Putnam County, New York—Point of Dispensing (POD) Training Exercise

Training can provide valuable information on necessary actions officials should take in a real emergency. After conducting a pediatric POD, Putnam County officials discovered that they needed a "lost and found" center. Another finding was that they needed to be particularly careful when dispensing medications as children's doses are in milligrams and kilograms.

Contributor: Sherlita Amler, Commissioner of Health, Putnam County, New York

EVENT PLANNING

Incident Command System (ICS)	Responsible Entity/Person	Date Assigned	Date Completed
Select Incident Command Leaders based on their expertise in dealing with identified vulnerabilities.			
An alternative to selecting an Incident Command Leader is to establish a regional Incident Management Team (IMT). Like an Incident Commander, it requires pre-designated section chiefs (i.e. planning logistics). FEMA/DHA have established credentialing requirements for these positions.			

General ICS recommendations:

- The Incident Command Leader may vary by scenario. When identifying the scenario-specific Incident Command Leader, focus on the expertise of various candidates.
- ICS is generally scalable, depending on the nature of the event. If the event has regional impact, the Incident Command Leader should be a regional leader.

Facilitated Movement	Responsible Entity/Person	Date Assigned	Date Completed
Strategize how the community might facilitate continued movement of evacuees to final destinations to ensure broad distribution and minimize burden on any one community.			
Identify locations and causes of traffic choke points.			

General recommendations for facilitating movement:

- Communities at the end of rail lines outside metropolitan areas should plan to receive evacuees without personal vehicles.
- Maintain communication and cooperation with the urban point of evacuation if possible to minimize the numbers of evacuating citizens. Consistent risk-communication messages must be conveyed in order to maximize compliance with shelter-in-place orders or to direct evacuees appropriately.
- Consider creative solutions such as stationing fuel tankers at the highway so that evacuees can refuel without having to exit. Ensure that they are positioned so that they are not jeopardized by a speeding vehicle, whether it be out of control or deliberately aimed at the tanker.
- Consider contingency plans for the possibility that bad weather (i.e. heavy snow or tropical storm) may complicate traffic management and highway workers may be pulled away by such events.

EVENT PLANNING

Reception Sites	Responsible Entity/Person	Date Assigned	Date Completed
Strategically locate alternate care sites and general reception sites away from hospitals and traffic choke points. Also, alternate care sites should be located in facilities that will not be needed for normal operation during the crisis and are not already part of the disaster plan.			
Print brochures describing availability of resources in town and in nearby towns so that evacuees can determine where their needs might be best met.			
Strategically locate supplies in the directions/areas that the planning team would like the evacuees to go. ▶ Keep in mind that WIC cannot stockpile infant formula.			
Identify what types of location-specific items the community might need (i.e., communities in the southern U.S. will need ice to preserve food; communities in the northern U.S. will need supplemental heaters).			
Ensure that reception site staff/volunteers are prepared to cope with mental health aspects of disasters. ▶ Police and fire have chaplains; public health does not. ▶ Train staff to assess staff/volunteers and address their needs. ▶ Have critical incident stress management and psychological first aid ready and waiting.			
Know and document resources available in community pharmaceutical or food warehouses.			

General recommendations for planning reception sites:

- Reception site staff can triage, facilitate movement, communicate with other reception points, provide acute medical care, distribute maps and provide directions, disseminate risk communication messages, provide the latest information on the disaster and weather, and store basic supplies. Take advantage of all potential uses and plan accordingly.
- Use rest stops along highways as reception sites.
- Prevent evacuees from stopping at the reception points if they have no urgent needs.
- Reception centers should always have medical staff available.
- Be sure that the reception sites have sufficient bathrooms/porta-potties.
- Plan for the unexpected. Communities are not always notified by nearby jurisdictions of incoming evacuees.
- Remember that the Red Cross is not mandated to provide medical care and many local chapters will not allow pets in Red Cross shelters. Contingency plans will need to be made. Policies vary among the local chapters—consult with local Red Cross chapter to clarify what is allowed.
- Alternate care sites should be in facilities that have medical clinic space, bathrooms, showers and kitchens.

EVENT PLANNING

Evacuees with Immediate Health Needs (e.g., infectious disease or radiological scenario)	Responsible Entity/Person	Date Assigned	Date Completed
Pre-deploy (or develop plan for rapid deployment of) medical supplies to reception sites.			
Have sufficient supplies available for at least a 72 hour response frame. Recognize, however, that help may not be available for an extended period and plan for the longest period of self-sustainability possible.			
Consider potential locations for ad-hoc mortuaries and have bagging supplies on hand. ▶ Have a system in place to locate bodies post-event should mass burials be required.			

General recommendations for planning for evacuees with immediate health needs:

- Triage: As evacuees arrive in cars, staff/volunteers should quickly assess evacuees and collect information on certain symptoms so that individuals can be directed to quarantine sites, acute care facilities, etc. (See Appendix D for a sample triage plan).
- The triage process will differ depending on event. In a pandemic flu scenario, a community cannot triage to other communities/facilities. In other sorts of disasters, communities might have the ability to triage to sites in nearby towns.
- Food and water are always the most essential "medical" supplies.
- When children need medical attention, keep parents with them to perform tasks such as bathing, comforting, etc.
- Triage at an alternate care site in order to ensure that the "worried well" do not block those who need care.

PLAN FOR THE UNEXPECTED

Inverness, Mississippi, Post-Hurricane Katrina

With no warning, Dr. W.L. Prichard and his response team received 600 people with dysentery from a nearby shelter with no notification from the sending organization. In order to house these evacuees, local officials opened up a hall in a school; however, without custodial keys, they had no access to those functional areas housing the heating/ventilation/air-conditioning (HVAC) facilities, as well as the sanitary facilities. Dr. Prichard's recommendation? Be sure to include environmental health officials in planning. Their importance in evacuation scenarios cannot be underestimated.

Contributor: W.L. Prichard, Emergency Coordinator, Inverness, Mississippi

EVENT PLANNING

Evacuees without Immediate Health Needs (e.g., natural disaster or conventional explosive device)	Responsible Entity/Person	Date Assigned	Date Completed
Train all volunteers/staff on the basics of shelter set-up procedures. Training should include: food preparation, supply guidelines, etc.			
Have method in place to verify evacuees' claims of welfare and/or other benefits.			
Prevent being overwhelmed by the "worried well" by educating the public and keeping residents and evacuees abreast of the latest developments. ▶ Effective risk communications strategies are critical.			

General recommendations for planning for evacuees without immediate health needs:

- Consider needs of special populations (elderly, disabled, drug and alcohol community, etc.)
- Attempt to keep individuals with pre-existing medical problems from being separated from their caregivers (i.e. nursing home residents)
- Ensure that staff and volunteers are able to deliver services in a culturally competent manner.
- Focus on establishing a sense of trust among evacuees.
- Take advantage of evacuees' willingness to help. Assign tasks to reduce stress on staff/volunteers and reduce boredom among evacuees.

Evacuees with Chronic Conditions	Responsible Entity/Person	Date Assigned	Date Completed
Assign a public health nurse to work at reception sites and medical facilities. Provide the authority to make contact with pharmacies or with primary care physicians to obtain prescriptions.			
Include medications for chronic conditions as part of your cache of medical supplies.			

General recommendations for planning for evacuees with chronic conditions:

- Evacuees likely will not know the names of the medications they take regularly. Individuals in mental health treatment centers or nursing homes may be separated from medical records in evacuations.
- In addition to those needing maintenance medications, there are individuals who will need to be kept on special diets.

Addressing Resident Concerns	Responsible Entity/Person	Date Assigned	Date Completed
Develop plan to ensure that resident security needs are addressed. ▶ Plan to increase law enforcement manpower. Banks, schools, and other venues have security personnel that may be employed. ▶ Recruit retirees into the medical reserve corps and other volunteer response groups. ▶ Protect the grocery store and other key supply centers from looting. Also focus on road security. ▶ Be on alert for increased domestic violence. ▶ Use Community Emergency Response Team (CERT) for traffic/crowd control.			
Have contingency plans to keep the flow of supplies and services moving. ▶ Try to retain a sense of normalcy in the community to the degree possible by ensuring regular services are maintained (e.g., do not stop garbage removal). ▶ Maintain the supply chain and continuity of government, social, and business services as much as possible. ▶ Recognize that most retailers now rely on "just in time" delivery of goods and materials and are unlikely to have a large stock of needed supplies, including food, medicine, clothing, etc.			

KNOW YOUR LOCAL PHARMACIES

In Texas, after Hurricane Rita, the public health regional pharmacy division had to make a deal with Walmart after the five local pharmacies ran out of medications. In Mississippi, Emergency Coordinator W.L. Prichard had the opposite experience when he discovered that the "mom and pop" pharmacy was the only one open 24 hours/day. In Kansas, the health departments obtained buy-in from the state's association of pharmacists. The members of this association communicated with local pharmacists, requesting that they network with their local health departments and other emergency response institutions. Thus, they ended up having a supply/cadre of local pharmacists as a part of the normal response team.

Contributor: Rural Preparedness Panelists (see acknowledgments)

EVENT PLANNING

Communications	Responsible Entity/Person	Date Assigned	Date Completed
Develop evacuee registry database so that families can be reunited.			
Ensure process is in place so that Public Information Officers (PIOs) will not distribute press releases in isolation. They should communicate with others in the region to ensure that a consistent, clear message is transmitted to citizens and evacuees across counties/states. Obtain the involvement of the state Joint Information Center in accordance with the National Incident Management System (NIMS).			
Have on hand information on a variety of topics that could arise in the areas of health education and risk communication.			
Be prepared to set up mobile low-amp signage along the highways to inform evacuees/residents of the latest developments and guide them to reception points. Contact state's Department of Transportation for equipment.			

State and Federal Assistance	Responsible Entity/Person	Date Assigned	Date Completed
Develop a regional resource database so that real-time determinations can be made as to the sufficiency of resources to meet current and anticipated needs. ▶ Include both staffing and supplies.			
Know the procedure for making a request for state and federal assistance and be sure to follow the chain of command.			
Prepare contingency plans in the event that assistance or aid is unavailable or delayed.			

General recommendation with regard to state and federal assistance:

▶ If unsuccessful in obtaining state/federal aid, consider seeking assistance from partners and those who signed mutual aid agreements. "Beg and borrow!"

EVENT PLANNING

Extended Length of Stay Issues	Responsible Entity/Person	Date Assigned	Date Completed
Ensure that plans are adaptable to various lengths of stay among evacuees. ▶ Consider how plans are likely to change based on various lengths of stay – two days, one week, three weeks, etc.			
Establish a rapid assessment team to identify changing priorities as length of stay increases.			

General recommendations for planning to address length of stay issues:

- By commandeering resources, hoarding can be prevented in favor of rationing.
- Keep in mind that social service and mental health needs also increase as time passes.
- Many evacuees with chronic mental health problems likely will not seek help for awhile.
- Strictly maintain shifts among staff and volunteers to allow for rest and minimize burnout.

Legal Considerations	Responsible Entity/Person	Date Assigned	Date Completed
Develop a legal process or legally authorized position to commandeer and distribute resources.			
Be sure that the public health officer or incident command leader knows what power s/he has to deny, ration, isolate and quarantine (I&Q) and triage.			
Become familiar with your state laws and local ordinances regarding public health powers and authorities and make sure your plans are compliant. Ensure legal processes are in place to modify/waive these as may be necessary in emergency scenarios. ▶ Include your county judge in planning process. ▶ Consider issues with civil liberties implications, such as enforcement of quarantine orders.			

General recommendations for planning to address legal considerations:

- In many counties, the public health officer or county executive has the power to ensure adequate food and fuel supply and such items related to basic survival. Does yours?
- Keep in mind that statutes might not cover voluntary emergency service persons.

POST-EVENT PLANNING

	Responsible Entity/Person	Date Assigned	Date Completed
Evaluate the disaster's impact on the community and identify recovery needs.			
Have a plan to assist those residents who suffered economic hardships and repay victims.			
Ensure process to keep detailed records in order to recoup losses. ▶ FEMA is more likely to grant money to communities if they provide photographic evidence.			
Conduct a post-event vulnerability assessment, based on community's response to the population surge. Identify gaps in preparedness efforts and evaluate whether the community was prepared for the number of evacuees it received. Consider the following: ▶ Basics: food, water, shelter, fuel ▶ Communications • With evacuees • With nearby city • With regional partners • With community residents ▶ Information technology systems of health care providers ▶ Transportation and signage ▶ Pharmaceuticals ▶ Emergency services infrastructure ▶ Law enforcement ▶ Health services			
Establish relationships with universities or local academic institutions to assist with post-event assessments. ▶ Often, post-event, preparedness officials get back to their day-to-day lives and have little time for evaluation.			

General recommendations for planning to address post-event considerations:

- Residents may be angry with authorities for not preventing people from arriving in the community. Be prepared to deal with such reactions.
- In some cases, evacuees may never return home. Recognize that they may need to be integrated into your community.
- Assess mental health impacts (e.g., PTSD, grief, experiences of orphans, etc.)
- Although some events may be small (blackouts, wildfires, etc.), lessons are still compelling. Do not neglect post-event assessments of these events.

APPENDIX A:
EMERGENCY MEDICAL SERVICES MUTUAL AID AGREEMENT TEMPLATE

(AGENCY NAME), INC.
(Address)
(City), (State) (Zip Code)

MUTUAL AID AGREEMENT

The following is an Emergency Medical Services (EMS) Mutual Aid Agreement between (aiding agency's name) and (agency requiring aid):

1. Services to be rendered by (aiding agency) to (agency requiring aid) will include but are not limited to the following:

    a. Provide EMS services in portions of (agency requiring aid) 's service area if (agency requiring aid) is not available. Service area of mutual aid to be defined.

    b. Provide an Advanced Life Support (ALS) unit (if available) for dual response to ALS calls, auto accidents and events with multiple patients in the above area.

    c. Co-respond with unit carrying extrication equipment whenever needed. Example: Auto accidents.

2. (Aiding agency) agrees to provide the following:

    a. An ambulance as needed and available.

It is understood that all services agreed upon are dependent upon the availability of proper equipment and personnel.

This agreement will remain in effect from the date of signature by both agencies until modified by mutual actions or revoked by the action of either agency.

(signature)	**(signature)**
(Name, Title, Agency)	(Name, Title, Agency)
Date	**Date**

APPENDIX B:
PORTABLE TRAILER INVENTORY

PUTNAM COUNTY CRI SUPPLIES TRAILER INVENTORY

Putnam County, New York, leveraged funding provided by the city of New York to prepare 2 portable trailers, containing 17 boxes with various supplies useful in emergency/disaster scenarios. Below is the inventory of these portable trailers' contents.

TRAILERS A & B	
BOX 1 OFFICE SUPPLIES	
ITEMS	**QTY**
DUCT TAPE	4
GRN,PINK,BLUE HIGHLIGHTERS	3
MASKING TAPE	4
MECHANICAL PENCILS	5
MEDIUM BINDER CLIPS	1
PAPERCLIPS 10PK	1
PENCIL SHARPENERS	1
RUBBER BANDS LGE	1
SCISSORS - LARGE	5
SCOTCH TAPE 10 PK	2
SHARPIE MARKERS 4PK	3
STAPLERS	5
STAPLES	5
SURGE PROTECTORS	2
TAPE DISPENSERS	5
TRAYS-WIRE LTR	5
BOX 2 OFFICE SUPPLIES	
ITEMS	**QTY**
3X3 POST-IT (YELLOW)	3
BLACK PENS	25
BOTTLES WHITE OUT	10
CALCULATORS	5
CD - RW	3
CLEAR PUSH PINS	2
DISKETTES 25 PK	3
JUMBO PAPE CLIPS 10 PK	1
MULTI-COLORED INDEX CARDS	5
MULTI-COLORED POST-ITS 3X5	3
RED PENS	5
REEL TICKETS	2
RUBBER BANDS SMALL	1
SMALL BINDER CLIPS	1
STAPLE REMOVERS	5
TWIN PACK PORTFOLIOS 10PK	2
YELLOW HIGHLIGHTERS	1

BOX 3	MEDICAL SUPPLIES
ITEMS	**QTY**
EMERGENCY BLANKETS	25

BOX 4	MEDICAL SUPPLIES
ITEMS	**QTY**
PILLOW CASE	1 BOX
HAND SANITIZER	12
INFLATABLE PILLOWS	25
MEDIUM VESTS	5
X LARGE VEST	5

BOX 5	MEDICAL SUPPLIES
ITEMS	**QTY**
BLOOD PRESSURE KITS W/SCOPE	5
GAUZE 2X2	20
GAUZE 4X4	5

BOX 6	MEDICAL SUPPLIES
ITEMS	**QTY**
4X4 GAUZE (TOP SPONGES)	3
BANDAIDS 1X3”	10
COTTON BALLS	2
DISINFECTANT WIPES	3
PENLIGHTS 6PK	3
SURGICAL TAPE DURAPORE 2”	3
SURGICAL TAPE DURAPORE 1”	5
SURGICAL TAPE MICROPORE 1”	5
SURGICAL TAPE MICROPORE 2”	3

BOX 7	MEDICAL SUPPLIES
ITEMS	**QTY**
BOI HAZARD BAGS	2
RED Z (FOR BIO BAGS)	2
SELF ADHESIVE ELASTIC BANDAGES	1
SURGICAL MASKS	2
TONGUE DEPRESSORS	15

BOX 8	MEDICAL SUPPLIES
ITEMS	**QTY**
EASEL	1
STERILE PADS 8X10	5

BOX 9	MEDICAL SUPPLIES
ITEMS	**QTY**
288 PIECE CUTLERY	3
LARGE ZIPLOC BAGS GAL	5
PAPER PLATE PACK	5
QT ZIPLOCK SM	5

BOX 10	MEDICAL SUPPLIES
ITEMS	**QTY**
50’ BRAIDED NYLON ROPE	1
BUNDLING TWINE	1
LEGAL PADS 12 PK	3
MAG LIT 4 CELL	1
SAFETY GLASES	2
SPLIT COWHIDE WORK GLOVES	2
WORK LIGHT COMBO PACK	1

BOX 11	OTHER SUPPLIES
ITEMS	**QTY**
COLORING BOOKS	50
CRAYONS	50

BOX 12	OTHER SUPPLIES
ITEMS	**QTY**
COLORING BOOKS	50
CRAYONS	50

BOX 13	MEDICAL SUPPLIES
ITEMS	**QTY**
CLEAR STORAGE BOX	4
TARP 5’6”X 7’6”	1

BOX 14	OTHER SUPPLIES
ITEMS	**QTY**
LIGHT STICKS 6 PK	4

BOX 15	MEDICAL SUPPLIES
ITEMS	**QTY**
STETHOSCOPE	3

BOX 16	MEDICAL SUPPLIES
ITEMS	**QTY**
TISSUES	15
1” SYRINGE	1 BOX
5/8 SYRINGE	1 BOX

BOX 17	SUPPLIES
ITEMS	**QTY**
WIRELESS MICROPHONE	1
WIRELESS MICROPHONE RECEIVER	1
AM/FM RADIO	1
AMPLIFIER	1
D-BATTERIES	12

Contributor: Sherlita Amler, Commissioner of Health, Putnam County, New York

APPENDIX C:
PLAN 9, SHELTER-IN-PLACE ESSENTIALS

Ready Montgomery
Emergency Preparedness and Response

Plan to be Safe.

Plan 9

You can do this!

Collect these nine essential items to help you shelter-in-place in the event of an emergency.

Start here

1 Water

One gallon per person, per day for three days.

2 Food

Non-perishables such as canned or packaged food.

3 Clothes

One change of clothes and footwear per person.

4 Medications

Three days' worth of prescription medications.

5 Flashlight

A bright flashlight and extra batteries.

6 Can Opener

***Manual* can opener** in case there's no electric power.

7 Radio

***Battery-powered* radio** and extra batteries.

8 Hygiene Items

Basics like soap, toilet paper and a toothbrush.

9 First Aid

Basics like antiseptic, bandages, and non-prescription medicines.

Done

For more information about emergency preparedness, contact:

Montgomery County, Md.	**montgomerycountymd.gov**
American Red Cross	**redcross.org**
Centers for Disease Control	**cdc.gov**
Disaster Help	**disasterhelp.gov**
Federal Emergency Management Agency	**fema.gov**
U.S. Department of Homeland Security	**ready.gov**

APC Advanced Practice Centers

Douglas M. Duncan
County Executive

If you don't have access to a computer and need information, please contact the Montgomery County Health and Human Services Information Line at 240-777-1245 and (TTY) 240-777-1295.

Alternative formats of this document are available upon request by calling 240-777-3038.

APPENDIX D:
SIMPLE TRIAGE AND RAPID TREATMENT (START)

START - Simple Triage And Rapid Treatment

START

By using a casualty sorting system, you are focusing your activities in the middle of a chaotic and confusing environment. You must identify and separate patients rapidly, according to the severity of their injuries and their need for treatment.

En route

Even while you are responding to the scene of an incident, you should be preparing yourself mentally for what you may find. Perhaps you've been to the same location before. Where will help come from? How long will it take to arrive?

Initial Assessment - Stay Calm

The first thing you should do upon arriving at the scene of an incident is to try to stay calm, look around, and get an overview of the scene. These visual surveys give you an initial impression of the overall situation, including the potential number of patients involved, and possibly, even the severity of their injuries. The visual survey should enable you to estimate initially the amount and type of help needed to handle the situation.

Your Initial Report - Creating a Verbal Image

The initial report is often the most important message of a disaster because it sets the emotional and operational stage for everything that follows. As you prepare to give the first vital report, use clear language (no signals or radio jargon), be concise, be calm, and do not shout. You are trying to give the communications center a concise verbal picture of the scene.

The key points to communicate are:

- Location of the incident
- Type of incident
- Any hazards
- Approximate number of victims
- Type of assistance required

Note: Be as specific with your requests as possible. Field experience has shown that a good rule of thumb initially, in multiple- or mass-casualty situations, is to request one ambulance for every five patients. For example, for 35 patients, request seven ambulances; for 23 patients request five ambulances, and so forth.

Before starting, take several deep breaths to give your mind time to catch up with your eyes and to try to calm your voice. You might give the following report: "This is a major accident involving a truck and a commercial bus on Highway 305, about 2 miles east of Route 610. There are approximately 35 victims. There are people trapped. Repeat: This is a major accident. I am requesting the fire department, rescue squad, and seven ambulances at this time. Dispatch additional police units to assist."

Sorting the Patients

It is important not to become involved with the treatment of the first or second patient with whom you come in contact. Remember that your job is to get to each patient as quickly as possible, conduct a rapid assessment, and assign patients to broad categories based on their need for treatment.

The patients who are left in place are the ones on whom you must now concentrate.

The START System: It really works!

The Simple Triage And Rapid Treatment (**START**) system was developed to allow first responders to triage multiple victims in 30 seconds or less, based on three primary observations: **R**espiration, **P**erfusion, and **M**ental Status (**RPM**). The **START** system is designed to assist rescuers to find the most seriously injured patients. As more rescue personnel arrive on the scene, the patients will be re-triaged for further evaluation, treatment, stabilization, and transportation. This system allows first responders to open blocked airways and stop severe bleeding quickly.

Triage Tagging: To Tell Others What You've Found

Patients are tagged for easy recognition by other rescuers arriving on the scene. Tagging is done using a variety of methods determined by your local Emergency Services System. Colored surveyors' tape or colored paper tags may be used.

The Four Colors of Triage

MINOR	delayed care / can delay up to three hours
DELAYED	urgent care / can delay up to one hour
IMMEDIATE	immediate care / life-threatening
DEAD	victim is dead / no care required

The First Step in START: Get up and Walk!

The first step in **START** is to tell all the people who can get up and walk to move to a specific area. If patients can get up and walk, they are probably not at risk of immediate death.

In order to make the situation more manageable, those victims who can walk are asked to move away from the immediate rescue scene to a specific designated safe area. These patients are now designated as MINOR. If a patient complains of pain on attempting to walk or move, do not force him or her to move.

The patients who are left in place are the ones on whom you must now concentrate.

The Second Step in START: Begin Where You Stand

Begin the second step of **START** by moving from where you stand. Move in an orderly and systematic manner through the remaining victims, stopping at each person for a quick assessment and tagging. The stop at each patient should never take more than one minute.

REMEMBER: Your job is to find and tag the patients --those who require immediate attention. Examine each patient, correct life-threatening airways and breathing problems, tag the patient with a IMMEDIATE tag and MOVE ON!

How To Evaluate Patients Using RPM

The **START** system is based on three observations: **RPM**--**R**espiration, **P**erfusion and **M**ental Status. Each patient must be evaluated quickly, in a systematic manner, starting with **R**espiration (breathing).

Breathing: It all STARTS Here.

If the patient is breathing, you then need to determine the breathing rate. Patients with breathing rates **greater than 30 per minute** are tagged IMMEDIATE. These patients are showing one of the primary signs of shock and need immediate care.

If the patient is breathing and the breathing rate is **less than 30 per minute**, move on to the circulation and mental status observations in order to complete your 30-second survey.

If the patient is not breathing, quickly clear the mouth of foreign matter. Use a head-tilt maneuver to open the airway. In this type of multiple- or mass-casualty situation, you may have to ignore the usual cervical spine guidelines when you are opening airways during the triage process.

> **SPECIAL NOTE:** The treatment of cervical spine injuries in multiple or mass casualty situations is different from anything that you've been taught before. This is the only time in emergency care when there may not be time to properly stabilize every injured patient's spine.

Open the airway, position the patient to maintain the airway and — if the patient breathes —tag the patient IMMEDIATE. Patients who need help maintaining an open airway are IMMEDIATE.

If you are in doubt as to the patient's ability to breathe, tag the patient as IMMEDIATE. If the patient is not breathing and does not start to breathe with simple airway maneuvers, the patient should be tagged DEAD.

Circulation: Is Oxygen Getting Around?

The second step of the R**P**M series of triage tests is the patient's circulation. The best field method for checking circulation (to see if the heart is able to circulate blood adequately) is to check the radial pulse.

It is not large and may not be easily felt in the wrist. The radial pulse is located on the palm side of the wrist, between the midline and the radius bone (forearm bone on the thumb side). To check the radial pulse, place your index and middle fingers on the bump in the wrist at the base of the thumb. Then slide it into the notch on the palm side of the wrist. You must keep your fingers there for five to ten seconds, to check for a pulse.

If the radial pulse is absent or irregular the patient is tagged IMMEDIATE. If the radial pulse is present, move to the final observation of the RP**M** series: **M**ental Status.

Mental Status: Open Your Eyes:

The last part of the RP**M** series of triage tests is the mental status of the patient. This observation is done on patients who have adequate breathing and adequate circulation.

"Open your eyes." "Close your eyes," "Squeeze my hand." Patients who can follow these simple commands and have adequate breathing and adequate circulation are tagged DELAYED. A patient who is unresponsive or cannot follow this type of simple command is tagged IMMEDIATE. (These patients are "unresponsive" to verbal stimuli.)

START is Used to Find IMMEDIATE Patients

This system is designed to assist rescuers to find the most seriously injured patients. As more rescue personnel arrive on the scene, the patients will be re-triaged for further evaluation, treatment, stabilization, and transportation. A patient may be re-triaged as many times and as often as time allows.

Remember that injured patients do not stay in the same condition. The process of shock may continue and some conditions will become more serious as time goes by. As time and resources permit, go back and recheck the condition of all patients to catch changes in condition that may require upgrading to attention.

Working at a Multiple- or Mass-Casualty Incident

You may or may not be the first person to arrive on the scene of a multiple- or mass-casualty incident. If other rescuers are already at the scene when you arrive, be sure to report to the incident commander before going to work. Many events are happening at the same time and the incident commander will know where your help and skills can best be used. By virtue of training and local protocols, the incident commander is that person who is in charge of the rescue operation.

In addition to initially sizing up an incident, clearly and accurately reporting the situation, and conducting the initial **START** triage, the first responder will probably also be called on to participate in many other ways during multiple- and mass-casualty incidents.

As more highly trained rescue and emergency personnel arrive on the scene, accurately report your findings to the person in charge by using a format similar to that used in the initial arrival report. Note the following:

* Approximate number of patients.
* Numbers that you've triaged into the four levels.
* Additional assistance required.
* Other important information.

After you have reported this information, you may be assigned to use your skills and knowledge to provide patient care, traffic control, fire protection, or patient movement. You may also be assigned to provide emergency care to patients, to help move patients, or to assist with ambulance or helicopter transportation.

In every situation involving casualty sorting, the goal is to find, stabilize and move Priority One patients first.

Triage in Hazardous Materials Incidents

Hazardous materials (Hazmat) incidents involving chemicals occur every day, exposing many people to injury or contamination. During a hazardous materials incident, responders must protect themselves from injury and contamination.

> **REMEMBER:** A hazardous materials placard indicates a potential problem. But not all hazardous materials problems will be placarded. Be sure to find the proper response to the problem before beginning patient treatment.

The single most important step when handling any hazardous materials incident is to identify the substance(s) involved. Federal law requires that hazardous materials placards be displayed on all vehicles that contain large quantities of hazardous materials. Manufacturers and transporters should display the appropriate placard, along with a four-digit identification number, for better identification of the hazardous substance. These numbers are used by professional agencies to identify the substance and to obtain emergency information.

IF THERE IS ANY SUSPICION OF A HAZARDOUS MATERIALS SPILL - STAY AWAY!

The U.S. Department of Transportation published the Emergency Response Guidebook, which lists the most common hazardous materials, their four-digit identification numbers, and proper emergency actions to control the scene. It also describes the emergency care of ill or injured patients.

Unless you have received training in handling hazardous materials and can take the necessary precautions to protect yourself, you should keep far away from the contaminated area or "hot zone."

Once the appropriate protection of the rescuers has been accomplished, triage in hazardous materials incidents has one major function--to identify victims who have sustained an acute injury as a result of exposure to hazardous materials. These patients should be removed from the contaminated area, decontaminated by trained personnel, given any necessary emergency care, and transported to a hospital.

REMEMBER: Contaminated patients will contaminate unprotected rescuers!

Emergency treatment of patients who have been exposed to hazardous materials is usually aimed at supportive care, since there are very few specific antidotes or treatments for most hazardous materials injuries. Because most fatalities and serious injuries sustained in hazardous materials incidents result from breathing problems, constant reevaluation of the patients in Priorities Two and Three is necessary so that a patient whose condition worsens can be moved to a higher triage level.

Summary

Every responder must understand the principles and operations behind your casualty sorting system. The **START** system is an excellent and easily understood triage or casualty sorting method.

Responders should be involved in periodic community disaster drills so that their skills and capabilities can be tested and improved.

You Should Know:

* The responder's role at multiple- or mass-casualty incidents.
* How to use the **START** system.
* How to recognize a hazardous materials placard.

You Should Practice:

* Using the **START** system during a simulated multiple- or mass-casualty incident.

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