JOHNSTOWN IEOC DMIS INDIVIDUAL TRAINING SESSION 1 OF 4

Log on to DMIS with your assigned password.

Message to Paul Neatrour that are signed on and ready to begin the exercise.

Paul will acknowledge your message.

You will authenticate with your initials in all caps.

STOP

Task 1

A severe weather advisory is issued for all of Cambria County. Heavy snow is anticipated form 1700 until 0600.

Create an incident report to begin a log of incidents related to a winter storm. Use your initials and a number to label the incident.

Message to Paul that you have completed task 1 and are ready for task 2.

Task 2

The previous weather advisory is changed to a winter warning effective midnight until 0600.

Update the previous incident report with this new information using the journal.

Message to Paul that you are ready for task 3.

Task 3

Cambria County 911 received a call reporting carbon monoxide detected at the Housing Authority apartments in the Eighth Ward at

Create a new incident and locate the apartment building on the mapping tool. The location is 300 Osborne Street, 15905. Message to Paul that you are ready for task4.

Task 4

The carbon monoxide in the above task has been verified. Twenty three people must be evacuated.

Update the incident recorded in task 3 using the casualty tool. Message to Paul that you are ready for task 5.

Task 5

Word is received from the on scene commander that two of the people will require ambulance transport. The rest are ambulatory.

Update the incident recorded in task 3 and message to Paul Neatrour that ambulance support will have to be requested. Use the casualty tool and the additional information tool. Message to Paul that you are ready for task 6.

Task 6

Draw an evacuation route on the map to the East Side Elementary School gym. East Side is located at Messenger and Pine. Don't use the Horner Street Bridge. Update the map, put a symbol at the elementary school and at the apartment building. Also label the route as route Trojan.

Update the incident with this route and map information. Notify Paul by message that you have completed the exercise, log out, and report to the conference room for an After Action Review (AAR).

ENDEX SESSION 1

JOHNSTOWN IEOC DMIS INDIVIDUAL TRAINING SESSION 2 OF 4

TODAY'S OBJECTIVE: CREATE A NEW INCIDENT AND GENERATE ONE SPECIAL NEEDS REQUEST FOR SOME EQUIPMENT.

Log on to DMIS with your assigned password.

Message to Paul that you are ready to begin the exercise with your initials in all caps and begin task 1. All information generated in this exercise will be saved and posted to the Johnstown Fire Department COG as a training entry.

Task 1

At 0730 this morning The Nelson Loughner Plaza, 51 Akers Street, alarm system has detected carbon monoxide in the building. Evacuation for 40 people needed to take place quickly. The JFD has verified that CO2 is present in dangerous quantities. Two of the people require ambulance transport but they are not sick. No terrorism is suspected. To insure the safety of all of the people evacuated from the Nelson G. Loughner Plaza you are tasked by the City Manager to develop an evacuation route to a more secure location at the West Side Elementary School on 196 Westgate Drive using routes 403 and 271. He wants this done as quickly as possible. The local hospital UPMC on Franklin Street is available for medical support. The severe winter weather and terrible road conditions may effect this evacuation.

Create a new incident. Complete each page of the incident tree view. Remember to save the information after each page is completed. Use the site information tool to locate the Loughner Plaza as the primary incident site. Use the edit mode to complete the agent information page. Complete the casualty page and all following pages. Put in zip code 15905 for the weather. The on scene weather temperature is 23F and the road conditions are treacherous. Using the map tool draw an evacuation route that will be named Hilltopper. Designate our area of interest on the map with a shaded rectangle. Indicate the start point with a symbol that represents a hazardous chemical at the Loughner Plaza. Place two traffic control points using the police symbol where you think they would be most useful. Label the West Side Elementary School as a shelter. Create a journal entry to this incident indicating an evacuation route has been prepared.

Send a message to Paul that all of the pages on the tree view are now blue except for the weather page. They all should be blue except the weather page.

Task 2

At 0830 hours a decision is made to evacuate the Loughner Plaza immediately. We need a bus and two ambulances. They are to report to a staging area at the Bishop McCort parking lot on Osborne Street as soon as possible where they will receive further instructions.

Create a single Special Needs Request that will include a request for two separate items: One for the bus and one for the ambulances. Place the staging area symbol on the map used for the incident in task 1. Make a journal entry to the task 1 incident record that a SNR was made and a staging area is designated. Go on to task 3.

Task 3

It is reported that the vehicles requested have arrived at the staging area at 0905 hours and the JPD reports that the TCPs are in position and a police escort is standing by in the staging area.

Update the incident with a journal entry.

Task 4

Message to Paul that everything is in place to conduct the evacuation.

Task 5

The West Side Elementary School has requested snow removal to facilitate the evacuation. Create an addition item request to the SNR for this incident and make a journal entry to this incident.

At 0915 the city Public Works Department notifies you that a plow truck has been dispatched to the West Side School and the job is complete.

Update the incident with a journal entry.

Task 6

At 0920 city firemen report that all passengers are loaded on the bus and the ambulances and are departing the staging area.

Update the incident with a journal entry.

Task 7

At 0940 Paul messages the team that the evacuation is complete with all passengers arriving safely at the West Side Elementary School.

Close out this incident with a journal entry.

ENDEX SESSION 2

Report to the conference room for the AAR.

JOHNSTOWN IEOC DMIS INDIVIDUAL TRAINING SESSION 3 OF 4

TODAY'S OBJECTIVE: TO OPEN A NEW INCIDENT, OPEN A SPECIAL NEEDS REQUEST FOR THAT INCIDENT, MAKE REQUESTS AND PLOT MAP INFORMATION RELATED TO THAT INCIDENT.

Log on to DMIS with your assigned password.

Message to Paul with your initials in all caps to indicate you are beginning the exercise.

All information generated in this exercise will be saved and posted to the JFD COG as a training entry.

Task 1

A serious vehicle collision has occurred at 1100 hours this a.m. on the route 56 by pass near the Johnstown War Memorial. All of the lanes on the by pass are blocked. A truck carrying coal has smashed into a van with four people. All of the people are injured. Two are ambulatory. The two that are not ambulatory require emergency treatment. Back injuries are suspected. Both are in shock. Traffic is backing up and the intersection at the red light at the bottom of the by pass is a jammed up. The roads are treacherous and snow is piling up everywhere.

Create a new incident. Complete as many of the pages of the incident tree as you can to the best of your ability based on the information given above. On the map place a shaded square over the affected area of the route 56 bypass and label it with a textbox.

Message to Paul that you have completed task 1 and go on to task 2.

Task 2

Two ambulances will be needed to transport the two seriously injured people. Injured passengers will have to be carried to a staging area established in the War Memorial parking lot near the bridge.

Create a Special Needs Request (SNR) and request 2 ambulances. Make a journal entry noting that the request has been made. Plot the staging area on the map.

Task 3

One additional ambulance is needed for the two people who are not seriously injured.

Request another ambulance and make a journal entry to update the incident.

Task 4

The UPMC hospital on Main Street is designated as the receiving hospital.

Plot the hospital location on the map and make a journal entry.

Task 5

The overturned truck has to be righted and towed from the scene to open up the bypass. Traffic continues to back up.

Request a tow truck capable of moving a large coal truck. Estimated weight is 30,000 lbs. The best approach to the accident scene is from the East using the Widman Street exit ramp and the Eastbound lanes.

Message to Paul that you have completed task 4 and continue with task 5.

Task 6

The city manager orders that traffic be rerouted starting at the point stadium through the city reentering route 56 at the entrance at the base of Bedford Street. Police assistance is required. Four patrol cars are now available for traffic control.

Create a detour route through the city with four traffic control points using the map tool and update the incident with a journal entry. You have to reroute the eastbound and westbound lanes. Label the detour routes Eastbound and Westbound using the textbox.

Task 7

The downtown area is congested with traffic. The City Manager wants to seal off the downtown area until traffic flow is under control.

Request 20 portable roadblock horses in the SNR. Establish roadblock positions on the map. Make a journal entry to update the incident.

Message to Paul that you have completed task 7.

Someone will report to your workstation to check your work.

The AAR time will be announced when all have completed the exercise.

JOHNSTOWN IEOC DMIS INDIVIDUAL TRAINING SESSION 4 OF 4

OBJECTIVE: ENTER A NEW INCIDENT, COMPLETE A SNR FOR FOUR NEEDED ITEMS, CREATE A $2^{\rm ND}$ and $3^{\rm rd}$ VERSION OF THE ORIGINAL INCIDENT, AND MAKE ENTRIES TO THE MAP.

Log on to DMIS with your password. Message to Paul your initials in all caps to indicate you are started on task 1.

Task 1

The city of Johnstown is jammed with snow. The city manager wants to clear the downtown streets for the businesses there during Christmas shopping prime time. He wants Main Street cleared first, followed by Market Street, Franklin Street, and Washington Street. At this time he wants the EOC activated and a map developed.

Create a new incident for snow removal. Mark and label the streets identified by priority. Identify the public safety building on Washington Street, City Hall on Main Street, the City Garage in Cambria City and the two city fire stations. One is on Ash Street and the other is on Fairfield Avenue. Also mark the main roads leading into the downtown area. Create police roadblocks on all secondary roads leading to the downtown area on the map.

Message to Paul that you have completed task 1.

Task 2

The City Manager approves the map and directs that 4 additional plow trucks, 2 front end loaders, and 10 dump trucks be requested to accomplish the snow removal. You will also have to request portable roadblock horses to block the streets you identified in task 1.

Edit the original incident and adding that the city manager approves the plan and wants additional resources on site NLT 2100 tonight. Mark the staging area for this additional equipment on the map. It will be at the Johnstown Folkfest area across the river from the point.

Message to Paul that you have completed task 2.

Task 3

The hospitals on Main Street and on Franklin streets have requested snow removal at their emergency room entrances. At the present time they are blocked. The City Manager makes this the first priority for snow removal.

Edit the original incident and identify the hospital emergency rooms as the first priority for snow removal. Mark the hospitals on the map.

Message to Paul that you have completed task 3. Attend the AAR $\,$ ENDEX SESSION 4

1 LAUREL, MD MASS CASUALTY EXERCISE : TRANSPORTATION SYSTEM COLLISION

It is 7:35 a.m. on a Wednesday in late April. At the International Airport, an A-300 Airbus carrying 182 passengers and 8 crew is departing on a trans-continental flight. Immediately after take-off, the aircraft begins a slow roll to starboard taking the aircraft over the industrial and business areas surrounding the airport. The aircraft progressively loses altitude as it continues banking toward the right. Witnesses on the ground can see smoke pouring from the starboard engine nacelle.
The aircraft passes low over the nearby suburbs, skims across treetops and telephone poles, and crashes into a residential area four miles from the airport. The fuselage skids through three blocks of houses, coming to rest less than two blocks from the Regional Hospital, which it miraculously misses. As the aircraft breaks apart, its fuel ignites into an enormous fireball that engulfs at least a dozen homes. The wind carries the cloud of smoke directly onto Regional Hospital, which is rapidly engulfed in smoke. Sirens can be heard almost immediately.
Issues concerning the immediate situation:
1. What immediate actions should be taken by the staff at Regional Hospital? What should be the second and third priorities?
2. How can the hospital mitigate the effects of the smoke and fire cloud in the immediate
vicinity? Is evacuation the best option? How should it be executed?
3. What assistance should be requested of adjacent medical facilities and hospitals? Who should be notified and how should status reports and updates be provided? Should Regional
Hospital designate itself as the primary response facility for this emergency, or should that be
delegated elsewhere? Who determines this designation?

Police, firefighters and first responders immediately begin arriving in the vicinity and mounting a response. The local district Fire Chief immediately assumes the role of Incident Commander.

4. What is the relationship of Regional Hospital's Incident Commander to the Fire Chief?	
N P	
5.If the Fire Chief orders an evacuation of the hospital, is the hospital's Incident Commander obligated to comply, even if she views her first obligation as assisting in the emergency meresponse? If evacuation is to be carried out, who among the hospital staff should be designated to coordinate the evacuation? Who coordinates emergency medical assistance to the response	dical ited to
at the scene of the fire?	
w1	
T P	
6.If evacuation is deemed necessary, how will transportation be coordinated with arriving fixEMS, and alternative rescue vehicles (e.g., panel trucks, school buses, coach buses, casino sbuses, etc.)? What routes have been planned, and how can traffic be controlled?	
7.If Regional Hospital is evacuated, what is the responsibility of your hospital to a How is that assistance coordinated?	ssist?
Assume that this incident happens in the vicinity of your haspital and that the aircraft does i	not

Assume that this incident happens in the vicinity of your hospital and that the aircraft does not miss, but actually strikes your facility, shearing off the top floor of the building.

8. What is the emergency evacuation plan for your hospital, and how quickly may it be implemented? How would the arrival of a large number of fire, EMS, and rescue vehicles (e.g., panel trucks, buses, etc.) in your neighborhood affect your ability to manage this emergency?

2 LAUREL, MD MASS CASUALTY EXERCISE : FIRE AND COLLAPSE OF A PUBLIC BUILDING

A PUBLIC BUILDING
It is 3:15 am on a Thursday in October. At (college/university) a gas line fitting fails on a heating system in the basement of the Dormitory, causing an accumulation of natural gas in a corner of the basement. The spreading gas reaches a pilot light on the dormitory's water heater and explodes, causing an instant fire and collapse of the southern quarter of the building. The fire spreads quickly, due to the interior wood construction and the academic clutter provided by the incoming students. Within minutes, the building has filled with smoke, and the fire is spreading horizontally along the first and second floors.
While some students at the northern end of the building have awakened and escape, the majority is overcome with the rapidly spreading smoke, and remain trapped inside. Students and community residents from surrounding buildings have gathered quickly to lend assistance, but the fire is too intense at the southern end of the building to permit unprotected access. By the time fire trucks arrive one half of the building is engulfed in flames.
Within 20 minutes, immediate casualties reported from first responders include 36 people suffering from varying degrees of smoke inhalation and 62 with serious burns requiring immediate evacuation and medical attention. 40 minutes later, reports indicate that there are 11 known dead and 29 unaccounted for, fire and rescue personnel are attempting to locate the missing and determine their condition. It takes two additional hours to bring the fire under control, during which time, two firefighters also succumb to smoke inhalation and are evacuated from the scene.
Regarding the immediate emergency:
1.By what medium does your facility receive initial reports and updates on an incident such as this? How does your county plan to receive and share this information? How does your facility intend to share this information across jurisdictional boundaries and hospital regional zones? How do you send a status report regarding the immediate availability of assets such as burn treatment facilities available at your hospital? To whom do you send such reports?

Hospital in _____ County, the nearest medical facility to the college (university)

finds itself overwhelmed with the casualties, due to existing stress on its capacities. How can you

learn of this situation and make known your ability to lend assistance and capability?

4

It is not until the next morning that firefighters are able to locate an additional 14 people who have expired in the incident, virtually all of whom are charred beyond recognition. Five additional students are determined to have been absent and the remainder are still unaccounted for.

3. What facilities does your hospital maintain for aiding in forensic identification of remains?
What are your facility's plans for obtaining refrigerated trailers? For contacting the county
coroner? For contacting the Disaster Mortuary Operational Response Teams (DMORT)?
w
T D
4. How many of the above casualties could be evacuated from the scene by helicopter from your
medical facility? How will your facility contact/access the necessary helicopter resources?
Where is the nearest helicopter landing zone to your facility? Which casualties should be
relegated to ground transportation? What advice would you provide first responders if asked?
T D
5. Assuming that your medical facility is the nearest to this incident, what is your facility's plan
for managing the arrival of relatives and loved ones of the injured and killed? What special
services can you call on to assist in controlling this problem?
services can you can on to assist in controlling this problem?
X P
6. What communication plan and procedures are in place for emergency notification to hospital
staff? To external emergency response agencies? To the media?
starr. To externar emergency response agencies. To the media.
K
7. What amount of time is required to call hospital personnel back to the emergency department
(or designated staging area) for a disaster response?
8. Has your facility identified a location from which media may work (film or live broadcast)?

3 LAUREL, MD MASS CASUALTY EXERCISE : NATURAL DISASTER (SUDDEN ONSET): TORNADO

NOTE: The objective of this exercise is to examine the coordination required in responding to a natural disaster occurring on the border between two or more jurisdictions: (federal, state, county, municipal). The exercise should be tailored to support this objective.

It is late afternoon on a Saturday in August in southern County. Since noon, there has been a growing overcast moving in from the west accompanied by a drop in temperature of about 10deg F. The barometer has also been dropping steadily, and the wind has increased to a consistent 18 knots from the north-northwest. A summer storm seems clearly imminent, and weekend vacationers at Park have begun moving to shelter and stowing loose gear as a precaution. At 3:20 p.m., the National Weather Service issues a severe weather warning for the southern regions of and counties. There is a possibility of a tornado, and citizens are warned to be vigilant. Weather alerts are repeated on area television and radio stations.
At approximately 3:55 p.m., a funnel cloud is sighted south of, moving generally southward with the gathering storm. It is not reported to have touched ground. At 4:10, a news bulletin from the local radio station reports that a tornado has been sighted close to the ground north of the border.
At 4:12 p.m., a tornado touches down one mile south of, and begins cutting a swath across the farmland and small communities in lower County. Within two minutes, the tornado has traveled six miles along a path between and It dissipates after crossing Route, just north of the border. In the tornado's wake lies a quarter-mile wide path of devastation.
In all, fourteen homes are demolished along the path between and, including three farmhouses and numerous barns and outbuildings. On the edge of the suburban areas northwest of, twenty additional homes are destroyed along with several businesses, fast-food restaurants and a strip mall. Twenty or more cars and trucks lie strewn like toys along Highway, and the heavy Saturday evening traffic has come to a chaotic stop.
Seventeen people have been killed in the small towns and business establishments along the storm's path, and another thirty-six have been seriously injured. Damage is extensive and over twenty families are left homeless. The potential clearly exists for the area to be declared a disaster area.
1. Given the proximity of this disaster to the city of, what agreements or protocols exist between your area's hospitals and those of to assist in managing emergency situations such as this? Are there any additional or extraordinary conditions that must be met for bi-lateral medical support between the two (countries, states, counties, municipalities)?



2.How quickly can your medical facility muster support and be ready to receive patients evacuated from this area? How is the storm condition likely to affect helicopter operations? What affect will this have on the type of medical emergencies you might expect to see?



If the tornado had touched down in the center of with significant casualties and loss of life, what sort of support would your region's hospitals be prepared to provide?

3. What is the role of the American Red Cross or other voluntary aid organizations?

4 LAUREL, MD MASS CASUALTY EXERCISE : NATURAL DISASTERS (SLOW ONSET):

HEAT WAVE AND DROUGHT

SEVERE WINTER STORM

NOTE: These exercises are intended to raise considerations for "slow onset" disasters, i.e., those that arise from sustained environmental conditions, rather than from a single catastrophic incident. There are significant differences between the effects of a summer heat wave and drought, as compared to a winter storm and extended severe cold. Nevertheless, there are also similarities in planning and preparation, and in recognizing the consequences of an extended hazard and in taking steps to mitigate the effects before conditions become severe.

HEAT WAVE AND PERSISTENT DROUGHT

It is mid-August during the hottest summer in a ten-year period of record-breaking summer temperatures. Across the nation, communities have struggled with persistent drought that has scorched lawns and forests, decimated agriculture and produce, and reduced municipal water supplies to record level lows. Lakes and reservoirs have been reduced to such a degree that electrical power generation has been affected nationwide. This, coupled with the exceptionally high demand on air conditioning systems, have caused a series of "rolling brown-outs" in cities across the country.

In temperatures have surpassed all records, with significant impact on some sectors of the local community. Hardest hit have been the poorest communities, where air conditioning is infrequently available and ventilation in high-rise apartment buildings is poorest. In retirement and convalescent homes the heat and humidity have had a serious impact on the elderly, particularly with shortages in electrical power limiting the use of air conditioning. In rural communities, wells have been running dry, necessitating the delivery of water in trucks, or the use of less well-monitored water sources. Summer school programs, sporting events and organized recreational activities have all been curtailed or modified, in order to reduce risks due to over-exertion.

For the last three weeks, there has been a noticeable rise in heat-related illnesses throughout the region. EMS serving your facility has responded to as many as eight calls per day for injuries and conditions attributable to heat and physiological stress. For the first time this summer, there were two heat-related deaths in your area within the last week.

1. What specific heat-related injuries or illnesses would you want the EMS and medical staff to be particularly prepared to receive and diagnose?



2. What demographic groups in your area are most at risk for heat related illnesses? What
precautions can those groups take to limit exposure and hazard?
▼ ▼
3. What steps should your facility take to protect its own staff during a possible increase in
patient load and working hours? What institutional or seasonal factors might contribute to
overwork and staff stress during this period?
T P
4. What impact is a long-term heat wave and drought likely to have on your facility and its
infrastructure? What precautions should your facility take to ensure its ability to maintain service
and quality of care?
<u> </u>
5. What assistance can or should your facility provide to local municipal leadership in coping
with this situation? How can your region's medical community combine its resources and pool
assets to assist in a sustained emergency of this sort?

SEVERE WINTER STORM

4

After the severe storms and record-breaking snows of the previous winter, it was not expected that this year would be as bad. However, for the second consecutive year, records are being broken across the central and eastern United States for severe winter conditions. In there have been persistent freezing temperatures for nearly six weeks, coupled with several winter storms. Accumulated snow has reached record levels, with snow banks along plowed highways and streets exceeding six feet in many places.

With the highest costs of home heating oil since the first months of the autumn, many homes and smaller buildings have gone without heat. As a consequence, the freezing of interior spaces has resulted in a significant demand on plumbing services and public works departments to repair damaged piping systems throughout the area.

Unfortunately, there are few signs of a break in the weather. Long-term predictions are for freezing weather to continue for at least another month. There is also another winter storm approaching from the northwest which is anticipated to arrive in the region within the next week.

6. What are the routine medical emergencies that can be anticipated with a prolonged period of
cold weather in your region?
△ ▼
7.In the event that expectations are exceeded and bad weather endures, what impact might those
conditions have on such aspects as hospital staffing? Emergency delivery and EMS services for
your facility? Staffing for security, administration, food service, and public works personnel?
8. What impact would severe prolonged weather have on mortuary services and burial within
your area? How might this interrupt or hinder routine procedures at your facility?
9. What weather-related illnesses or conditions would you expect to see over time? Would

9. What weather-related illnesses or conditions would you expect to see over time? Would confining the local population to homes and indoor activities exacerbate or reduce routine winter medical conditions like influenza, hypothermia, and exposure? How might it affect other problems like automobile and industrial accidents? What preparations should be made for these possibilities?

5 LAUREL, MD MASS CASUALTY EXERCISE : DETONATION OF A TERRORIST DEVICE: TRUCK BOMB

At 9:40 a.m. on Wednesday morning, the dispatcher at the County Sheriff's Office receives a brief call from an unknown person stating that there is a bomb "inside the County Court House that will be detonated at ten o'clock." The County Sheriff's Department's Bomb Squad is dispatched immediately to the scene. The dispatcher notifies the Fire Department, the Police Department and Emergency Medical Services via the 800 MGHz radio system that connects directly with the County 9-1-1 dispatch center. The dispatcher then calls the Security Officer at the County Courthouse, who begins notifying courthouse personnel to evacuate the building immediately.
Within minutes, the courthouse begins to clear and personnel flood the exits and move quickly into the street. Sirens blare as arriving police stop traffic along surrounding streets and begin moving people onto adjacent parking lots and sidewalks at a safe distance.
At precisely 9:55 a.m. there is a terrific explosion in front of the office building across the street from the courthouse, as a white van parked along Street detonates in a fireball. People along the street who had evacuated from the Court House-as well as passersby, police officers and county officials-are blown to the ground from the concussion, and many are injured from flying debris. In the office building, workers who had crowded the windows to watch the commotion below are injured by the hundreds as glass windows from the fac§ade implode into the office spaces.
On the street there is chaos, as citizens who had thought themselves safe from possible injury in the courthouse suddenly realize that a second bomb could explode at any moment. Police, firemen, emergency medical technicians and some citizens attempt to converge on the scene of the explosion, only to have to fight crowds attempting to escape. The crowd on the street grows quickly as uninjured personnel and mobile wounded from the office building begin evacuating from the three intact sides of the building. Soon the Bank building also begins to empty, as does the county annex across the street from the main courthouse.
It is clear from the extent of the damage to the street, and to the building, that injuries will be extensive and serious. Many people lie unmoving on the street, and blood, clothing, debris and human body parts lie scattered along the entire block. A fire truck that was across the street from the van is extensively damaged and several firemen are injured. An ambulance that had just arrived lies on its side in the middle of Street.
Almost immediately, the Deputy Sheriff and the Fire Chief-both on the scene of the evacuation-call their headquarters and report the bombing incident and casualties. EMS and Sheriff's Office dispatchers immediately turn the calls around and begin notifying area police, fire and rescue services to report to the scene to assist.
Hospital and Medical Center and other area hospitals are immediately notified of the incident via the countywide hospital radio-phone matrix system run at the Emergency

Operations Center in, and begin to prepare for the flood of casualties. Measures to assist emergency medical services are put into motion.
1. For an incident of this magnitude at, what measures will be taken immediately by your facility to assist? Who initiates these measures? What standard routines are activated and what is your specific responsibility?
4
2.Blood will be needed immediately. How does your facility involve the American Red Cross in
rapidly activating emergency blood supplies?
▼
3. What special medical attention will be most urgently demanded from this incident? What
services of a specialized or exceptional nature can your medical facility provide?
4. Much literature on disaster response management indicates that one of the greatest disaster
challenges is the management of civilian volunteers who arrive to assist. If your facility was the
nearest hospital to this incident, how would you maintain control of potential blood donors and
other volunteers? Who at your facility is charged with this responsibility?
▼
5. Assuming that your medical facility is the nearest to this incident, what is your facility's plan
for managing the arrival of relatives and loved ones of the injured and expectant? What special
services can you call on to assist in controlling this problem?
6. What special precautions must be taken to preserve the value of crime evidence? Specifically,
what becomes of the personal effects of victims arriving at your facility to ensure that their value
as evidence is not lost? What advanced planning and training has been undertaken to educate
medical personnel of this dimension of the medical support role?

6 LAUREL, MD MASS CASUALTY EXERCISE : DETONATION OF A TERRORIST DEVICE: SUICIDE BOMBER

It is approximately 6:40 p.m. on a Saturday night in early June. Lines at the local multi-plex cinema have begun filling for the first showing of the evening, and people are beginning to pour into a nearby restaurant adjacent to the theater. As a crowd moves about, a lone man wearing a motorcycle jacket enters the restaurant. He walks briskly past the hostess and into the center of the dining room where, without hesitating, he detonates a powerful bomb that is hidden beneath his leather jacket. Instantly, there is a terrific explosion that utterly demolishes the restaurant.

Seen from outside, the front of the building simply disappears behind a brief flash and a hail of smoke and debris. Glass, metal and wood fragments from the restaurant fly through the air injuring scores of people on the sidewalks and along the street in front of the restaurant. Inside there is momentary silence as debris settles from the collapsed roof. Seconds later a few muffled cries can be heard from within.

The street is immediate chaos, as the more distant passersby instinctively run from the damage. Dozens of people are lying on the street, some injured, some merely stunned. Moments later, other people run toward the damaged restaurant in an effort to help. Sirens begin to sound in the distance. The now darkened building and street front is littered with a random mixture of motionless bodies, building materials, human body parts, tables and chairs, and broken glass.

The supervisor at Emergency Room receives a call from the first Emergency Medical Technician on the scene, and is told of the mass carnage. She estimates that there are at least thirty seriously injured persons who will require immediate medical attention. You can expect to begin receiving casualties within fifteen minutes.

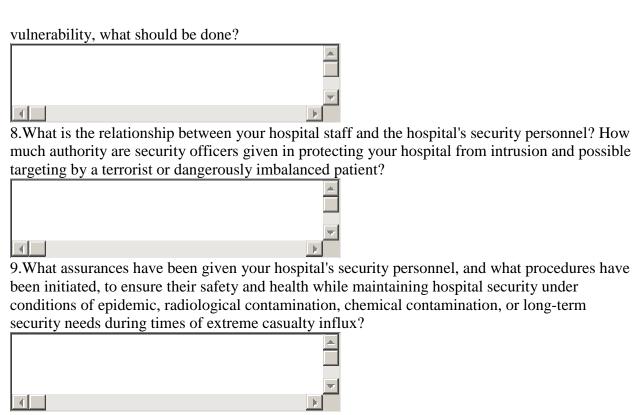
1. What immediate steps should you take to painflux?	repare the Emergency Room and staff for this
1	D
2.On a "routine" Saturday night in early sumi	mer, what capacity does your ER have to manage a
sudden casualty situation of this magnitude?	

prior medical conditions or diseases such as hepatitis or HIV/AIDS? How are large quantities of contaminated tissues, fluids or body parts from mass casualty sites to be handled at your facility? What facilities or capabilities exist for the treatment and/or decontamination of first responders-
as well as uninjured bystanders-who may have become exposed or contaminated?
1
Establishing the identity, motivation and origin of the perpetrator(s) is of crucial (and most likely, national-level) importance, and will require the immediate intervention of police and investigators while on-scene emergency efforts are still in progress.
5. What special precautions must be taken by EMS and hospital personnel to preserve evidence and what training has your facility's personnel received in these procedures? What training has your facility's personnel received in cooperating with and supporting law-enforcement personnel and investigating officers?
4
Several ambulances arrive at the front of the hospital, and the victims are being transported into the ER receiving area. At that moment, there is a terrific explosion felt in the hospital that shakes the walls of the ER. From the main entrance of the hospital, there come the sounds of panic and screaming. Smoke and dust begin to fill the air. Word comes that a suicide bomber has just blown himself up in the main reception area of the hospital at the start of the evening's visiting hours. There is massive damage to the front of the hospital, to the main entrance and reception area, and to dozens of visitors, patients and hospital staff at the other end of the hospital.
6. What is the immediate responsibility of your ER staff to the arriving victims from the primary terrorist incident, and to those at your own facility?
7. What security procedures have been established at your facility to screen incoming patients and visitors, to ensure that an event of this sort is prevented? In recognition of your facility's

3. Given the degree of trauma to these victims, what steps do you need to take at this time of

4. What procedures or protocols exist for handling injured victims who may be suffering from

night to ensure that adequate blood supplies are available?



10. What kind of interaction exists between hospital security personnel and local law enforcement?

7 LAUREL, MD MASS CASUALTY EXERCISE : TOXIC INDUSTRIAL ACCIDENT

It is approximately 10:00 p.m. on a hot, humid, breezeless Saturday night in early September. At the Printing Plant in, printing of the Sunday edition of the newspaper is in full swing. During the course of the shift, an electrical short occurs in a motor controller for one of the printing presses, and an electrical fire breaks out. At that moment, the attention of the printing crew is on a printing error just discovered in an insert for the paper's September 11th Retrospective. With the noise of the printing operation and the crew's focus momentarily diverted, a small fire quickly becomes a large one. Within seconds, the electrical fire ignites the paint and accumulated dust on the wall.
By the time the fire is noticed, a large section of the wall and the electrical cabling on it are burning. As the insulation on the cabling melts, the electrical fire compounds and the wiring suddenly becomes a massive electrical short of fused cables, flying sparks and melting insulation. On the level above the fire, a piping system for the lubricant of the presses ruptures at a weakened joint and also ignites, sending enormous clouds of smoke into the workspace. The smoke emitted from the lubricant and the burning electrical insulation is instantly over-powering, and the printing crew-now attempting to fight the fire with portable carbon dioxide extinguishers-cannot get close enough to be effective.
Attempts are made to secure the electrical power and isolate the damaged cabling, but the heat generated from the fused electrical systems makes the fire self-sustaining. The printing crew begins to evacuate, as the fumes and intensity of the smoke increases. The upper sections of the printing presses themselves are soon engulfed in flames, fed now from the burning paper and lubricants in the presses. The automatic fire suppression system activates, but having been partially drained Friday for repairs that were to resume on Monday, the water is not sufficient for the size of the fire. What water there is merely raises a steam cloud making the smoke dense and impenetrable. The crew is overcome by the smell of the burning ink and chemicals, and is barely able to evacuate through the billowing smoke. Explosions are heard inside the building as chemical storage rooms begin to catch fire and burn.
Fire and rescue vehicles from the Fire Department are already arriving. However, Saturday night traffic has come to a stop in the vicinity of the plant, due to the dense smoke clouds that have made transit through the area nearly impossible. Motorists, delivery vehicles, and night shift personnel attempting to evacuate from the area suffer from the acrid smoke and fumes that hover close to the ground and refuse to dissipate. By the time the fire teams are set up to do battle, the fire is out of control.
Within thirty minutes from its start, the printing plant is engulfed in a fire that emits a dense cloud of smoke from the burning newsprint and vaporizing chemicals. Toxic fumes from the chemicals associated with the printing process are so thick that the fire crews are unable to approach the building without self-contained breathing apparatuses, thus making preparation and sustained fire-fighting difficult. Assist crews from area fire stations begin to arrive, but the fire

has now grown to a conflagration. The heat, humidity and stillness of the air add to the stress of

the situation, and the safety of firefighters becomes a principal concern for the Incident Commander.

In addition, the danger posed to residents by the lingering smoke and fumes necessitates the immediate evacuation of the neighborhood surrounding the print plant. During the next four hours, area hospitals see a steady stream of motorists, residents and emergency personnel arriving for treatment of smoke inhalation, inflammation of the throat and lungs, and sustained irritation to the eyes. Many of those admitted, particularly elderly area residents, require ventilation. Some are unconscious upon arrival.

1.Once notified of the extent of this fire, at what point does your hospital activate its Incident Command System and begin making preparations for special emergency medical routines? Who makes that determination on late Saturday night? How quickly can additional emergency room personnel be obtained? What alternative routes to the hospital have been considered for hospital personnel in the event the main highway near the plant is closed?



2. Given the nature of the emergency posed by toxic reactions to this fire, what priority is to be given victims of smoke inhalation over other "routine" Saturday night emergency room patients? Are any special procedures or precautions necessary?



3. Your emergency room is quickly overwhelmed by the volume of people requiring specialized care and ventilation. What assistance is available that can be obtained on short notice at this time of night? Where do extra ventilators come from, and how quickly can they be obtained?



4. Will the requirements for supporting fire-fighting activities-like first aid and recovery for firefighters, police and emergency personnel-have any impact on your hospital's ability to maintain continuity of operations and standards of care in the emergency room?

8 LAUREL, MD MASS CASUALTY EXERCISE : CHEMICAL SPILL IN TRANSIT

With the first serious snowfall of the new year, the _____ area had been slowed to a crawl for four straight days. Most businesses had been on shortened work hours, and many had authorized permissive leave policies and tele-commuting. Most non-essential county and government services had been suspended. Highway crews and public works personnel, on the other hand, had been taxed severely. Road maintenance along snow emergency routes and interstate highways had kept highway crews busy, and several area power outages had been sustained as a result of storm damage to telephone poles and power lines. Over the course of a week, 32 inches of snow had accumulated, with roadside snowbanks higher than seven feet in some areas. Most municipal thoroughfares had been reduced to a single lane each way. Highways around major towns had been kept open, though at considerable difficulty. On Monday morning of the first reasonably clear weather day, business was beginning to resume a more normal pace. Having missed several days of regular work, commuters were determined to return to their normal work schedule. Despite heavy drifts on roadsides and recurrent patches of ice still on the highways, the morning rush hour was resuming its familiar, slow pace. At 7: 50 a.m. a tanker truck loaded with liquid chlorine is making its way carefully down Highway _____ toward _____. As it approaches the _____ intersection, an empty van hits a patch of ice ahead of the tanker truck, and begins to swerve across two lanes of traffic. The van collides with another car, and the two skid into a third. The driver of the tanker truck attempts to brake and swerves right to avoid the three cars ahead of him. The rear of his truck hits the same patch of ice that the van had hit, and the tanker begins to jack-knife across the highway. As its rear wheels hit the snow bank on the left side of the highway, the tanker overturns and rolls over. The tank ruptures with the force of the collision, and spills 22,000 gallons of liquid chlorine over the highway. Within seconds, over 20 vehicles either collide, come to rest in snow banks on either side of the highway, or find themselves stopped on the highway amid the chlorine spill. As a consequence, nearly 40 motorists become stranded in the spill, many of whom sustain injuries from the collisions. Some begin to succumb to the fumes as they attempt to leave their abandoned vehicles. Traffic in both directions along the highway, and at the _ intersection comes to a standstill and begins to back up. Cars that are able pull off the highway. However, because of the accumulated snow, access for emergency vehicles is soon completely blocked. As the chlorine gas begins to drift down wind, more and more motorists are affected. Soon a number of homes, businesses and buildings adjacent to the accident are engulfed in the fumes.

1. Your Emergency Room is alerted to this accident, and prepares to receive injured personnel once an evacuation can be effected. What steps should your hospital make now to prepare for the injured?



Over the course of four hours, emergency rescue personnel are able to remove or assist over 80 civilians. There are 8 deaths from injuries sustained in the collisions and another 20 directly attributable to asphyxiation. In addition, nearly 240 people in the _____ area are evacuated from their homes and businesses. Of those, 120 are brought into local hospital emergency rooms suffering from chlorine gas inhalation. Eight EMTs and rescue personnel are overcome by the chlorine fumes and require medical treatment.

2. What are the capabilities of your hospital to communicate with emergency management personnel at the scene of this accident? To communicate with County Emergency Operating Centers?



3. Who in your facility is responsible for maintaining that communication, and for coordinating the facility's efforts with other area medical facilities?



4.If such an incident as this occurred within a mile of your medical facility, how would you coordinate medical support to the relief efforts? What are the capabilities of your facility to decontaminate victims who are already suffering from exposure and injury? How would your facility handle an emergency evacuation in an incident such as this?

9 LAUREL, MD MASS CASUALTY EXERCISE : TERRORIST ATTACK USING A CHEMICAL AGENT

It is early Tuesday morning, the first day o	of the annual conference of the	Association,		
and for the first time in nearly a decade,	is hosting the event at the	Conference		
Room in the Hotel. The session of	ppens at 9:00 a.m. with a keynote addr	ess by the state		
Lieutenant Governor on the topic of "Terro	orism and Your Community: What it i	means to be an		
American in a Changed World."				
Delegates from the state branches of the Hotel at 7:30 a.m.; by 8:00 the hotel lobby anticipation of the 8:30 convening of the c slower than normal, given the steady stream up traffic at the hotel parking lot.	r, reception area and Conference Room onference. Morning traffic along	n are filling in Street is		

At 8:15 a young man enters the hotel lobby from the elevators, carrying a guitar case and a backpack. He leans his gear against the wall in the corner of the lobby, and proceeds to the receptionist desk where he checks out of his room. After glancing at his wristwatch, he takes his car keys from his pocket and walks out to the parking lot, gets into a white car and drives away. Two minutes later, there is a terrific explosion in the hotel lobby, as a bomb inside the abandoned backpack detonates.

Dozens of people in the lobby are injured, and the exploding windows of the hotel front injure many more in the hotel entrance and parking lot. The hotel lobby, conference room, dining area and ground floor hallways are instantly filled with smoke, dust and flying debris.

Immediately, those not injured by the blast begin to stream out from the conference room, from ground floor rooms and from the stairwells from upper floors. Most of the guests and conference attendees attempt to find their way to exits, but many people converge on the lobby and hallways and attempt to help those immediately hurt by the blast. Many other uninjured people begin to stream into the hotel lobby from the parking lot to lend assistance. On the street, traffic has come to a standstill.

Within minutes, however, many of those uninjured by the detonation are suddenly overcome by the fumes, clutch at their throats and chests, and begin stumbling for the exits. Some men fall down unconscious; others begin convulsing. People farther from the lobby suddenly begin salivating, coughing and gagging. In the hotel lobby injured people are unable to move and begin to lapse into unconsciousness.

Amid the noise, smoke and confusion, police officers and local emergency management technicians begin to arrive. Fire and ambulance sirens can be heard approaching. All are immediately overcome by a sudden feeling of congestion in the chest, rapid, shallow breathing and an inability to go on. It is clear that the bomb contained a toxic chemical or gas, and people now begin to panic all along the station. The crowd spills out into the street just as fire and rescue officials begin to arrive. The word is passed along to the arriving responders that a bomb has detonated that contained a toxic gas. Rescue agents spend extra minutes ensuring their self-

move traffic from the streets surrounding the hotel. 1. You learn of this incident through the emergency room supervisor, who has been alerted by the Fire Department. What are your immediate actions? Upon what indication will you activate the hospital's Incident Command System? Given the distance of your facility from the scene of the incident, does it make sense to act now, or to simply monitor reports until a clear decision can be made? 2. Your facility receives a call from the _____ Regional Hospital stating that people are beginning to flood the emergency room demanding immediate treatment for suspected exposure to a toxic gas or chemical weapon. They need to know how many patients an hour you can handle. What is your response? 4 Reports begin to arrive via waiting room television news-later confirmed by communications County Emergency Operations Center-that nearly 30 persons were initially killed, either by the bomb or by the gas-and another 120 have suffered various degrees of injury. Initial reports are that the gas used was Sarin-identical to that used in the Tokyo subway attack in 1994. 3. What is the hospital treatment regime for this gas, and is it readily available? Does your facility have reference books, CD-ROMs and or Internet access to references at hand in the ER and hospital Operations Center? Does your facility have a point of contact at a poison control center or industrial emergency facility with specialized capabilities who can be called upon for chemical or biological incidents? 4. If your hospital were the nearest to this incident, what immediate actions would you take to prepare for managing this crisis?

contained breathing apparatuses and masks are securely fitted. Meanwhile, local police begin to

5. How quickly could you establish a decontamination station for the victims? What would be the priority of care for those arriving? Who makes that decision?

6. What preparations have been made for dealing with the media?

10 LAUREL, MD MASS CASUALTY EXERCISE : BOTULISM OUTBREAK

It is early Saturday evening in mid-September, and several thousand people are attending the annual Barbecue (BBQ) and Baked Bean (BB) competition at the County Fair. This is the 55th anniversary of the County BBQ&BB Competition, and this year's cook-off is being judged by the mayor, local celebrities from TV, Miss, a High School graduate and the state's contestant in this year's Miss America Contest, and the "Flying Elvis's," direct from Las Vegas.				
At 2:00 a.m. Sunday morning, a County 9-1-1 operator receives an urgent call for an ambulance and emergency assistance for a middle-aged woman who is experiencing a constriction in her throat, difficulty breathing, and blurry vision. The operator dispatches an ambulance and notifies the County Hospital emergency room.				
Twenty minutes later, a husband and wife arrive at the County Hospital emergency room both complaining of numbness in the shoulders and upper chest, difficulty breathing, and dry mouth and constricted throat. Neither individual exhibits fever or gastro-intestinal stress.				
During the course of the night, there are four similar cases, of which one man suffers severe constriction to his breathing requiring the administering of a tracheotomy. He also displays progressive loss of motor skills in his hands and arms.				
1.At what point in this scenario is it prudent to initiate special hospital procedures for dealing with a sequence of similar emergency diagnoses? What does hospital doctrine require of emergency room personnel and the late-night supervisory staff in making such a decision?				
2. What resources are available to assist in diagnosing or confirming the diagnosis of an illness				
such as this?				
T D				
3. At what point do you assess that these circumstances indicate the outbreak of an epidemic or				
widespread infection?				
4				

4. What threshold would determine the establishment of a hospital Emergency Operations Center
and the initiation of the Incident Command System?
5. Which agencies exterior to the hospital, if any, should be notified of the current situation, and
who is empowered to make that decision?
who is empowered to make that decision.

By the next morning the hospital has received fifteen patients, all of whom exhibit the same symptoms as indicated above. The local ambulance and EMT service is swamped with calls and is bringing a steady stream of patients into the emergency room. Other area hospitals are experiencing the same influx of patients; one patient in the nearby Regional Hospital is on the verge of death, and the conditions of three others are critical.
6. How and from whom does that hospital request assistance in mounting a larger-scale response than is possible with current assets and local resources? Is it the hospital's responsibility to initiate such a request?
7. How is a diagnosis for this outbreak confirmed, and how certain can hospital staff be that the
diagnosis is correct and that proper treatment is being administered? How will the hospital staff
be protected from the range of potential problems that this outbreak could indicate, and what
protective measures should they adopt? Are masks and respirators indicated and are they
CURRENTLY available to protect the staff?
8. What resources does the hospital have to treat an outbreak of this magnitude? If hospital
resources were insufficient, where are those resources available, and how long does it take to ascertain them?
ascertain them?
9. What obligations does the hospital have for reporting this incident to higher/other authority,

9. What obligations does the hospital have for reporting this incident to higher/other authority, and when should those reports be initiated?

11 LAUREL, MD MASS CASUALTY EXERCISE: ANTHRAX OUTBREAK

It is late January. With the arrival of the New Year, and a peaceful holiday season recently ended, the nation has returned to its customary pace of life. Schools and universities are back in session, government and local service workers have resumed their normal schedules, and people have returned to their routines. With a successful-though somewhat subdued-holiday shopping season completed, the nation's business community is guardedly optimistic about economic prospects in the first quarter of the year. Though the weather was unusually warm throughout the holiday season, the first winter storms are beginning to form along the northern Rockies, and meteorologists are warning about the imminent arrival of real winter.

With the onset of winter weather, influenza is beginning to emerge, as well. Several schools in the area had already begun to report cases of the flu among younger children. As had been the experience in recent years, influenza vaccine had been in short supply nation-wide, and it was estimated that only about half of the "at-risk" population had been vaccinated. Medical officials reported that the "flu shots" administered earlier in the fall would probably be effective for only about 70% of those vaccinated.

By the first week of February, the flu season appeared to be gaining momentum. Area schools were reporting about 5% absentees attributable to the flu. Nursing homes and managed care facilities were likewise reporting an increasing number of sick among their residents. Absenteeism among workers was beginning to increase, and was expected to peak within three weeks if current trends continued. Medical facilities throughout the region were able, so far, to maintain routine treatment schedules, though surge capacity in beds had been reduced by 20% with the increasing number of elderly patients being admitted with flu-like symptoms.

On February 19th, CBS News reported that an elementary school child in Arlington, Virginia had died at home from what was suspected to be infection from anthrax. The child had been sent home from school six days earlier with what was thought to have been a case of the flu.

The next day, three other children in Arlington-two from the same school-are hospitalized with what is strongly believed to be anthrax infections. Authorities in Arlington, and several communities in the Washington, D.C. region, were considering screening the entire student population of five local schools.

On February 23rd, two teenagers in Annapolis, Maryland were diagnosed with anthrax after their cases of flu suddenly increased in severity and failed to respond to treatment. Representatives from the Governors' offices in both Virginia and Maryland requested assistance from the CDC to screen all school-age children in towns surrounding Washington, D.C., and the FBI was initiating an investigation to determine any similarities with these suspected incidents and the unsolved incidents of 2001's anthrax mail attacks.

On February 26th, national news reports indicate that anthrax has been diagnosed in seven other incidents involving children throughout the mid-Atlantic region, including three schools in Norfolk, Virginia and one in Dover, Delaware. In Aberdeen, Maryland, a fifth grade teacher has tested positive for exposure to anthrax and has been hospitalized. In addition, a severe outbreak

of influenza has been reported at both the United States Naval Academy and the U.S. Military Academy at West Point, where over 650 midshipmen and cadets have been hospitalized. A full-blown investigation by Department of Defense epidemiologists is currently being initiated, and an alert has been issued to all military medical clinics. Communities surrounding U.S. military bases are on alert.
On February 27th, a third-grader at the Elementary School is sent home with the flu and dies late that night in bed. Public Health officials immediately request an autopsy. The morning news reports confirm that the child tested positive for exposure to anthrax.
1. What are your immediate concerns regarding your hospital's preparations and capabilities for dealing with the current situation?
2. What preparations does your hospital currently have in place, and what resources can it draw on now? What forms of assistance do you intend to request from outside agencies? When?
3. What actions do you recommend your hospital take to assist your area's school system in dealing with the current outbreak of flu? What actions can you take to reassure and inform concerned parents? What actions can/should be taken to alleviate potential overloading of area medical facilities?
At 7:20 a.m. on February 28th, your emergency room receives four children previously believed to be suffering from influenza, but whose conditions over the last 24 hours have significantly worsened. Two of the children are having difficulty breathing. While being processed in the emergency room, one of the children lapses into a coma.
4. What immediate actions should be taken to deal with the affected children?

5. What requirements and obligations does the hospital have to inform local authorities and the
children's schools (define local authority)?

6. What immediate preparations should be made for hospital operations as a result of this incident (e.g., hospital capabilities to protect medical and non-medical staff)?

12 LAUREL, MD MASS CASUALTY EXERCISE: TULAREMIA OUTBREAK

It is 5:00 a.m. on a Thursday in March. The emergency room in your hospital receives a patient, a 23 year-old male, complaining of severe headache, chills, and low pain deep in his chest. He is coughing repeatedly, without sputum, and has a temperature of 100.2deg F. He complains of sleeplessness and general malaise. Yesterday he felt fine. He had received a flu shot in late October.

While the first patient is seated in the waiting room awaiting examination, a second patient, a 28 year-old male, arrives complaining of similar symptoms. Within two hours, three other male patients arrive ranging in ages from 16 to 58. All five are otherwise healthy and have no history of medical problems or recent illnesses.

With the arrival of the regular morning staff, all five individuals are subjected to examination, including laboratory analysis. All five are tested and indicate preliminary positive results for exposure to tularemia. Specimens from each patient are forwarded to the State Public Health Lab for confirmatory tests. It is now 9:30 and the emergency room has received a total of 16 additional patients complaining of similar symptoms. Two are female and the rest are male.

1. What are your immediate actions in light of this situation?

2. What particular precautions are necessary for cases of tularemia admitted to your hospital?

3. What steps do you take to prepare your staff for the remainder of the day?

4. What additional information would you want to obtain from the patients?

5.Do you have available the treatment regime for this disease? How long will it take to obtain it?
By 2:00 p.m., your hospital receives another 16 cases, all testing positive for exposure to tularemia. Conversations with the patients indicate no similarities, except that all had attended the basketball game at (college/university) the previous Monday night.
6. Given the foregoing information, what additional steps are required of your hospital?
7. What do you now anticipate to happen over the next several days? For how long should you
expect to receive patients who test positive for this disease?
8. What steps should you now take within your own hospital staff to prepare for the next several
days? What preventative or mitigating actions do you recommend to local authorities?
Over the course of the next 72 hours, your hospital receives a total of 292 cases of tularemia. Other regional hospitals are similarly affected. In all, area hospitals report 2,281 cases of tularemia; of those 702 are female, and the rest are male area hospitals report 833 cases, with a similar gender mix. Within 48 hours of the first cases, patients begin to die at a rate of about 30%.
9. What facilities does your hospital have to accommodate a patient influx of this magnitude, recognizing that other area hospitals are similarly taxed? What steps do you recommend your hospital take next?
10. What are your facility's capabilities to establish a morgue to handle hundreds of bodies? To
support the coroner or medical examiner? What measures have been taken to address families'

religious wish	es with counselors,	, priests, and clergy	of various faiths?
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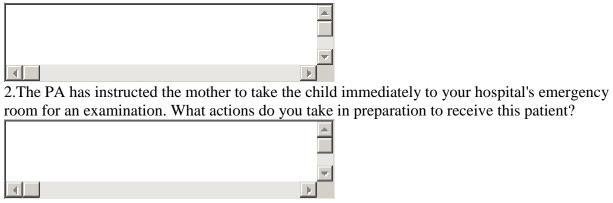
11. What national-level resources are available for your hospital to call on? How do you initiate that action?

13 LAUREL, MD MASS CASUALTY EXERCISE: SMALLPOX OUTBREAK

It is mid-July during one of the hottest summers on record. Midday temperatures have been consistently above 100deg F for a period of ten days. In this region, in particular, hospitals and clinics have been swamped with heat-related illnesses and injuries. City-wide there have been four deaths from heat-related causes, all involving elderly persons. Precautions are being taken at all sporting events, youth programs, and group activities. Attendance at malls, in movie theaters-even art galleries and museums-is setting records. This pattern has been replicated in all metropolitan areas of the region, where the most popular activities generally include anything in proximity to water, whether the seashore, lakes or state parks along rivers.

On a Thursday morning, your hospital receives an urgent call from the physician's assistant at a local children's day school, reporting what is potentially a case of smallpox. The PA reports that she received a call from the young mother of a seven-year old who had been absent from school for two days with a case of chickenpox. This morning the child's mother called the PA urgently requesting advice on whether to take the child to an emergency room. During the night, the child began vomiting, and now has a temperature of 101.4deg F. The "spots" from the chicken-pox have deepened and spread to all the limbs, and the child is in a great deal of discomfort.

1. What is your advice to the PA? What actions should you take based on this information? What actions are required? What requirements exist for higher notification?



Upon their arrival, the child is immediately cleared through the emergency room and is placed in an isolation ward. Initial examination indicates that the child is, in fact, suffering from smallpox.

3. What is needed in order to confirm this diagnosis? If confirmed, what actions are required of your hospital?

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Over the next 48 hours, an investigation reveals that four other children at the day school have
been infected with smallpox. Moreover, three other area hospitals report similar cases. In all, 11 cases of smallpox are reported among school-age children within the area.
cases of smanpox are reported among school-age children within the area.
4.At what point do you expect to see County Health Department authorities jointly making uniform public service announcements about the outbreak of this disease? Should those measures be adopted early, or later after more information is gathered and a strategy worked out?
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5. What recommendations would you make regarding your hospital's own involvement with local
media? Does the hospital have any responsibilities to the public in this regard?
6. What do you expect to see as a result of public service announcements?
That evening, national network news carries stories about the outbreak of smallpox among area children. By the end of the week, there have been reports of smallpox outbreaks in
six other major metropolitan areas, including Boston, New York, Cleveland, Atlanta, District of
Columbia, and Baltimore. By this time, the Centers for Disease Control and Prevention has been
involved in diagnosis and in the implementation of appropriate preventive and treatment
measures. The National Disaster Medical System (NDMS) has been activated in response to the
threat of an outbreak.
7. What sort of support would you expect to receive from the CDC and the NDMS? How will your facility communicate with the County Operation Centers regarding federal level support?
How will the support materials be transported, secured, and utilized at facilities?
8.If the National Strategic Stockpile were activated for distribution of appropriate medicines,
how much would you expect to receive? How do you plan to distribute it and where would it be
staged for distribution in your area? What is the level of urgency attached to this? How will your



9. What is the role of the federal and state Department of Homeland Security (DHS)? How will your organization interact with DHS personnel?

14 LAUREL, MD MASS CASUALTY EXERCISE: PLAGUE OUTBREAK

Over a period of several months, the U.S. domestic climate slowly returned to normal. By spring, the Dow-Jones average was once again solid, unemployment had begun to decline, and there was a general mood of optimism reflected in national opinion polls. When the anniversary of the September 11th attacks came and went-with quiet dedication ceremonies, the commencement of construction on the new World Trade Center and memorials in New York City, the Pentagon and Somerset County, Pennsylvania, and no further terrorist events-the nation breathed a collective sigh of relief and began traditional preparations for the winter holiday seasons.

Nevertheless, national events ensured that the concept of "homeland security" remained in the public spotlight. International terrorist groups continued to issue occasional calls for war against America and the West, and international focus remained fixed on America's active prosecution of the "war on terrorism." The ongoing impasse between the Israelis and Palestinians kept the Middle East situation in a state of constant tension, despite U.S. involvement in negotiation efforts. The Office of Homeland Security and the FBI continued to issue unspecified threat warnings, and local law enforcement authorities were directed to remain at a high level of alert.

On December 17th, the BBC reported that Israeli authorities had suddenly closed all borders to the Palestinian sectors of the West Bank following the discovery of a Palestinian youth dying on a main street of Jerusalem from what was strongly believed to be pneumonic plague. Within an hour, international media were reporting alternating scenes of near panic at Israeli medical facilities contrasting with virtual desertion in Israeli streets and marketplaces.

U.S. domestic news broadcasts that evening carried stories of several confirmed diagnoses of plague among Israeli citizens. Israeli authorities were setting up medical screening facilities in both Tel Aviv and Jerusalem. International air flights into and out of Tel Aviv airport had been grounded. A representative of Islamic Jihad issued a statement that "Israel and America would soon know the full extent of Islamic anger."

On the late afternoon of 18 December, CNN reported that two men of Middle Eastern descent had been taken into custody at the Mall of America near Minneapolis. Both men were shouting and harassing crowds of holiday shoppers. One of the men reportedly collapsed and had to be evacuated by ambulance. An hour later, CNN reported that both men had been diagnosed with pneumonic plague, and one was near death.

That evening, national news reports carried stories of similar events occurring at malls in San Francisco, Atlanta, St. Louis and Denver. In each case one or two men had been shouting in Arabic, and upon arrest were discovered to be extremely ill. All appeared to be from the Middle East and spoke English with an accent. In a follow-up story, the government had placed Atlanta's Centers for Disease Control and Prevention on alert for any indications of plague or other contagious diseases. Medical facilities in each of the affected cities were beginning to fill with fearful citizens, some of whom exhibited sudden and acute fever, persistent coughing and respiratory distress.

At 6:35 p.m., a call is received at the County 9-1-1 Center reporting the emergency evacuation of a man who has collapsed at the Mall. The duty EMT at the Mall's first aid station reports that the man's symptoms include severe respiratory distress, coughing with bloody sputum and a body temperature of 102deg F. He appears to be Arabic, and was shouting incoherently before he collapsed.
Regarding the immediate situation:
1. What steps should be immediately taken to receive the patient enroute to your hospital?
2. What procedures are already in place for handling such a case, and are they adequate for this
situation?
3. What would you expect to have happen within the next six hours of your shift? What do you
need to do to prepare for it?
4. What additional measures should you direct to be taken by the staff on duty that evening?
5. What additional resources or personnel would you alert to this situation, and how soon would
you alert them?
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If you knew with certainty that such an event as described above would occur within one year:

6. What measures should your hospital institute now to prepare for it?
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7. Are your current resources adequate? If not, which ones should receive priority attention?
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8. What type of preparation would you insist be undertaken by organizations and agencies outside
your own medical facility?
9. What type of state or federal assistance would you need, and what should you expect?
10. What is the state of smallpox inoculations among your hospital staff and regional emergency
workers? What preparations should be initiated at this point?

15 LAUREL, MD MASS CASUALTY EXERCISE : EMERGENCE OF TUBERCULOSIS

In early December, an epidemiologist at your hospital receives a call from a friend, the university physician at ______ College. The physician is seeking advice and confirmation for a suspected case of tuberculosis at the college.

The physician explains that this morning he saw during sick call a student who had been complaining of persistent cough, intermittent fever, and general fatigue. The student, a 20-year old male, complained that he had felt this way for a period of several weeks, but had considered it to be nothing more than a cold, along with tiredness from his academic schedule and end-of-semester exam preparations. Several of his friends had complained of the same symptoms, and they considered it to be a "cold going around."

The physician explained that he had grown concerned when he learned that the student had been a member of an eight-week summer trip on a church-sponsored mission in Russia and the Caucasus. During that trip, the students had traveled around the Moscow area including trips to several small villages east of the city. They had then flown to Baku, Azerbaijan and had traveled overland to the Ngorno-Karabak region bordering Armenia. They had then continued to Tblisi, Georgia before returning home in late August. The eight students on the trip had stayed in a variety of hotels, hostels and private homes, and had visited several refugee camps in Ngorno-Karabak. Three of his closest friends had been with him on that trip; two of those were among the group that the student had said exhibited the same symptoms he did. He became concerned yesterday when he discovered bloody phlegm after a coughing spell.

The physician had examined the student and had also administered a Mantoux test, which he would read when he saw the student again at the end of the week. The doctor had also taken a throat culture, and his initial screening had turned up a strong possibility of TB infection. The doctor was now calling to confirm his suspicions and seek the advice of your epidemiologist.

1.In the event that the student tests positive for tuberculosis, what actions can your staff and hospital take to help deal with this situation?



2. What requirements are there for reporting this incident to the local Public Health Officer, and who should make that determination? When or how soon should such reports be made?



Over the course of the next several days, the college physician sees three more students referred by the original student, and confirms that there are, in fact, two active cases of tuberculosis among them, as well as two other exposures to the disease.

3. What are the differences between active cases and exposure to tuberculosis, and how are the cases to be treated? What procedures should the college follow in these cases?



4.In the event that these cases should prove to be multi-drug resistant-given their possible source of origin-what precautions should your hospital be considering to aid in diagnosing and controlling an outbreak of this disease in your area?

16 LAUREL, MD MASS CASUALTY EXERCISE : RESURGENCE OF INFLUENZA

In early Spring, the ProMED online newsletter (http://www.promedmail.org) reported that an unknown illness had afflicted a number of Singapore residents. The illness exhibited the classic symptoms of influenza, including persistent cough and congestion of the chest and throat; high fever and malaise; general aching of the muscles, and loss of appetite. However, of the thirteen verified cases, eight died within 48 hours of the first symptoms. The other five were in local hospitals and two were in critical condition. Singapore authorities had immediately initiated an emergency medical alert, and the victims and their families where placed in isolation for observation.

During the next three days, 22 other cases emerged among the Singaporean populace, and other similar cases had been reported in Tapei, Kuala Lumpur, Jakarta and Bangkok.

Within a week, worldwide news services had begun to focus attention on the mysterious illness, and public health officials of the World Health Organization and Pan American Health Organization had issued medical alerts. During the next two weeks, 67 new cases of the illness (unofficially dubbed the Singapore Flu) had been reported world-wide, including six cases in Russia and two in Sweden. Of those, there had been 19 reported fatalities, all within 72 hours of diagnosis. There was no specific demographic group or age affected, as victims of the illness included two school children, healthy working-age men and women, and several elderly patients.

In the United States there was a growing concern among the public health community. The Centers for Disease Control and Prevention issued a warning, and focused particular attention on the west coast and Hawaii. U.S. news reports had begun referring to the 1918 influenza epidemic and its affect on the U.S. society. Some reports raised the possibility that a bio-terrorism agent had been released, or had surpassed the control of its creators.

In your community, there has been front-page coverage of the disease in newspapers and on local television. Numerous queries had begun coming in to hospital emergency rooms and to local physicians.

1.At this point, what actions might your healthcare facility or clinic begin considering? At what point would you place those plans into action?



2. What actions might your facility take to reassure the public in your community, and how should that information be disseminated? Does your healthcare facility have a public relations specialist, spokesman or designated physician who is known throughout your community and

who regularly speaks on behalf of your facility?
3. What concrete actions could your facility recommend that individual citizens take to reduce the
likelihood of their being exposed to a contagious illness of this sort?
4 What are the vulnerable nonvictions in view community, and what estions might be taken on
4. What are the vulnerable populations in your community, and what actions might be taken on their behalf?
T
Within six days the number of cases triples, with definite outbreaks of the illness identified in Rome, Hamburg, Moscow, Sydney, and Toronto. Diagnosed cases result in hospitalization 66% of the time, and the mortality rate remains consistent at 21%. Infants are the most susceptible and those above the age of 60, although one-third of the fatalities are healthy adults. Five weeks after the emergence of the first cases, two positive diagnoses are made in Hawaii, and three others in Seattle. The nation's airlines, which had been monitoring Pacific-based
passenger bases, issues an urgent travel notification, and begins to screen passengers for signs of flu or colds. Media attention, and concern on the part of the public, begins to rise.
5. What precautions should be taken at your facility to ensure positive identification and diagnosis of cases that might arise in your community?
6. What guidance and assistance can be provided from state and federal medical resources, and how should that assistance be sought?
now should that assistance be sought?
4

7. What has your facility done to reassure your own staff, support personnel and their families?
8. What other agencies and organizations in your local community should be approached and
included in planning for a medical emergency?
increded in planning for a medical emergency.
Twelve weeks after the first diagnosed case, your facility admits a patient who exhibits symptoms of the "Singapore Flu," a 36 year-old male who had recently returned from a business trip to Mexico City.
9. What actions should your facility take to diagnose this case, and which medical authorities should be notified of the details?
10 What managedymas should view alimin initiate to notify lead sixia leadership? What role does
10. What procedures should your clinic initiate to notify local civic leadership? What role does the facility play in protecting the local community from potential spread of such an illness, and
who specifically in your community is responsible?
who specifically in your community is responsible:
11. What actions should your clinic initiate to isolate the patient? What steps should be placed in
motion to protect your own staff and clinic personnel?

17 LAUREL, MD MASS CASUALTY EXERCISE : ACCIDENT AT A NUCLEAR POWER STATION

NOTE: This exercise focuses on an accident and contamination at a nuclear-powered generating station requiring the evacuation of a regional hospital. While most hospitals in the U.S. are not in the immediate evacuation zone of a nuclear power station, many are and many more would receive the evacuees from such facilities. Similar considerations exist for many industrial areas and manufacturing districts throughout the company. This exercise should be tailored as required to address those hazards.

At 12:07 p.m. on a midsummer afternoon, the Emergency Room supervisor at the
Memorial Medical Center receives a call from the Operations Officer at the County
Emergency Operations Center (EOC) alerting the hospital that there has been an accident at the
Nuclear Generating Station. Four workers have received serious burns from a steam
leak. A County EMS ambulance is evacuating the injured men to Memorial,
and they are expected to arrive within thirty minutes. According to officials, it does not
appear that the workers were exposed to any radiation, and decontamination should not be
necessary.
Immediately after receiving this call, the Emergency Room supervisor receives a second call
from the Nuclear Generating Station Safety Officer, reiterating the report from the
County EOC, but adding that there is a possibility that the victims were exposed to leaked
radiation, and are currently undergoing on-site decontamination. They should be enroute to the
hospital within fifteen minutes.
Twenty minutes later, the County EOC watch officer reports that there has been a loss
of coolant accident at the Station, and Memorial should prepare for
evacuation. At that moment the sirens of the Emergency Alert System begin to sound.
1.At this point, what actions should the Emergency Room supervisor take? Who is the individual
at Memorial responsible for ordering and executing an evacuation?
▼
2. Given the serious nature of the injuries to the four nuclear plant workers, what actions should
be taken to provide for their emergency medical care? Should they be immediately received at
Memorial's Emergency Room, or should they be diverted to another facility?
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Ten minutes later, the Duty Officer at the County EOC calls and says that there has
been a series of accidents at Nuclear Station, and there is now a significant possibility
of a radiation release from the nuclear plant's containment building. Emergency evacuation of the
hospital should be immediately initiated if it is not already in progress. He further states that a
similar notification has gone to adjacent hospitals at and, and also to
County Medical Center in, all of which lie within the possible contamination zone,
given current wind and weather conditions. This situation at Station has the potential
for significant danger, and all precautions should be taken.
3.Does the information provided by the EOC Duty Officer constitute authoritative guidance for an evacuation? If so, to what facility should your facility's patients be evacuated? Where would patients from other area hospitals go if they were directed to evacuate as well?
4. Assuming that the emergency at Station progresses to a worst case scenario-a "severe accident" involving a melt-down of the reactor core or breach of the containment vessel with a significant release of radioactivity-what plans exist for evacuation of several area hospitals, and the treatment of a large number of contaminated or potentially contaminated civilians?

18 LAUREL, MD MASS CASUALTY EXERCISE : DETONATION OF A RADIOLOGICAL DEVICE IN THE ENVIRONMENT

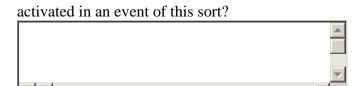
It is 6:02 p.m. on Wednesday evening. Along Highway, the usual auto and truck traffic is snaking its way through the intersection as commuters are heading home and truckers are beginning to exit the highway in search of a brief rest and the evening's dinner.
An eighteen-wheel tractor-trailer carrying a large Sea-Land container is approaching the intersection when suddenly there is a terrific explosion that rips the container apart. The tractor is blown completely clear of the trailer, and into the center of the intersection. A dozen cars adjacent to the trailer are hurled through the air in all directions, and several burst into flames. Traffic in all directions comes to an abrupt halt, and people erupt from stopped cars to escape the scene and its fires and destruction. Sheet metal and debris from the container, tractor and damaged cars is scattered in all directions, and smoke and dust fill the evening air.
Along the streets and at the intersection there is pandemonium. People are running everywhere, many in a state of confusion. From several diners and business establishments along the highway, people rush outside to see the commotion, and to render aid to the injured. Along the sides of the intersection, injured people lie about in a daze, some attempting to move, others lying perfectly still. Blood, human body parts and remnants of clothing are scattered around the roadways.
Within minutes, police cars, fire and rescue trucks and ambulances begin to arrive, and the shoulders of the roads in all four directions quickly fill with emergency vehicles. The police immediately begin clearing traffic and directing the evacuation of the area by those who can leave. Cordons are established and gathering crowds are kept at a distance. Traffic slowly begins to clear the area, as emergency vehicles and ambulances begin loading the dead and injured.
Reports of the explosion begin to arrive at your hospital from the 9-1-1 operator, and from local telephone calls. Within minutes, most area hospitals are alerted and begin preparations to assist with an influx of emergency patients. Immediate reports from the scene indicate that there may be as many as 10 dead, twice that many critically injured and immobile, and at least another 20 with injuries requiring immediate medical attention.
At about 7:15 p.m. hospitals in the area receive a follow-up call from the County Sheriff's office alerting them that the Police Department's Bomb Squad has determined that the explosion was caused by the detonation of a large bomb, and that the weapon contained a radiological contaminant, probably uranium in some form. Initial surveys indicate that a high level of radiation has been detected in the trailer's debris and the immediate vicinity, and it appears certain that the smoke and debris carried some level of radiation along the roadway and onto surrounding buildings and business establishments for some distance. Victims already received and those currently being evacuated to hospitals will need to go through radiological

It is at this point that the first emergency evacuees begin arriving at your hospital.

decontamination.

1. What immediate steps should be taken to handle the arriving patients? What are the priorities for managing initial care seriously injured patients who may have been exposed to nuclear radiation?
2.How quickly can a decontamination station be established at your facility? Who is in charge of making this happen? Is that person available and if not, how can he be reached? If the decontamination station is not available for immediate use, what happens to the patients in the interim?
Within 30 minutes of the arrival of the first victims, people begin arriving at the hospital who have heard over local radio and television that a nuclear bomb was detonated along Highway Most of the arriving patients had either been close enough to witness the explosion or had driven through the smoke and debris along the road. They fear they may have been contaminated by nuclear radiation.
3. What steps must now be taken in anticipation of an influx of non-injured persons who may require decontamination and monitoring? What priority are they given relative to the injured? Where are they kept while awaiting decontamination?
4. How are these persons identified, tracked, and recorded? What happens to their personal effects and clothing during decontamination? What is returned, and what is disposed of?
5. What is the hospital's legal liability to respond to an overwhelming demand for diagnostic testing like radioactive decontamination and monitoring?
6. What are the hospital's obligations to its staff, traffic control personnel, assisting police and

6. What are the hospital's obligations to its staff, traffic control personnel, assisting police and security officers in ensuring they do not become contaminated? What is the hospital's plan that is



7. What resources are available external to the hospital to aid in dealing with a situation of this magnitude? How quickly can those resources be mustered, and who initiates that action?

19 LAUREL, MD MASS CASUALTY EXERCISE : DETONATION OF A RADIOLOGICAL DEVICE IN A PUBLIC SPACE

It is 8:38 on a Wednesday morning in late spring. At the ______ Regional Airport, a SAAB 340 twin-engine commuter airliner, is taxiing to its debarkation point adjacent to the American Eagle terminal.

Moments after the plane stops at the terminal, there is a massive explosion from the fuselage, the force of which is so great that it blows the tail section off the aircraft and shatters glass windows throughout the terminal. Passengers waiting in the departure gates are blown away; debris is flung along the entire extent of the terminal building. The glass doors at the bottom of the three nearest departure gates are blown in by the explosion, and smoke, debris and broken glass surge throughout the terminal. The air inside the terminal fills with smoke and dust, and the noise of the explosion and settling debris is replaced by the screams of injured and panicked passengers.

Within the airport there is instant pandemonium. People are running everywhere, and the noise is deafening. The exit doors are suddenly filled with people attempting to evacuate, while passengers who are able flood the central terminal attempting to reach the exits. At the same time, airport officials, security officers, first aid personnel and some passengers immediately begin running toward the wreckage to assist. Around the terminal, injured people lie in a daze. Some attempt to move, others remain perfectly still. Blood, human body parts and remnants of clothing are scattered along six adjacent boarding platforms.

Within minutes, security vehicles, fire and rescue trucks and ambulances begin to arrive, and the roadways on both access roads to the airport fill with departing buses, taxis and automobiles, at the same time that emergency vehicles begin to crowd the roadways. The police immediately begin clearing traffic and directing the evacuation of the station. Cordons are established and gathering crowds and media are kept at a distance. Incoming aircraft are immediately diverted, departing aircraft are held on the runways, and airport operations come to a halt.

Reports of the explosion begin to arrive at area hospitals via telephone calls, from e-mail communications and from news reports on waiting room televisions. By 9:00 p.m., most area hospitals are alerted officially and told to stand by to assist with an influx of emergency patients who are expected to overwhelm the capacities of the immediate region's emergency rooms. Immediate reports from the scene indicate that there may be as many as 50 dead, twice that many critically injured and immobile, and at least another 100 with injuries requiring immediate medical attention.

At 9:40 a.m. the initial calls to hospitals are followed up with a report from the ______ Police Department indicating that the Bomb Squad has determined that the explosion was caused by a bomb aboard the aircraft and that it appears to have contained a radiological contaminant. Initial surveys indicate that a high level of radiation has been detected in the immediate vicinity of the damaged aircraft, and throughout the airport terminal, and it appears certain that the smoke and debris carried some level of radiation into the central terminal and surrounding areas. Victims being evacuated to hospitals will need to go through radiological decontamination, and screening

for possible ingestion of contaminated smoke and debris. Those with open wounds will require additional screening.

Review the questions in the previous exercise. In addition to those, consider the following:

1. What assistance is your hospital prepared to provide to police, firemen, rescue personnel and
officials during the search and rescue effort at the Regional Airport?
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2. What additional measures will be required, and what preparations should be initiated to support
the long-term decontamination of the airport and surrounding area?
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3. What support and specialized equipment for wide area decontamination can the hospital help
provide? What assistance can the hospital give to assist in on-scene decontamination of victims,
rescue personnel and security officials at the scene?
▼ ▼
4. What federal, state and regional agencies can support these requirements? How long will it

take before their arrival on the scene? What actions should be taken in the meantime?

20 LAUREL, MD MASS CASUALTY EXERCISE : NUCLEAR ATTACK ON A POPULATION CENTER

NOTE: This scenario is not intended as a mass casualty exercise, per se, but rather as a means for thinking about how to organize resources and muster professional and community strength of will when dealing with a situation that appears utterly hopeless. The first reaction to any scenario of this sort is either that "it can't happen here" or that "there is nothing that can be done about this." However, it is instructive to bear in mind that the cities of London, Dresden, Leningrad and Hiroshima were all fully restored after the horrific devastation of WWII. The same can be said of Atlanta after the Civil War, San Francisco after the 1906 earthquake and Philadelphia after the 1918 influenza epidemic. The first step is to overcome the mindset that such a situation is "unthinkable" and consider what measures, taken now, could serve to make such a desperate situation recoverable. Specifically, how could the medical community best serve the disaster recovery process, and what steps could be taken now to mitigate its effects?

In short, how would your medical facility react to an event such as this if it happened at an American city very distant from yours? What if it happened to the nearest large city in your area? What would be the effect on your operations during the immediate event? For the long term? What can your medical or healthcare facility do to contribute to the region's or nation's needs in the event of such a catastrophe? On a moonless and foggy night 220 miles off _____ a lone foreign-flag tanker slows nearly to a stop. Crewmen open two large cargo hatches on the main deck. Below decks, men bathed in red light complete pre-launch assembly of four Scud-B missiles. Within thirty minutes a small, fast sport fishing boat arrives within five miles of the merchantman. Messages are exchanged between the two ships via a satellite internet link. Suddenly, the surrounding water is lit by a brilliant white light followed by two more, as three of the missiles leave their launchers. Immediately, the fishing boat approaches the tanker as the crew of eleven men hurriedly depart the ship in rubber life rafts. They are quickly recovered by the fishing boat, which then speeds away for a rendezvous with a larger ship twenty miles farther out to sea. Twelve minutes later-at exactly 12:43 a.m.-one of the missiles detonates five hundred feet above _____ three miles from _____. The 7-kiloton warhead raises a blinding fireball that lasts for ten seconds. Within a 1-mile radius of the hypocenter, all buildings and structures are either incinerated or flattened. Two miles away, structures other than those of reinforced concrete are demolished. Glass panels and windows as far as four miles away are shattered. The _____ International Airport and its facilities are blown over, as are the hotels, businesses and service facilities that surround it. The ______ is instantly demolished; the _____ collapses; the roadbed sags. Fuel tanks and storage areas adjacent to the airport are ruptured, and massive petroleum fires erupt, engulfing more than a square mile, causing an enormous updraft of debris and smoke.

In an instant, the nearby Electrical Power Generating Station is knocked off the line due to damage and the instantaneous load caused by massive short-circuits in the electrical grid. In
turn, the stations suffer similar surges and are stripped from the grid. Electrical power is lost throughout the city, and progressively throughout the state and subsequently to neighboring states.
Throughout the streets are strewn with overturned automobiles, electrical wiring, fallen trees and debris from collapsed roofs and the walls of the weaker buildings. While the newer and taller buildings survive the blast, virtually no glass windows remain in tact on the southern exposure. Rail lines south of the main terminal are either demolished, or are so littered with debris they are declared unusable.
By sunrise, is an inferno. Streets, roads and highways in County are utterly impassable. In adjacent, the scene is the same, with fire, smoke and destruction visible in every direction. The is aflame with ignited petroleum. Smoke from the fires rises to an altitude of 20,000 feet, and extends across over an area of 400 square miles. Roads and highway systems leading to the north, south and west are grid-locked as citizens from unaffected areas attempt to evacuate to safety.
With the detonation, 20,000 people in instantly perish from gamma radiation, from the pressure wave and intense radiant heat, and from collapsing buildings and flying debris. Before sunrise, an additional 15,000 people die from injuries and shock. Within the next 24 hours nearly 50,000 people in the area will be made homeless, 10,000 will require immediate medical attention from traumas of every description, and another 12,000 will be seeking urgent care for a loved one or someone they are attempting to assist.
Firefighters, emergency medical technicians, police and city officials are overwhelmed. One main city street is established as the immediate firebreak, with the intention of containing the destruction and fires to the area south of that line. A secondary line is established along Street. To the west, the railway line is established as the first line of defense, with the park areas defining the as the secondary cordon.
Regarding a catastrophe of this magnitude:
1. What steps could be initiated now that could help prepare the area medical system-or that of the nearest large metropolitan area from your medical facility-for such an event one year from now?
2. Assuming that your medical facility was fully prepared for a "normal" mass casualty event, what extra preparations would be essential for dealing with a scenario where casualties could
r r and a second

measure in the tens of thousands?
3. Which medical services, functions and wards would your hospital terminate or defer in order to
provide staff, equipment and facilities to support more urgently needed medical care during a disaster of this sort?
disaster of this soft:
4 How would your medical facility myster the medical staff required to systein basis medical
4. How would your medical facility muster the professional staff required to sustain basic medical services for an extended period of time? Who would you consider "qualified" and how would
you mobilize them?
5. What sort of medical positions and responsibilities could you delegate to civilian volunteers in a situation of this magnitude? What measures could you take now to prepare for such a
mobilization of the community? To which civic organizations could you look for assistance in
the event of full mobilization? What facilities in your community could be turned into
emergency medical facilities and shelters?
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6. Assuming that assistance could be expected from outside agencies (federal, state, international)
which responsibilities or functions would you choose to delegate to those agencies? Which
would be essential to reserve to your own local talent and knowledge? How would you organize and coordinate this effort?
7.Recognizing that no current or future resources are likely to be allocated to preparing for such
a low-probability event as the foregoing, what long-term, low-cost organizational changes and
conservation methods might be implemented that would nevertheless mitigate the effects of a
disaster of this magnitude?