# **Modules and Addenda**

# Hospital Disaster Drill Evaluation **Pre-drill Module**

**Note:** *Circle* or *check* (✔) as indicated. NA=Not applicable

1. Background Information

1.a	Name of person completing module:		
	Title:	Office phone:	
	Hospital:	Cell phone:	
	Room number:	E-mail:	
	Street address:	FAX:	
	City and state:	Pager:	
	Best method of contact during the drill.	(Check one.)	
	○ Cell phone ○ E-mail	$\circ$ FAX $\circ$ Office phone $\circ$ Pager	
1.b	What will the disaster scenario include? (Check all that apply.)		
	□ Biological agent	□ Chemical agent	
	□ Fire	□ Incendiary device/explosive	
	□ Natural disaster (e.g., earthquake)	□ Radiological agent	
	□ Structural collapse	☐ Transportation accident	
	□ Internal hospital system failure (speci	ify):	
	□ Other (specify):		
1.c	Will the drill include decontamination?	Y/N/U	
. Level	and Scope of the Hospital Drill Act	ivity	
2.a	What type of disaster drill is your hospi	ital performing? (Check one.)	
	□ Operationalized drill		
	□ Tabletop Exercise		
	□ Computer Simulation		
	□ Other (specify):		

	What is your main overall goal for the disaster drill? (Please limit to one sentence and include ious after-action items as appropriate.)
2.c	What are the specific objectives for the disaster drill? ( <b>Please limit to one sentence each.</b> )
	a.
	b.
	c.
	d.

## 3. Drill Activity

· ·			
How will the notification to initiate the drill occur? (Check all that apply.)			
☐ By another hospital ☐ I	By first victim arrival		
☐ By health department ☐ I	By government agency (e.g., fe	ederal or state emergency agency)	
□ EMS dispatch center			
□ Other (specify):			
Which hospital personnel (not including victims or observers) from the following staff groups will actively participate in the drill activities? (Check all that apply.)			
□ Administration	□ Central supply	□ EMS/patient transport service	
☐ Engineering and physical plant	□ Infection control	□ Intensive care unit	
□ Laboratory	□ Medical staff	□ Nursing	
□ Occupational health	□ Pharmacy	□ Public affairs	
□ Radiation safety	□ Safety	□ Security	
□ Social work	☐ Emergency department	☐ Medicine department	
□ Pediatrics department	☐ Psychiatry department	□ Radiology department	
□ Surgery department	□ Hospital-wide		
□ Other (specify):			
□ Other (specify):			
	□ By another hospital □ By health department □ Other (specify):  Which hospital personnel (no groups will actively participate □ Administration □ Engineering and physical plant □ Laboratory □ Occupational health □ Radiation safety □ Social work □ Pediatrics department □ Surgery department □ Other (specify):	□ By another hospital □ By first victim arrival □ By health department □ By government agency (e.g., ference of the EMS dispatch center □ Other (specify):	

3.c	What levels of activity will be included in the drill? (Check all that apply.)					
	□ Materials and supplies received					
	□ Triage of victims					
	□ Simulated clinical procedures performed					
	□ Victim decontamination	n				
	□ Victim transport in the	emergency department only				
	□ Victim transport throug	hout hospital				
	□ Other (specify):					
3.d	What other organizations	agencies will be involved in the drill? (	Check all that apply.)			
	□ Ambulance system	☐ Hospital/health systems(s) (specify)	):			
	□ Fire	□ City/local agency(ies) (specify):				
	□ Media	□ State agency(ies) (specify):				
	□ Police	□ Federal agency(ies) (specify):				
		□ Military (specify):				
		□ Other (specify):				
4. Incider	Incident Command					
4.a	Will there be an incident	command center? (Check one.)				
	□ Yes If yes, where is its location?					
	□ No					
5. Comm	ommunications					
5.a	What methods will personnel use to communicate during the drill? (Check all that apply.)					
	□ 2-way radio/phone(s)	□ E-mail/Internet/network	□ Emergency radio			
	□ FAX machine(s)	□ Intercom	$\Box$ Landline phone(s)			
	$\square$ Megaphone(s)	□ Numeric paging	□ Overhead paging			
	$\square$ PDA(s)	□ Runner(s)	$\Box$ Satellite phone(s)			
	□ Text paging	$\square$ Wireless/cell phone(s)	□ Ham radio			
	□ Other (specify):					

#### 6. Evaluation

6.a	Which aspects do you plan to evaluate during the disaster drill? (Check all that apply.)		
	□ Decontamination	□ Incident command	
	□ Treatment	□ Triage	
	□ Biological illness exposure	□ Chemical exposure	
	☐ Communication and information flow	☐ Equipment and supplies	
	□ Facility engineering	□ Patient documentation and tracking	
	□ Patient flow	□ Personal protective equipment (PPE) use	
	□ Radiation exposure	□ Rotation of staff	
	□ Security	□ Staffing	
	□ Surge capacity	☐ Time points	
	□ Zone disruption	□ Zone operations	
	□ Other (specify):		
6.b	Name of lead person, if different than 1.a,	, planning to conduct the debriefing session:	
	Title:	Office phone:	
	Hospital:	Cell phone:	
	Room number:	E-mail:	
	Street address:	FAX:	
	City and state:	Pager:	
	Best method of contact during the drill. (0	Check one.)	
	□ Cell phone □ E-mail	□ FAX □ Office phone □ Pager	

# END OF PRE-DRILL MODULE

# Hospital Disaster Drill Evaluation Incident Command Center Zone Module

**Note:** Circle or check (✔) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer:		I	Date:/	
Observer title:				
Hospital:				
Period of time of evaluation:	AM/PM (Ci	ircle one.) to	AM/PM (Circle	one.)
1. Time Points				
<b>◆</b> 1a. Did the drill start on t	ime?			Y/N/U
Comments:				
1b. Time the drill began: (Circle	e one.)		AM / PM /	U
1c. Time the hospital disaster plan was initiated in this zone:  AM / PM / U / Not initiated (Circle one.)				
2. Personnel				
<b>◆</b> 2a. Was an incident command system established? Y/N/U				
Comments:				
2b. How many minutes after the drill activities in this zone commenced did the incident commander assume command of the zone? (Check one.)				
□ <10 min	□ 10 - £	29 min	□ 30 - 59 mi	in
□ 1 - 2 hrs	□ >2 h	rs	□○ NA	
□ No one took charge	ર.			
2c. Were the following drill p	participants identif	fiable?		
a. Incident Commander	Y/N/U/NA	b. Incident Com	mand Personnel	Y/N/U/NA
c. Drill Evaluators	Y/N/U/NA	d. Drill Organiz	ers	Y/N/U/NA
e. Security	Y/N/U/NA			

Was someone fulfilling the functions of the following roles (within the incident command center or elsewhere) or reporting to the incident command center?

→ If no one fulfilled a specified function, circle "N" in column "A" and go to the next row.

	A. Function filled	B. Comments
2d. Incident Commander	Y/N/U/NA	
2e. Logistics Chief (oversees facilities, communications, patient transportation, and supplies)	Y/N/U/NA	
2f. Planning Chief (oversees staffing)	Y/N/U/NA	
2g. Operations Chief (oversees patient care, ancillary services, and staff support)	Y/N/U/NA	
2h. Other (specify):	Y/N/U/NA	

## 3. Zone Operations

3. Zone Operations					
<b>◆ 3a. Did the incident command center function efficiently?</b> Y/N/U					
Comments:					
3b. Was the hospital disaster plan	3b. Was the hospital disaster plan followed? Y / N / U / Partially / No plan				
3c. If not followed, what were the reason(s)? (Check all that apply.)					
a. □ Not available b. □ Too complex					
c. □ Not relevant to drill d. □ Participants unfamiliar		iliar with plan			
e. □ Too hard to access f. □ Other (specify):					
3d. If the hospital disaster plan was available, what was its format? (Check all that apply.)					
a. □ Complete manual	b. □ Flow diagram	c. □ Job action sheets			
d. □ No disaster plan	e. □ Other (specify):				

#### 4. Communications

**◆ 4a. Were communications effective?** Y/N/U

Comments:					
Were the following communications devices used in the drill for internal or external communications? (Check all that apply.)					
	A. Internal	B. External	C. Comments (Note strengths and weaknesses.)		
4b. 2-way radio/phone(s)					
4c. Landline phone(s)					
4d. Wireless/cell phone(s)					
4e. Personal data assistant(s) (PDA)					
4f. Numeric paging					
4g. Overhead paging					
4h. Text paging					
4i. E-mail/Internet access/network					
4j. FAX machine(s)					
4k. Intercom					
4l. Megaphone(s)					
4m. Runner(s)					
4n. Satellite phone(s)					
4o. HAM Radio					
4p. Emergency radio					
4q. How was incoming information to the zone recorded? (Check all that apply.)					
a. □ Computer (or other electronic device) b. □ Notepaper					
c. □ Posted paper	c. $\square$ Posted paper d. $\square$ White board/chalk board				
e 🗆 Not recorded	fП	Other (speci	ify):		

# 5. Information Flow

<b>◆ 5a. Was necessary information received?</b> Y / N / U
Comments:
51. Did the incident command containing time by underesting the total number of sympoted
5b. Did the incident command center receive timely updates regarding the total number of expected victims? $Y / N / U$
5c. Were problems created by delays in receiving information? Y / N / U
→ If problems were created by delays in information, specify in comment box at end of this module.
6. Security
<b>◆ 6a.</b> Were entrances and exits strictly controlled in this area? Y / N / U
Comments:
7. Rotation of Staff
<b>▼ 7a. Were incoming staff updated?</b> Y / N / U
Comments: (If comment refers to a specific item, give the item number):

## END OF INCIDENT COMMAND CENTER ZONE MODULE

# Hospital Disaster Drill Evaluation

# **Decontamination Zone Module**

**Note:** *Circle* or *check* (✓) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer:	<u>.</u>	Date:/	/
Observer title:			
Hospital:			
Period of time of evaluation: Al	M / PM (Circle one.) to _	AM / PM	(Circle one.)
1. Time Points:			
<b>◆</b> 1a. Did the drill start on time?	Y/N/U		
Comments:			
1b. Time the drill began: (Circle one	.) AM / PM / U		
1c. Time this zone was ready to accept	pt victims: (Circle one.)	AM / PM	I/U
2. Zone Description:			
<b>☞</b> 2a. Were the zone boundaries clo	early defined? Y/N	/ U	
Comments:			
2b. How was the boundary for this zo	ne defined? (Check all tl	hat apply.)	
a. □ Barricade	(s) b. $\Box$ Sign(s)	c.	□ Tape
$d. \square Wall(s)$	e. □ No bour	ndary f.	□ Other (specify):
3. Personnel:			
<b>◆</b> 3a. Did someone assume comma	nd of this zone? $\overline{Y/}$	N / U	
Comments:			
3b. How many minutes after the drill a command of the zone? (Check one.)	activities in this zone con	nmenced did son	neone assume
□ <10 min	□ 10 - 29 min	□ 30 -	59 min
□ 1 - 2 hrs	□ >2 hrs	□ NA	
$\square$ No one took charge.			
			•

**4. Zone Operations:** 

lacksquare 4a. Did the decontamination area operations function efficiently? $Y / N / U$				
Comments:				
4b. Was the decontamination zone set up pr	rior to arrival of first victim? Y/N/U			
4c. Were there problems with decontamina	tion of non-ambulatory victims?			
□ Yes □ No □ No non-amb	oulatory victims   ☐ Unclear			
4d. Were victims' clothing and personal be	longings removed during decontamination? Y / N / U			
4e. Were victims' clothing and personal bel	ongings marked as hazardous and secured? Y / N / U			
4f. Mechanism of decontamination? (Chec	k all that apply and estimate the number.)			
a. $\square$ EMS or fire department vehicles w	ith hoses (number:)			
b. □ Permanent overhead showers/sprin	klers (number:)			
c. □ Temporary decontamination tent(s)	(number:)			
d. □ Indoor decontamination facilities (number:)				
e. □ Other (specify):				
4g. Was medical oversight of victims main 4h. Did a bottleneck develop in this zone?	tained through the decontamination process? $Y/N/U$ Y/N/U			
→ If a bottleneck did develop, describe in the comment box at the end of this module.				
5. Victim Documentation and Tracking:				
<b>☞ 5a.</b> Were all incoming victims registered or medical record number? Y / N /				
Comments:				
5b. When were incoming victims registered number? (Check one.)	and given a unique identification or medical record			
☐ Before entering this zone	□ On entering this zone			
□ Not while in this zone □ Unclear				

#### 6. Communications:

<b>6a.</b> Were communications effective? Y / N / U		
Comments:		
Were the following communication apply.)	ns devices used in	the drill for communication? (Check all that
	A. Used	B. Comments (Note strengths and weaknesses.)
6b. 2-way radio/phone(s)		
6c. Intercom		
6d. Megaphone(s)		
6e. Runner(s)		
6f. Cell phones		
6g. Text paging		
6h. FAX machine(s)		
6i. PDAs		
6j. Email/internet/network		
6k. Numeric paging		
6l. Emergency radio		
6m. HAM radio		
6n. Landline phones		
60. Satellite phone(s)		
6p. Overhead paging		
6q. Other (specify):		

7. Information Flow:	
<b>▼ 7a.</b> Was necessary information received?	Y/N/U
Comments:	
7b. Were problems created by delays in recei  → If problems were created by delays in information.	ving information? Y/N/U rmation, specify in comment box at end of this module.
7c. When was your zone made aware of the pagent? (Check one.)	otential involvement of a chemical or radiological
☐ Before the first victim arrived	☐ After first victim arrived
□ All victims completed decontamination	□ Never made aware
□ Unsure	
8. Security:	
<b>☞</b> 8a. Were entrances and exits strictly cont	rolled in this area? Y/N/U
Comments:	
8b. Did any of the following security issues a	rise in this zone? (Check all that apply)
a. □ Crowd control	b. □ Media control
c. □ Unruly victims	d. □ Other (specify):
8c. Were security personnel present in this zo	ne? Y/N/U
9. Personal Protective Equipment (PPE) a	nd Safety:
• 9a. Was an appropriate supply of PPE	·
Comments:	
9b. Was the PPE applied correctly? Y/N	N / U
Comments:	
9c. Was staffing of the decontamination zo	one adequate? Y/N/U
Comments:	

If needed, were these items for standard precautions available for the healthcare workers?			
→ If safety materials were not available	e, circle "N" in column "A	" and go to the next	t row.
	A. Available?	B. Used by staff?	C. Adequate Supply?
9d. Protective suit	Y/N/U	Y / N / U	Y/N/U
9e. Hoods	Y/N/U	Y / N / U	Y/N/U
9f. Boots	Y/N/U	Y / N / U	Y/N/U
9g. Gloves, chemical resistant	Y/N/U	Y/N/U	Y/N/U
9h. Apron	Y/N/U	Y / N / U	Y/N/U
9i. Masks	Y/N/U	Y / N / U	Y/N/U
9j. Respirators (e.g., powered air purifying respirator)	Y/N/U	Y/N/U	Y/N/U
9k. Other (specify):	Y/N/U	Y/N/U	Y/N/U
91. Were instructions available regarding	g appropriate donning and	removal of PPE?	Y/N/U
9m. If available, in what format were th	ey? (Check all that apply	<b>v.</b> )	
a. □ Verbal instructions by staff	b. $\square$ Poster(s)		
c. □ Written instruction(s)	c. $\square$ Written instruction(s) d. $\square$ Video		
e. $\square$ Other (specify):			
9n. Were <i>all</i> workers in the decontamin	ation area dressed in appro	opriate PPE? Y/N	N/U
90. Was there inadvertent contamination	n of staff or victims? Y	/ N / U	
9p. What issues with donning and remo	oving PPE arose in this zon	e? (Check all that a	apply.)
a. □ Broken seals b. □ Delay in donning PPE c. □ Improper fit			Improper fit
d. □ Staff not trained to don PPE	e. □ Staff not trained to	remove PPE f. □	None
g.   Other (specify):			
9q. What issues with staffing arose in th	is zone? (Check all that a	pply.)	

a. □ Could not communicate with each other	b. □ Fatigue c. □ Over-heating/dehydration
d. □ Inadequate numbers to allow work cycles	e. □ Other (specify):
9r. How were victims screened for appropriate dec zone? (Check all that apply.)	contamination prior to leaving the decontamination
a. □ Screening device (e.g., radiation or themical detector)	b. □ Physical examination c. □ Not screened
10. Zone Disruption:	
<b>■ 10a. Did the zone function as planned?</b> Y/N	/U
Comments:	
10b. Was there a plan in place to relocate this zone	e if necessary? Y/N/U
<b>Comments</b> (If comment refers to a specific item, give the	e item number.):

# END OF DECONTAMINATION ZONE MODULE

# Hospital Disaster Drill Evaluation Triage Zone Module Note: Circle or check (✔) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer:		Date:/
Observer title:		
Hospital:		□ 1° triage □ 2° triage □ NA
Period of time of evaluation:	AM / PM (Circle on	<b>e.</b> ) toAM / PM ( <b>Circle one.</b> )
1. Time Points		
<b>☞</b> 1a. Did the drill start or	time? Y/N/U	
Comments:		
1b. Time the drill began: (	Circle one.)AM / PM	1/U
1c. Time this zone was rea	dy to accept victims: (Circl	e one.) AM / PM / U
2. Zone Description:		
<b>☞</b> 2a. Were the zone boun	daries clearly defined?	Y/N/U
Comments:		
2b. How was the boundary	for this zone defined? (Che	ck all that apply.)
a. □ Barricade(s)	b. $\square$ Sign(s)	c. □ Tape
$d. \square Wall(s)$	e. □ No boundary	f. $\square$ Other (specify):
3. Personnel		
<b>☞</b> 3a. Did someone assum	e command of this zone	? Y/N/U
Comments:		
<b>☞</b> 3b. Was staffing for the	triage zone adequate?	Y / N / U
Comments:		
3c. How many minutes after command of the zone? (Chec		zone commenced did someone assume
□ <10 min	□ 10 - 29 min	□ 30 - 59 min
□ 1 - 2 hrs	□ >2 hrs	□ NA
□ No one took char	ge	

3d. Were the follow	ving drill participants ide	entifiable?	
a. Person in charge	Y/N/U/NA	b. Drill evaluators	Y/N/U/NA
c. Drill organizers	Y/N/U/NA	d. Media	Y/N/U/NA
e. Medical personnel	Y/N/U/NA	f. Mock victims	Y/N/U/NA
g. Observers	Y/N/U/NA	h. Security	Y/N/U/NA

## **4. Zone Operations**

<b>◆ 4a. Did the triage area function efficiently?</b> Y / N / U		
Comments:		
4b. Was the hospital disaster pla	an followed? Y/N/U/Pa	artially / No plan
4c. If not followed, what were t	he reason(s)? (Check all tha	t apply.)
a. □ Not available	b. □ Too complex	
c. □ Not relevant to drill	d. □ Participants unfami	liar with plan
e. □ Too hard to access	f. $\square$ Other (specify):	
4d. If the hospital disaster plan was available, what was its format? (Check all that apply.)		
a. □ Complete manual	b. □ Flow diagram c. □ Job action sheets	
d. □ No disaster plan	e. $\square$ Other (specify):	
4e. Was the space allocated for the zone adequate? Y / N / U		
4f. If victims were screened for biological, chemical, or radiological exposure, how were they screened? (Check all that apply.)		
a. □ Personal interview	b. □ Physical examination	c. □ Screening device (e.g., radiation or chemical detector)
d. □ Not screened	e. □ NA	f. $\square$ Other (specify):
4g. Did a bottleneck develop in this zone? $Y/N/U$		
→ If a bottleneck did develop, describe in the comment box at the end of this module.		
4h. If triage occurs after decontamination, did any contaminated victims enter this zone? Y/N/U/NA		

5. Victim Documentation and Tracking

5. Victim Documentation and Traci	Milig	
■ 5a. Were all incoming victims regis or medical record number?	stered and given a uniq Y / N / U	ue identification
Comments:		
5b. When were incoming victims reg number? (Check one.)	istered and given a uniqu	ue identification or medical record
☐ Before entering this zone	□ On €	entering this zone
□ Not while in this zone	□ Unc	lear
5c. What was the method of documer	nting the victim record ir	this zone? (Check all that apply.)
a. □ Computer entry	b. □ Data card(s) attac	ched to victims
c. □ Scanner	d. □ Separate victim p	paper chart
e. □ No documentation	f. □ Other (specify): _	
5d. Were clearly visible triage levels the triage area? Y/N/U/NA	identified for each patien	nt prior to leaving
5e. Was information about victims' p caregivers? Y/N/U/NA	rior field interventions a	ccessible to
6. Communications		
<b>◆</b> 6a. Were communications effect	ive? Y/N/U	
Comments:		
Were the following communications dev	vices used in the drill? (	Check all that apply.)
	A. Used	B. Comments (Note strengths and weaknesses.)
6b. 2-way radio/phone(s)		
6c. Landline phone(s)		
6d. Cell phone(s)		
6e. Personal data assistant(s) (PDA)		
6f. Numeric paging		
6g. Overhead paging		
бh. Text paging		
6i. E-mail/Internet/network		

6k. Intercom			
6l. Megaphone(s)			
6m. Runner(s)			
6n. Satellite phone(s)			
60. Emergency radio			
6p. HAM radio			
6q. Other (specify):			
7. Information Flow			
<b>◆ 7a.</b> Was necessary information received?	Y / N / U		
Comments:			
7b. Did your zone receive updates regarding the events, number of victims arriving, acuity of victions arriving.			
7c. How was this zone kept aware of the ongoi that apply.)	ng general situ	uation within the hospital? (Check all	
a. □ Call(s) from incident command	a. □ Call(s) from incident command b. □ FAX from incident command		
c. □ Other contact from incident command	c. □ Other contact from incident command d. □ Runner(s) from incident command		
e. □ Contact from other internal sources (spec	cify):		

6j. FAX machine(s)

d.  $\square$  Video

8. Security				
<b>◆ 8a.</b> Were entrances and exits strictly	controlled in th	nis area? Y	/ N / U	
Comments:				
8b. Did any of the following security is	sues arise in this	zone? (Chec	ck all that ap	ply)
a. □ Crowd control b. □ Media	control c.	□ Unruly vict	tims d. □	Other (specify):
	4. 0 17.	NI / II		
8c. Were security personnel present in a				
9. Personal Protective Equipment (Pl 9a. Was an appropriate supply of PP		<u>Y / N / U</u>		
Comments:	L avanabic.	1/11/0		
	Y / N / U			
Comments:	171070			
If needed, were these items for standard p	recautions avail	able for the h	ealthcare wor	kers?
→ If safety materials were not avai				
	A. Available?	B. Used by staff?	C. Adequate Supply?	D. Problems with use? (e.g., donning)
9c. Face shields/Masks	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9d. Waterproof gowns	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9e. Isolation gowns	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9f. Gloves	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9g. Passive (negative pressure) filtration (e.g., N95 or N99 masks)	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9h. Respirators (e.g., powered Air purifying respirator)	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9i. Other (specify):	Y/N/U	Y/N/U	Y/N/U	Y/N/U
9j. Were instructions available regarding	g appropriate do	nning and re	noval of PPE	? Y/N/U
9k. If available, in what format were the	ey? (Check all tl	hat apply.)		
a. $\square$ Verbal instructions by staff	b. □ Poster(s)		c.   Written	instruction(s)

Triage Zone Module 5

e. □ Other (specify): \_

10. Equipment and Supplies

<b>► 10a.</b> Were there appropriate quantities of medical supplies?  Y/N/U		
Comments:		
Were these medical supplies available?→ If the "A" and go to the next row.	ne medical supplies were no	t available, circle "N" in column
	A. Available	B. Issues
10b. Alcohol-based hand cleaner	Y/N/U/NA	
10c. Bandages	Y/N/U/NA	
10d. Basic airway equipment	Y/N/U/NA	
10e. Blood pressure equipment	Y/N/U/NA	
10f. Oxygen masks	Y/N/U/NA	
10g. Oxygen tanks	Y/N/U/NA	
10h. Stethoscopes	Y/N/U/NA	
10i. Stretchers	Y/N/U/NA	
10j. Suction equipment	Y/N/U/NA	
10k. Vascular access supplies (catheters, fluids, etc)	Y/N/U/NA	
10l. Wheelchairs	Y/N/U/NA	
10m. Other (specify):	Y/N/U/NA	

e item number.)
l

# END OF TRIAGE ZONE MODULE

# Hospital Disaster Drill Evaluation

## **Treatment Zone Module**

**Instructions:** This form can be used in the Emergency Department, and in medical and surgical care areas. **Note:** *Circle* or *check* (✓) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer: Date://
Observer title:
Hospital:
Period of time of evaluation: AM / PM (Circle one.) to AM / PM (Circle one.)
1. Time Points
<b>◆ 1a. Did the drill start on time?</b> Y/N/U
Comments:
1b. Time the drill began: (Circle one.)AM / PM / U
1c. Time this zone was ready to accept victims: (Circle one.)AM / PM / U
2. Zone Description:
<b>◆ 2a. Were the zone boundaries clearly defined?</b> Y/N/U
Comments:
2b. What type of unit is this zone during regular hospital functioning? (Check all that apply)
a. □ Emergency Department (ED) b. □ Intensive Care (ICU)
c. □ Medical Inpatient d. □ Medical Outpatient
e. □ Surgical Inpatient f. □ Surgical Outpatient
g. $\square$ Other (specify):
2c. Were actual patients treated in the drill treatment area (along with mock victims)? Y/N/U
3. Personnel
<b>◆ 3a. Did someone assume command of this zone?</b> Y/N/U
Comments:
3b. Was staffing of the treatment zone adequate? Y/N/U
Comments:

3c. How many minutes after the drill activities in this zone commenced did someone assume command of the zone? ( <b>Check one.</b> )					
□ <10 min	□ 10 - 29 m	in □ 30	0 - 59 min		
□ 1 - 2 hrs	□ >2 hrs		A		
$\square$ No one took charge.					
3d. Were the following drill partic	cipants identifiable?				
a. Drill evaluators	Y/N/U/NA	b. Drill organizers	Y  /  N  /  U  /  NA		
c. Media	Y/N/U/NA	d. Medical personnel	Y  /  N  /  U  /  NA		
e. Mock victims	Y/N/U/NA	f. Observers	Y  /  N  /  U  /  NA		
g. Security	Y/N/U/NA				

#### **4. Zone Operations**

<b>◆</b> 4a. Did the treatment area functi	on efficiently? Y/N/U
Comments:	
4b. Was the hospital disaster plan foll	owed? Y / N / U / Partially / No plan
4c. If not followed, what were the rea	son(s)? (Check all that apply.)
a. □ Not available	b. □ Too complex
c. □ Not relevant to drill	d. □ Participants unfamiliar with plan
e. □ Too hard to access	f. $\square$ Other (specify):
4d. If the hospital disaster plan was av	ailable, what was its format? (Check all that apply.)
a. □ Complete manual	b. □ Flow diagram c. □ Job action sheets
d. □ No disaster plan	e. $\square$ Other (specify):
4e. Was the space allocated for the zo.	ne adequate? Y / N / U
→ If space allocated was not adequate	te, specify in comment box at end of this module.

4f. Did a bottleneck develop in this zone? Y/N/U				
→ If a bottleneck did develop, describe in t	he comment box at the end of this module.			
4g. How were victims managed who w	ere NOT previously triaged? (Check one.)			
☐ Sent back to triage zone	☐ Sent to another area (specify):			
☐ Triaged in this zone	☐ Treated without being triaged			
4h. Did all victims have disposition dec	cisions made at drill termination? Y/N/U/NA			
4i. Did any contaminated victims enter	this zone? Y/N/U/NA			
5. Victim Documentation and Tracki	ng			
5a. Were all incoming victims regist or medical record number? Y /	ered and given a unique identification N/U			
Comments:				
5b. When were all incoming victims registered and given a unique identification or medical record number? ( <b>Check one.</b> )				
□ Before entering this zone	□ On entering this zone			
□ Not while in this zone	□ Unclear			
5c. What was the method of documenting the victim record in this zone? (Check all that apply)				
a. □ Computer entry	b. □ Data card(s) attached to victims			
c. □ Dictation system	d. □ Personal data assistant (PDA)			
e. □ Scanner	f. □ Separate victim paper chart			
g. □ No documentation	h. □ Expedited registration			
i. □ Other (specify):				
5d. Were triage designations for each pattreatment area? Y/N/U/NA	atient clearly visible upon entry into the			
5e. Was information about victims' prio caregivers? Y/N/U/NA	or field interventions accessible to			

#### 6. Communications

<b>◆ 6a. Were communications effective?</b> Y	/ N / U	
Comments:		
Were the following communications devices used	l in the drill?	(Check all that apply.)
	A. Used	B. Comments (Note strengths and weaknesses.)
6b. 2-way radio/phone(s)		
6c. Landline phone(s)		
6d. Cell phone(s)		
6e. PDAs		
6f. Numeric paging		
6g. Overhead paging		
6h. Text paging		
6i. E-mail/Internet/network		
6j. FAX machine(s)		
6k. Intercom		
6l. Megaphone(s)		
6m. Runner(s)		
6n. Emergency Radio		
60. HAM radio		
6p. Satellite phones		
6q. Other (specify):		

#### 7. Information Flow

c. □ Unruly victims

8c. Were security personnel present in this zone?

lacktriangle 7a. Was necessary information received? Y / N /	U
Comments:	
7b. Did your zone receive updates regarding the situat disaster events, number of victims arriving, acuity of vic	*
7c. How was this zone kept aware of the ongoing gene that apply.)	eral situation within the hospital? (Check all
a. □ Call(s) from incident command	b. $\square$ FAX from incident command
c. □ Other contact from incident command	d. □ Runner(s) from incident command
e. □ Contact from other internal sources (specify):	
7d. Were problems created by delays in receiving info	ormation? Y/N/U
→ If problems were created by delays in information	a, specify in comment box at end of this module.
8. Security	
<b>◆ 8a.</b> Were entrances and exits strictly controlled in	this area? Y/N/U
Comments:	
8b. Did any of the following security issues arise in th	is zone? (Check all that apply.)
a. □ Crowd control b.	. □ Media control

d. □ Other (specify): \_

 $Y \mathbin{/} N \mathbin{/} U$ 

9. Personal Protective Equipment (PPE) and Safety

<b>◆ 9a.</b> Was an appropriate supply of PPE available? Y / N / U						
Comments:						
<b>☞</b> 9b. Was the PPE applied co.	orrectly? Y/N	/ 1 1				
	Hectiy: 1/19	70				
Comments:						
If needed, were these items for s	standard precautio	ons available for the	e healthcare v	workers?		
→ If safety materials were	e not available, ci	ircle "N" in colum	n "A" and go	to the next row.		
A. Available?  B. Used by staff?  C. Adequate Supply?  C. Problems with use? (e.g. donning)						
9c. Face shields/masks	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9d. Waterproof gowns	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9e. Isolation gowns	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9f. Gloves	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9g. Passive (negative pressure) filtration (e.g., N95 or N99 masks)	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9h. Respirators (e.g., powered air purifying respirator)	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9i. Other (specify):	Y/N/U	Y/N/U	Y/N/U	Y/N/U		
9j. Were instructions available	regarding appror	priate donning and	removal of P	PPE? Y/N/U		
9k. If available, in what forma	t were they? (Che	eck all that apply.	.)			
a. □ Verbal instructions by	staff b. □ Pos	ster(s) c. $\Box$	□ Written inst	ruction(s)		
d. □ Video e. □ Other (specify):						

#### 10. Equipment and Supplies

<b>◆ 10a.</b> Were there appropriate quantities of medical	supplies? Y/N/	U
Comments:		
10b. Were medications needed for treatment of victim	ns available in the ho	ospital? Y/N/U/NA
Were needed medical supplies available?		
→ If medical supplies were not available, circle "N	" in column "A" and	go to the next row.
	A. Available	B. Issues
10c. Alcohol-based hand sanitizer	Y/N/U/NA	
10d. Bandages	Y/N/U/NA	
10e. Basic airway equipment	Y/N/U/NA	
10f. Blood drawing supplies	Y/N/U/NA	
10g. Blood pressure equipment	Y/N/U/NA	
10h. Burn packs	Y/N/U/NA	
10i. Cleaning supplies for contaminated equipment	Y/N/U/NA	
10j. Crash carts	Y/N/U/NA	
10k. Intravenous fluids	Y/N/U/NA	
101. Intubation equipment	Y/N/U/NA	
10m. Medications	Y/N/U/NA	
10n. Monitors	Y/N/U/NA	
10o. Oxygen masks	Y/N/U/NA	
10p. Oxygen tanks	Y/N/U/NA	
10q. Splints	Y/N/U/NA	
10r. Stethoscopes	Y/N/U/NA	
10s. Stretchers	Y/N/U/NA	
10t. Suction equipment	Y/N/U/NA	
10u. Surgical masks	Y/N/U/NA	

10v. Vascular access supplies (catheters, fluids, etc.)	Y/N/U/NA	
10w. Ventilators	Y/N/U/NA	
10x. Wheelchairs	Y/N/U/NA	
10y. Other (specify):	Y/N/U/NA	

Comments (If comment refers to a specific item, give the item number.):				

# END OF TREATMENT ZONE MODULE

# Hospital Disaster Drill Evaluation **Biological Incident Addendum**

**Instructions:** Attach to Incident Command, Triage, and Treatment Zone Modules for biological drills. **Notes:** *Circle* or *check* (✔) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer:		Date:	/	
Observer title:		Zone:		
Hospital:				
Period of time of evaluation:	AM / PM	(Circle one.) to _	AM / PM (C	ircle one)
1. Time Points				
1a. Time that the zone became illness caused by a biological a			•	AM / PM / U
2. Information Flow				
Were the following informed:  → If not in	•	l agent may be invo N" in column "A" an		2.
A. Informed		B. Time Notified		
2a. Incident commander	Y/N/U	○ <30 min	○ 30-59 min	0 1 - 2 hrs
		○ >2 hrs	O Unclear	○ NA
2b. Hospital	Y/N/U	○ <30 min	○ 30-59 min	0 1 - 2 hrs
epidemiologist or designee		○ >2 hrs	O Unclear	○ NA
2c. Local and/or state	Y/N/U	○ <30 min	○ 30-59 min	○ 1 - 2 hrs
health department		○ >2 hrs	O Unclear	○ NA
2d. Occupational health	Y/N/U	○ <30 min	○ 30-59 min	01 - 2 hrs
		○ >2 hrs	O Unclear	○ NA
2e. Was a "chain of custody" i	mplemented? <sup>a</sup>	Y/N/U		
<sup>a</sup> Chain of custody is defined at time, location, and when, how successively responsible for cuhold up in court.	, and by whom o	acquired. It includ	es signatures of al	l persons

If using BIOLOGICAL INCIDENT ADDENDUM in the INCIDENT COMMAND ZONE, STOP HERE. Do not complete the rest of module.

•	T 7 . 4 .	<b>D</b> :	•
3.	Victim	Diagno	DSIS

3. Victim Diagnosis			
3a. Was the suspected illness caused by a victims in this zone? Y/N/U	a biological agent known prior to t	he arrival of affected	
3b. If the cause of the illness was not kno victim arrived was the cause of the il		ng after the first	
□ <1 hr	□ 1 - 4 hrs □ 5 - 8 hrs		
□ >8 hrs	□ Never identified □ NA		
3c. What was the cause of the illness? (C	Check all that apply.)		
a. □ Anthrax	b. □ Botulinum toxin		
c. □ Plague	d. □ Influenza		
e. □ Smallpox	f. □ Tularemia		
g. □ Viral hemorrhagic fever	h. □ Unknown		
i. □ Other (specify):			
3d. What resources were used to make the	ne diagnosis(es)? (Check all that a	ipply.)	
a. □ Consultation with an in-hospita	l expert		
b. □ Consultation with an expert from	m state/local health department		
c. □ Consultation with the Centers for	or Disease Control and Prevention	(CDC)	
d. $\square$ History and physical exam by the	he treating health care provider		
e. □ Microbiological data			
f. □ Radiologic data			
g.□ Telemedicine			
h.□ NA			
i. □ Other (specify):			
I. Safety: Isolation Precautions			
4a. Was isolation required for the suspec	ted illness involved? Y/N/U		

Isolation required for smallpox, plague, viral hemorrhagic fever, certain pneumonias or rashes, and other symptoms suggestive of a contagious infection outbreak.

- → If no isolation was required, skip to the Screening and Prophylaxis section.
- 4b. Were there delays in placing victims in isolation rooms?
- → If there were delays, specify in comment box at the end of this module.

4c. Were there enough isolation rooms? Y / N / U
4d. If insufficient isolation rooms, how were victims isolated? (Check all that apply.)
a. □ Conversion of other rooms/area (specify):
b. □ Existing isolation room in other area (specify):
c. □ Overflow victims not isolated
d. □ Victims with the same suspected illness caused by a biological agent placed in the same isolation room
e. □ NA
f. $\square$ Other (specify):
4e. Were there signs on victims' doors that described the type of isolation required? $Y / N / U$
4f. Were any breaches in isolation precautions identified? Y / N / U
→ If there were any breaches in the isolation precautions, specify in comment box at end of this module.
4g. Did representatives from infection control arrive in the zone to assess the appropriateness of isolation precautions? $Y / N / U$
5. Safety: Personal Protective Equipment (PPE)
5a. Given the suspected illness caused by a biological agent, was PPE used to protect healthcare workers? $Y / N / U$
Isolation required for smallpox, plague, viral hemorrhagic fever, certain pneumonias or rashes, and other symptoms suggestive of a contagious infectious outbreak.
5b. Did you observe staff without PPE interacting with potentially contagious victims $Y/N/U/NA$
6. Screening and Prophylaxis
6a. Were prophylactic medications available for staff? Y / N / U / NA
6b. Were prophylactic and/or treatment medications available for victims? $Y / N / U / NA$
7. Laboratory Specimens
7a. Were guidelines available for packaging and transporting microbiological specimens? $Y/N/U$
Comments (If comment refers to a specific item, give the item number.):

# END OF BIOLOGICAL INCIDENT ADDENDUM

# Hospital Disaster Drill Evaluation

# Radiological Incident Addendum

**Instructions:** Attach to Incident Command, Decontamination, Triage, and Treatment Zone Modules for radiological drills.

**Note:** Circle or check (✔) as indicated. Y=Yes; N=No; U=Unclear; NA=Not applicable

Observer:	rver: Date:/			
Observer title:		Zone:		
Hospital:				
Period of time of evaluation:	AM / PM	(Circle one) to	o AM / PM (	Circle one)
1. Time Points				
1a. Time that this zone became aware that radiological victims were AM / PM / U involved: (Circle one.)				
2. Information Flow				
2a. How did this zone become a	ware that radio	logical victims	were involved? (Ch	eck all that apply.)
a. □ Informed by fire depart	tment b.	□ Informed by	incident command	center
c. □ Onsite alarm	d.	□ Other (speci	fy):	
Were the following informed that	at a radiologica	l agent was inv	olved?	
→ If not info	rmed, circle "N"	in column "A"	and go to the next lin	ie.
A Informed B. Time Notified				
2b. Incident commander Y /	Y/N/U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
		□ >2 hrs	□ Unclear	□ NA
2c. Radiation safety officer or	Y  /  N  /  U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
designee		□ >2 hrs	□ Unclear	□ NA
2d. Local and/or state health	Y / N / U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
department		□ >2 hrs	□ Unclear	□ NA
2e. Hazardous materials	Y/N/U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
(HAZMAT) official		□ >2 hrs	□ Unclear	□ NA
2f. Occupational health	Y/N/U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
		□ >2 hrs	□ Unclear	□ NA
2g. Municipal wastewater	Y/N/U	□ <30 min	□ 30-59 min	□ 1 - 2 hrs
treatment officials		□ >2 hrs	□ Unclear	□ NA

#### 3. Materials and Supplies

3a. If prophylaxis for the given agent was indicated, was it available? Y/N/U/NA

3b. Were specialized cleaning supplies available for contaminated equipment? Y/N/U/NA

# If using RADIOLOGICAL INCIDENT ADDENDUM in the INCIDENT COMMAND ZONE, STOP HERE. Do not complete the rest of module.

#### 4. Zone Description

4a. Was the radiological decontamination zone separate from the triage zone? Y/N/U

4b. Was the integrity of the boundary between the radiological decontamination zone and the triage zone assessed by the use of radiation detectors? Y/N/U/NA

#### 5. Safety: Precautions

Were the following available	; 	1	1
5a. Dosimeters	Y/N/U	5b. Floor covering	Y/N/U
5c. Radiation signs	Y/N/U	5d. Radiation survey meters	Y/N/U
5e. Striped tape			Y/N/U
5f. Radioactive and mixed waste (Bio/Rad) disposal containers		Y/N/U	
5g. Other (specify):			Y/N/U
5h. Were breaches in precautions observed?		Y/N/U	
→ If breaches in precaut	ions were observed	d, specify in comment box at end o	of this module.
5i. Did the institutional saf	ety officer arrive in	this zone to assess the activity?	Y / N / U / NA

#### **6. Safety: Personal Protective Equipment (PPE)**

6a. Was PPE used to protect healthcare workers? Y / N / U

If needed, were these safety materials available for the healthcare workers?

#### → If safety materials were not available, circle "N" in column "A" and go to the next row.

* If safety materials we	re not available, en	cie ii iii column	una go to the h	<u> </u>
	A. Available?	B. Used by staff?	C. Adequate Supply?	D. Problems with use? (e.g. donning)
6b. Face shields	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6c. Passive (negative pressure) filtration (e.g., N95 or N99 masks)	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6d. Respirators (e.g., powered air purifying respirator)	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6e. Protective suit	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6f. Waterproof gowns	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6g. Hoods	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6h. Boots	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6i. Waterproof shoe covers	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6j. Gloves, chemical resistant	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6k. Double latex gloves	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6l. Apron	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6m. Surgical caps	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
6n. Other (specify):	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA	Y/N/U/NA
60. Did you observe staff with	out PPE interactin	g with contaminat	ed victims?	Y/N/U/NA

Comments (if comment refers to a specific item, give the item number):		

END OF RADIOLOGICAL INCIDENT ADDENDUM

# Hospital Disaster Drill Evaluation **Group Debriefing Module**

**Note**: The debriefing session(s) should be recorded by audiotape or scribe. Each item is relevant to every zone involved in the drill. Delete items on decontamination if not relevant to drill. Debriefing participants **should state their zone when responding**.

- 1. Did you feel you were notified of the disaster in a timely fashion?
- 2. Did the incident command center work effectively?
- 3. Did any zone receive incorrect information from the incident command center?
  - 4. If not correct, what specifics do you recall about incorrect information?
- 5. Was the information from the incident command center received by other zones in a timely way?
- 6. Were there problems with information flow within the hospital?
- 7. Were memorandums of understanding (MOUs) with outside agencies (e.g., police) activated?
- 8. Did nurses and physicians respond quickly to the disaster call?
- 9. Was the zone set up when the first mock victim arrived?
- 10. Was security in place before the first mock victim arrived?
- 11. Did people have a good understanding of their roles, as defined in the disaster plan?
- 12. Did the decontamination system work effectively?
- 13. Did you have any problems with the decontamination equipment?
  - 14. Functioning properly?
  - 15. Adequate number of units?
  - 16. Participants used correctly?
- 17. Were there delays in decontamination?
  - 18. If so, what triggered these delays?

- 19. Did the triage system work effectively?
- 20. Were there delays in triage?
  - 21. If so, what triggered these delays?
- 22. Did the treatment system work effectively?
- 23. Were there delays in treatment?
  - 24. If so, what triggered these delays?
- 25. Was personal protective equipment (PPE) used correctly?
- 26. Were you able to function in the PPE?
- 27. Were you rotated adequately when wearing the PPE?
- 28. Was security adequate?
- 29. Was staffing adequate?
- 30. Were supplies adequate?
- 31. Was the equipment adequate?
- 32. If not, what equipment was not adequate (give specifics)?
- 33. Were there problems with transporting patients?
- 34. Were there problems with communication devices (e.g., equipment failure)?
- 35. Did the hospital appear to work well with city and/or regional disaster agencies?
- 36. Were there problems with information flow between the hospital and outside agencies?
  - 37. If yes, which agencies?
- 38. Were there bottlenecks?
- 39. Was workspace adequate?
- 40. Did you feel you could accomplish what you were assigned to do during the drill?

- 41. What did you learn from participating in the drill?
- 42. Overall, what parts of the drill went well?
- 43. What could have been done differently to make the drill run better?

# END OF GROUP DEBRIEFING MODULE