# The Emergency Department response to Chemical, Biological, Radiological, and Nuclear events: A Human Factors and Ergonomics Approach

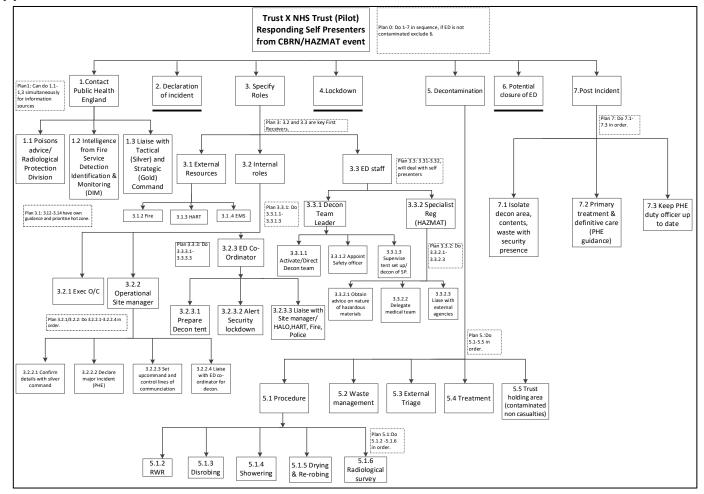
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### Vol 2: Appendix 18. Pilot HTA

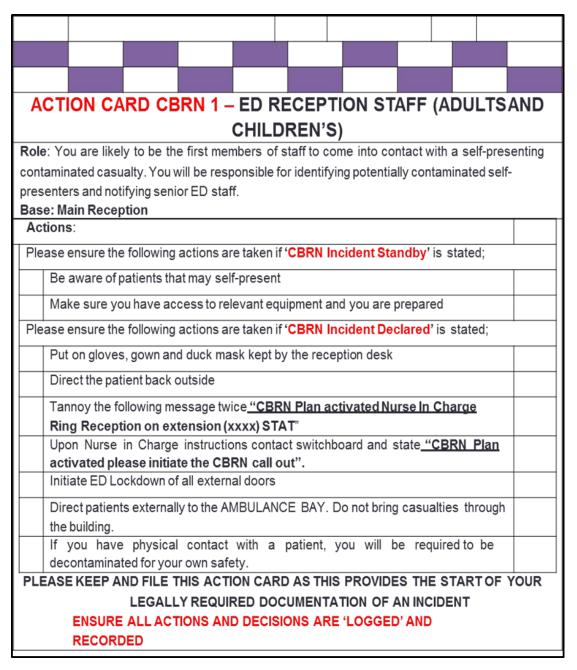


# Vol 2: Appendix 19. Part 1 CBRN plan

#### REDACTED - OFFICIAL - RESEARCH USE ONLY - NOT TO BE MADE AVAILABLE TO THE PUBLIC For any advice and further information and advice about responding to a CBRN incident, training or exercising please contact the Emergency Planning officer. Please note this is not an on call/operational response role for use during an incident **AIM & OBJECTIVES** The Aim of the plan is; To enable the Trust to respond to the arrival of self-presenting contaminated casualties who require decontamination to limit further damage to their health and to prevent secondary contamination of staff, visitors and hospital infrastructure. This will be achieved through the following objectives; a) To establish the processes for identifying contaminated self-presenters and appropriate activation and notification arrangements b) To identify appropriate decontamination procedures to reduce the effects of the contaminants c) To identify other agencies who will assist with the management of selfpresenters d) To identify the command and control arrangements as to how the incident will be managed supported by appropriate action cards e) To identify additional specific considerations that may arise during a CBRN incident. SCOPE This plan will cover the processes to adopt when it is suspected that a patient(s) may be contaminated with a hazardous Chemical, Biological, Radiological or Nuclear substance (CBRN). Contaminated casualties will be managed in the location they first present. Contaminated casualties must not be transferred for management to another department unless they have been decontaminated. Any casualties arriving by Ambulance or other emergency services should have been decontaminated at the scene, the exception to this is P1 casualties that are contaminated with radioactive substances. All arrivals via ambulances during a known CBRN incident should be verified before casualties and ambulance staff are permitted entry to the Emergency Department. CBRN Plan Page 6 of 1 Version; 3, May 2017 Next Review Date: August 2017

(Example extract of Trust A CBRN plan: Image courtesy of Trust A)

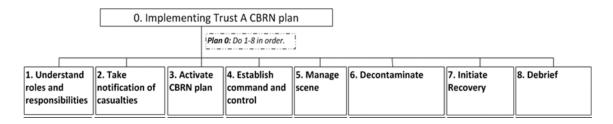


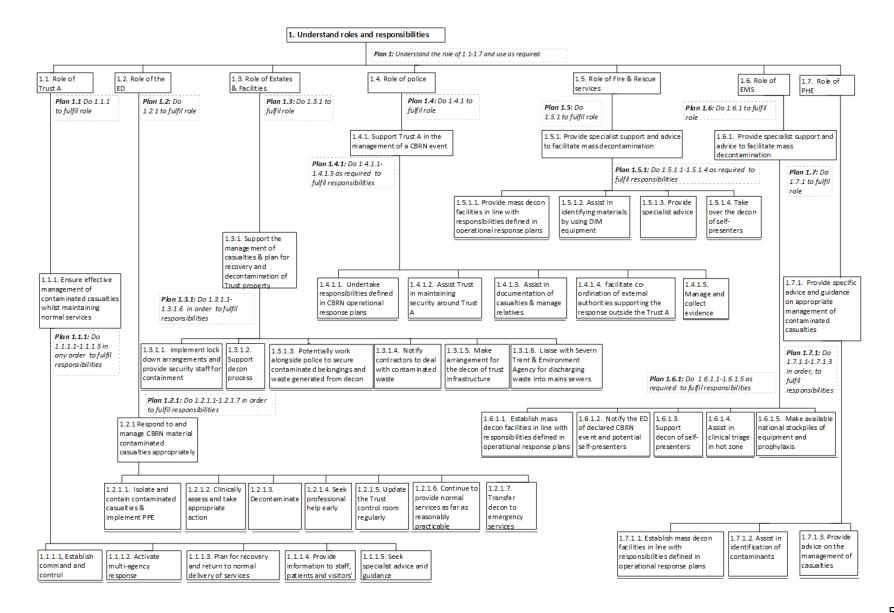


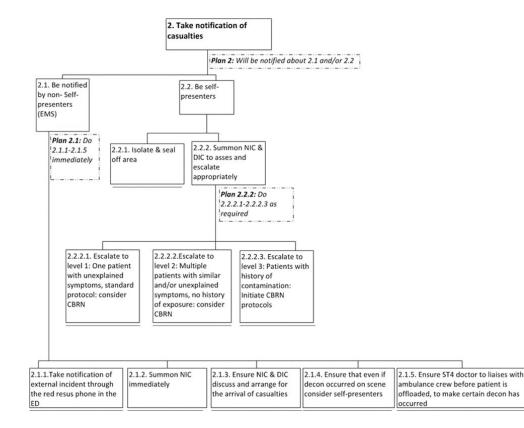
(Example extract of Trust A CBRN plan: Image courtesy of Trust A)

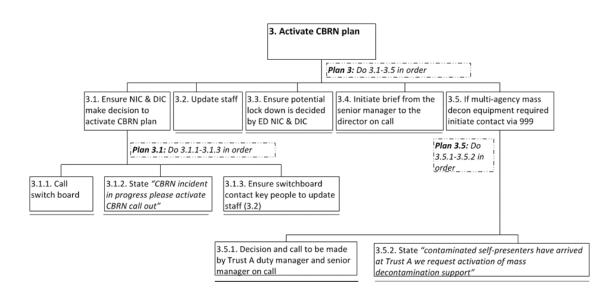
# Vol 2: Appendix 21. Trust A: General Organisational

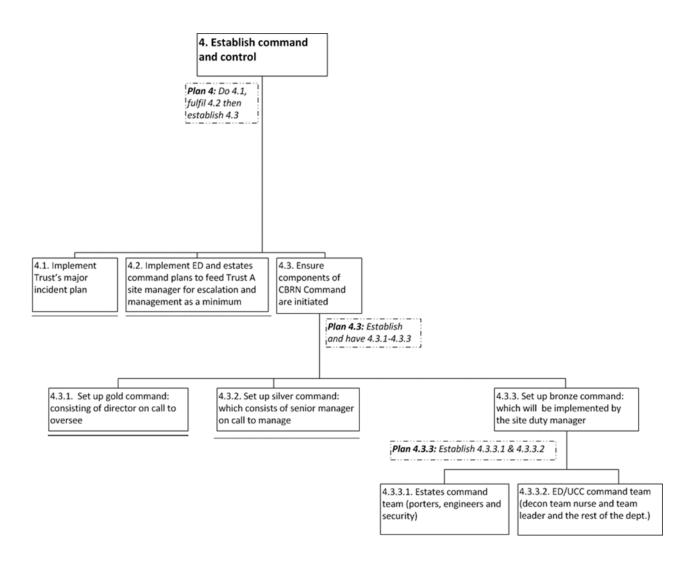
**Responsibilities (V1)** 



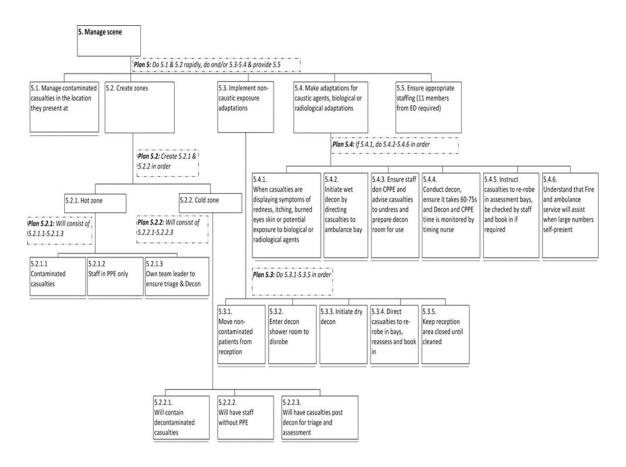


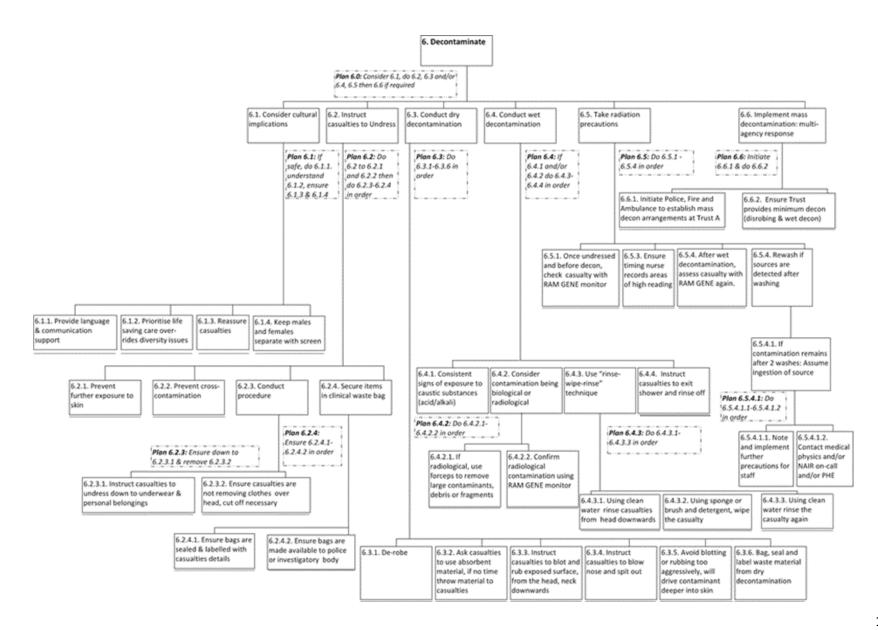


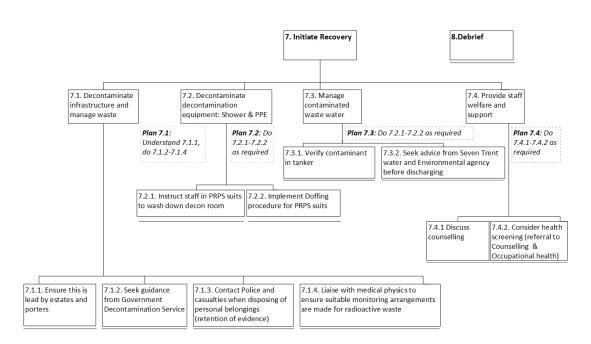


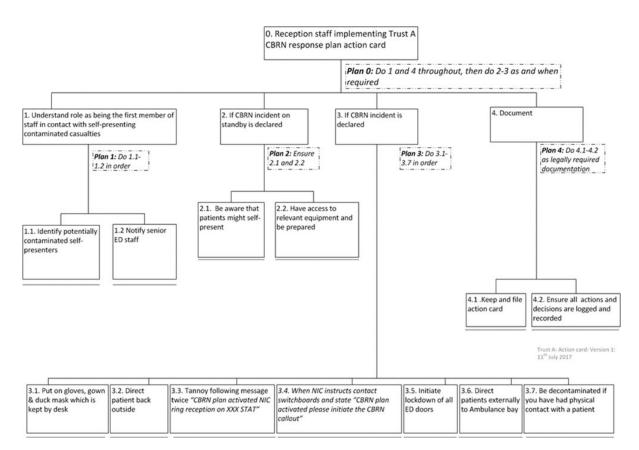


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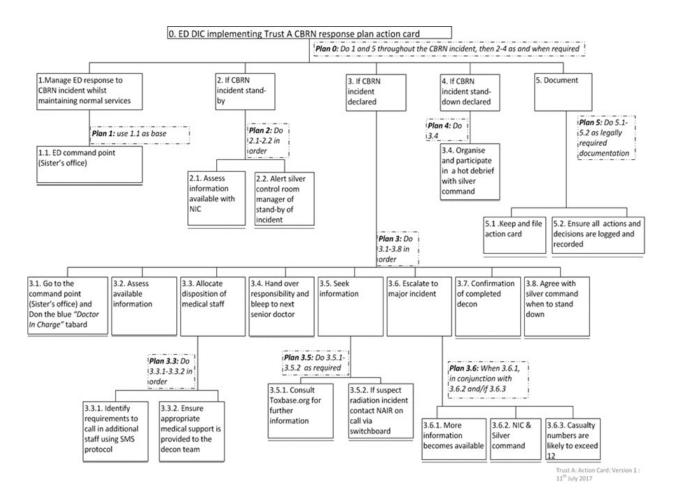


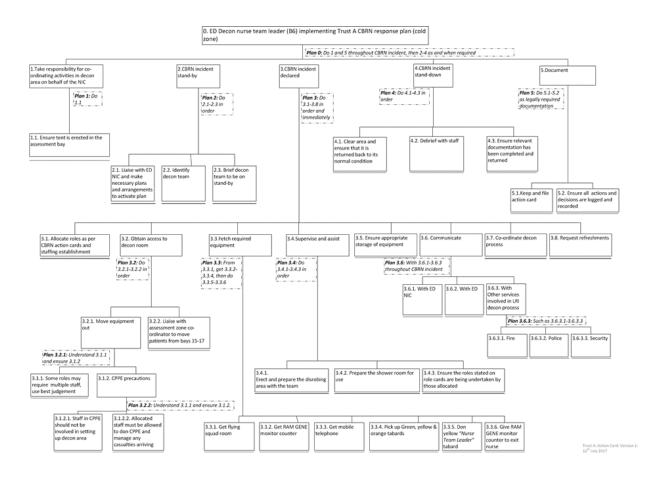


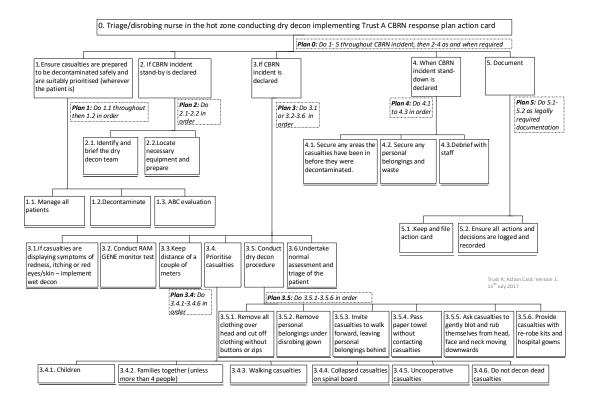


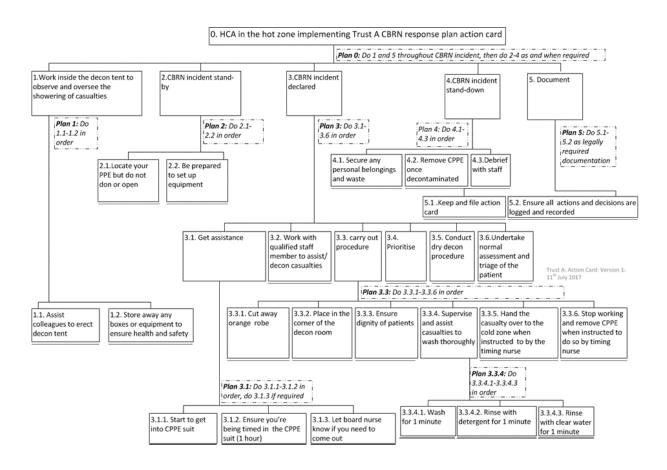


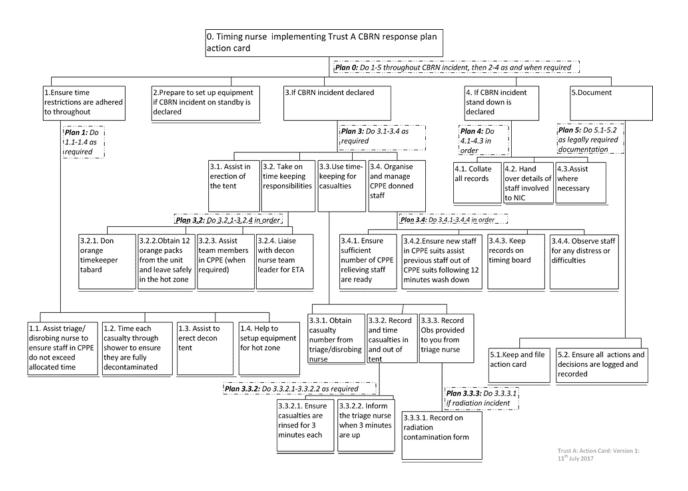
# Vol 2: Appendix 22. Trust A: Action cards (V1)

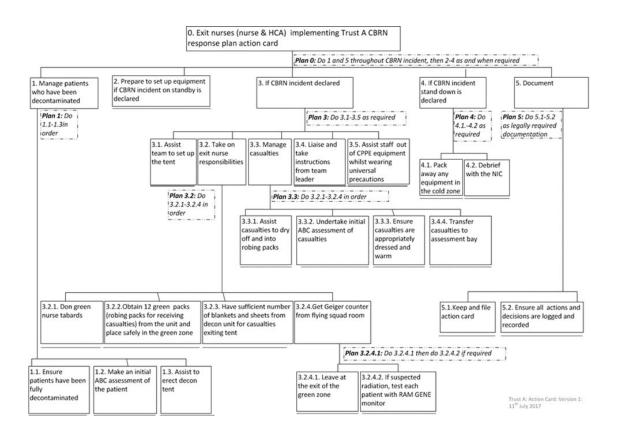


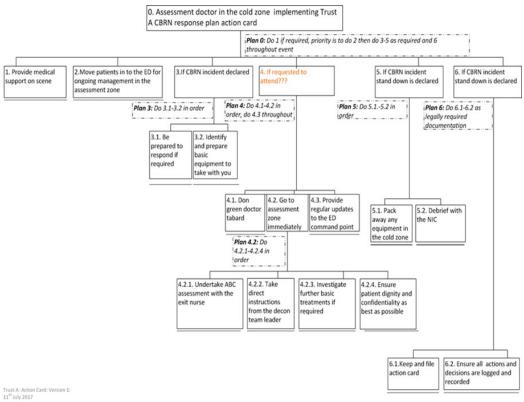


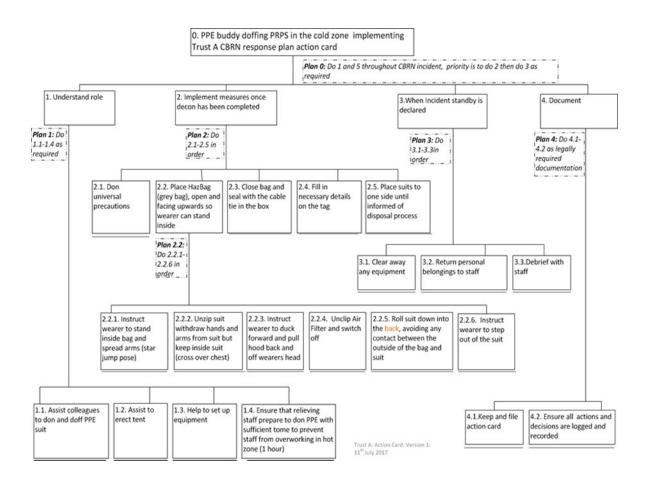


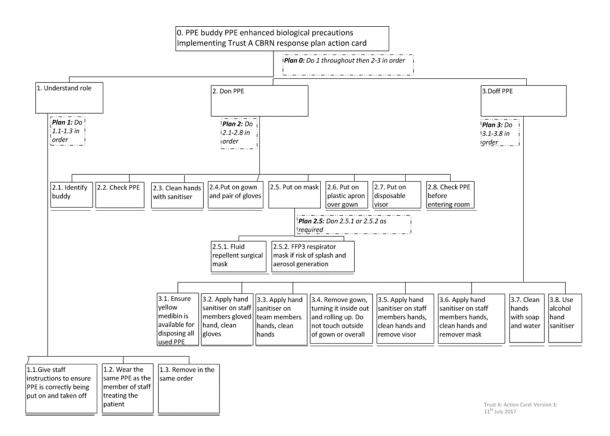


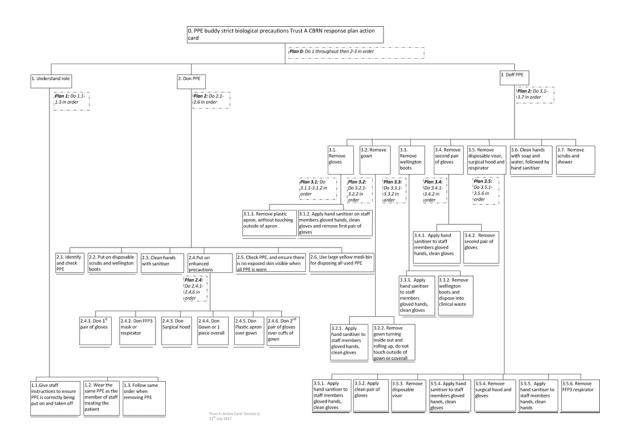


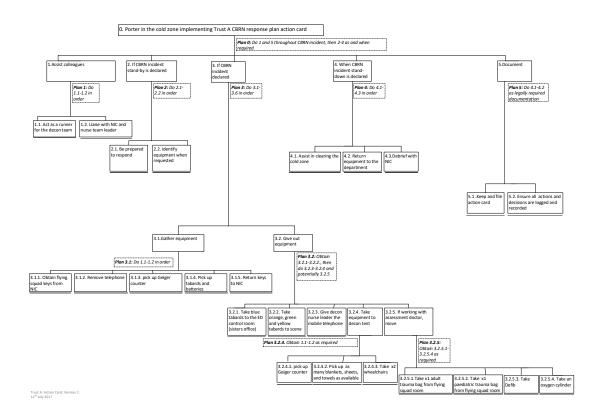


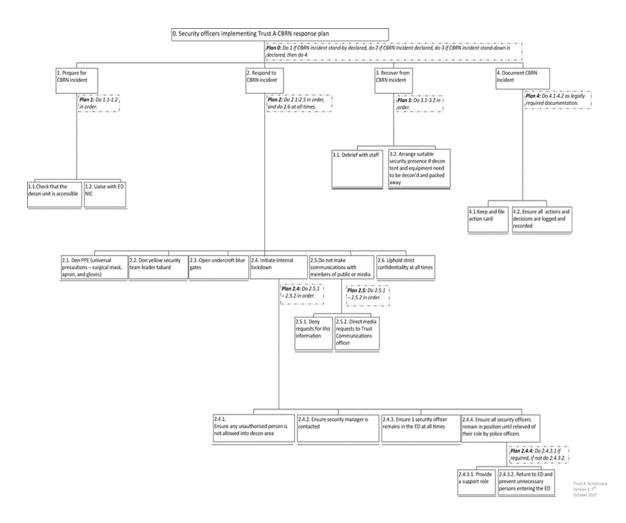


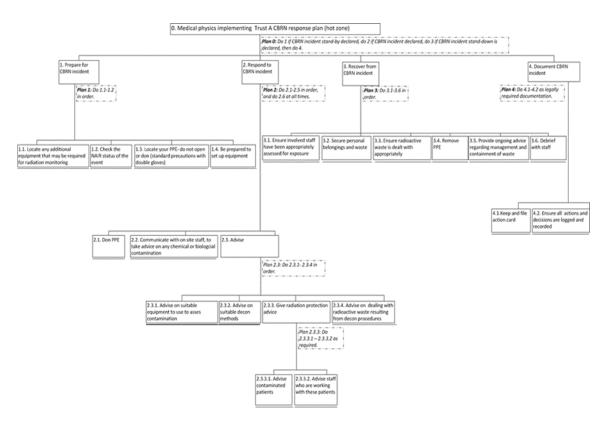






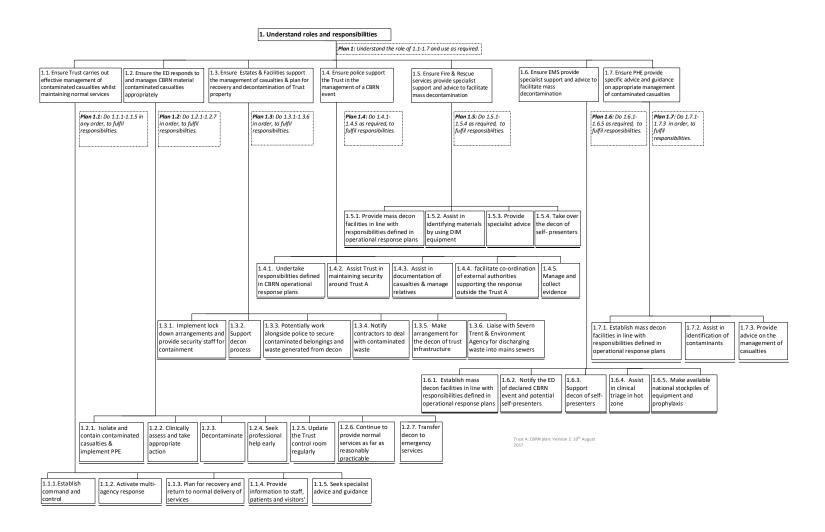


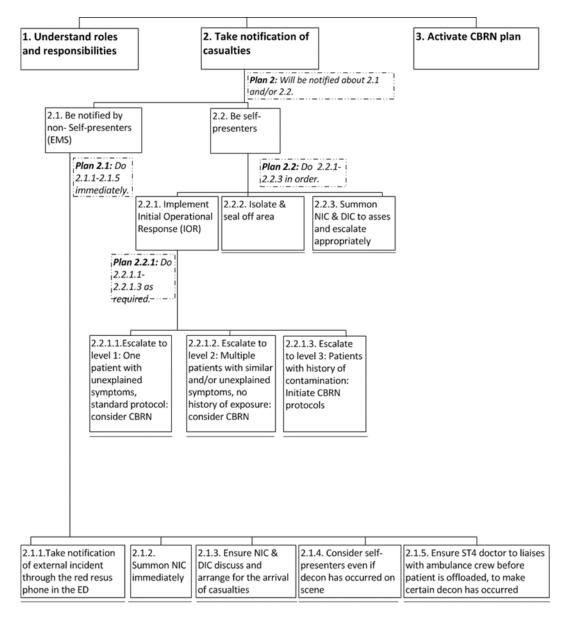




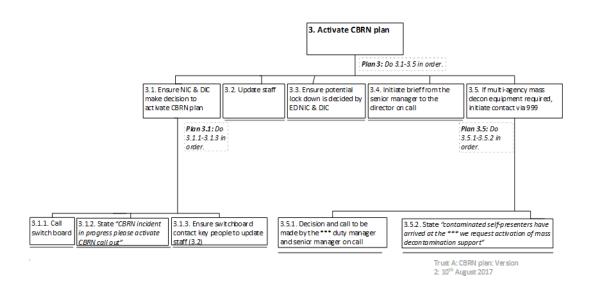
Trust A: Action Card; Version 1: 7<sup>th</sup> October 2017

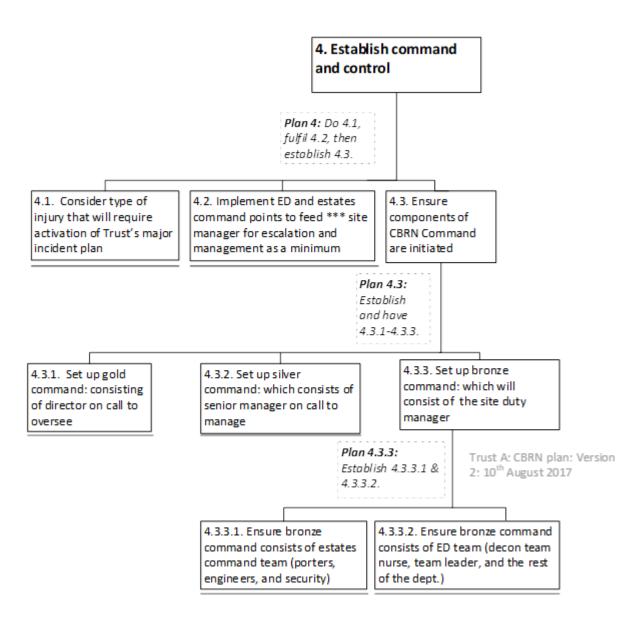
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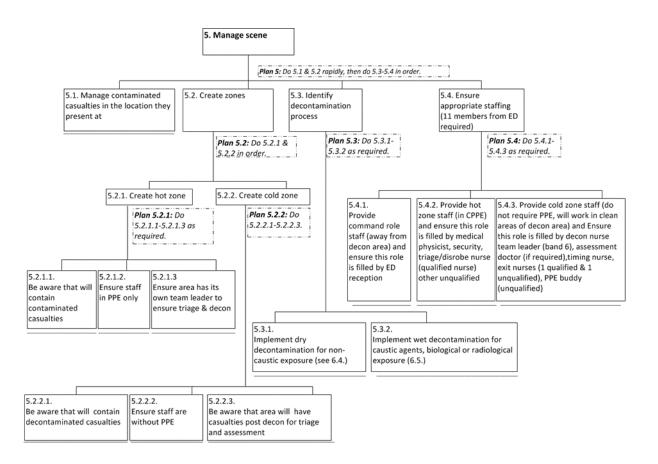


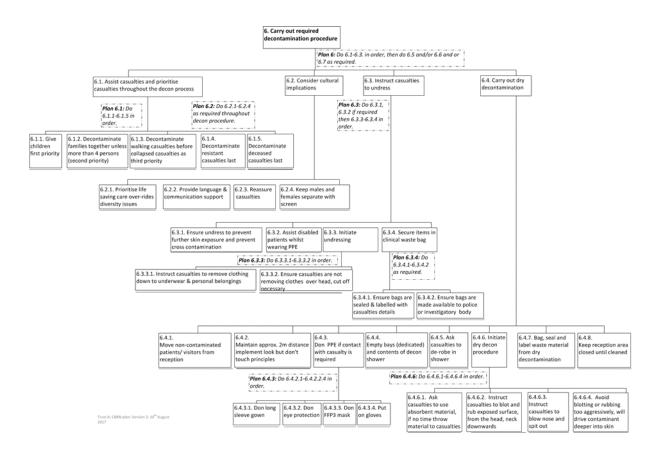


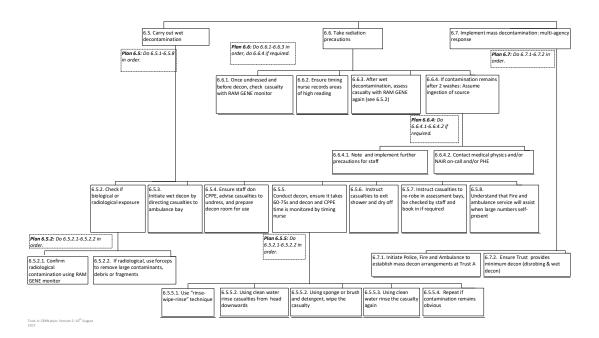
Trust A: CBRN plan: Version 2: 10<sup>th</sup> August 2017

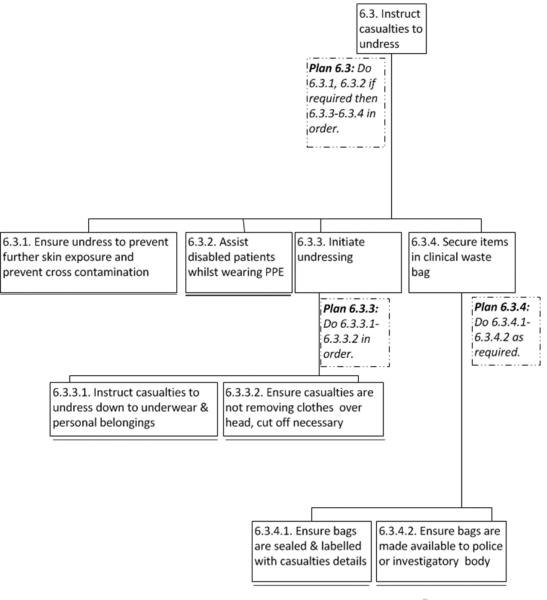




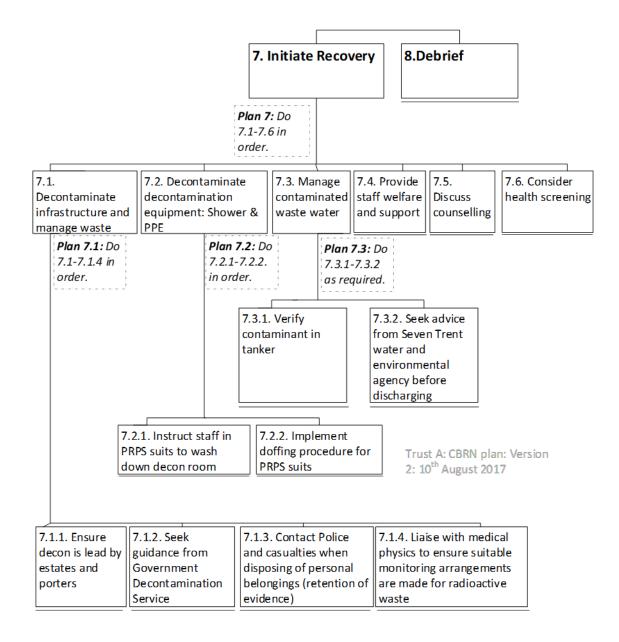


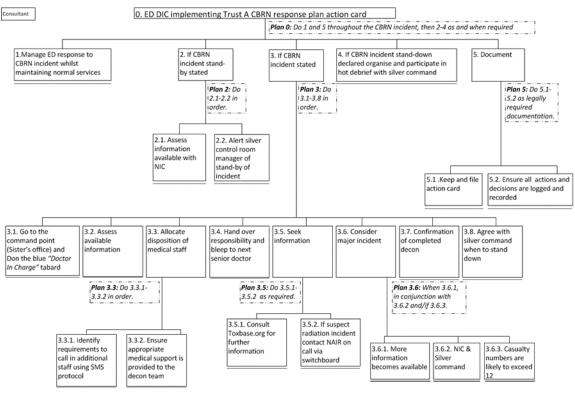






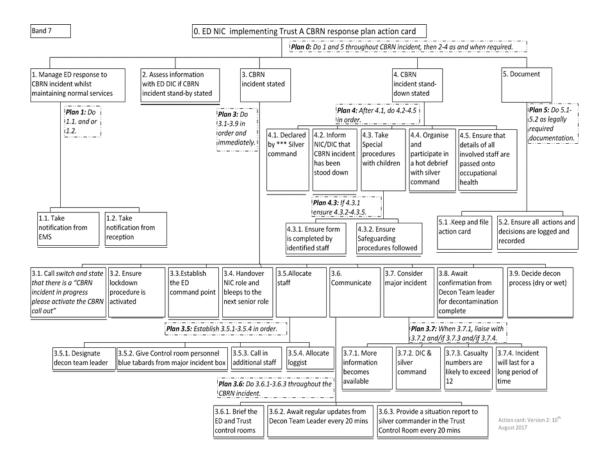
Trust A: CBRN plan: Version 2: 10<sup>th</sup> August 2017

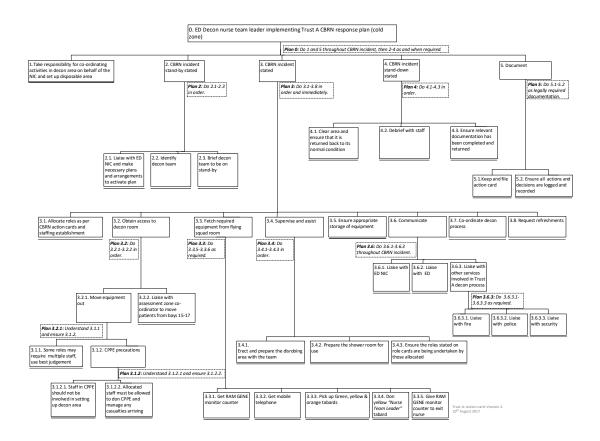


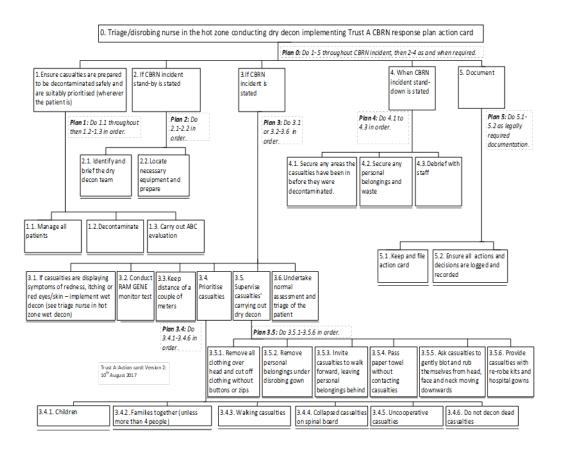


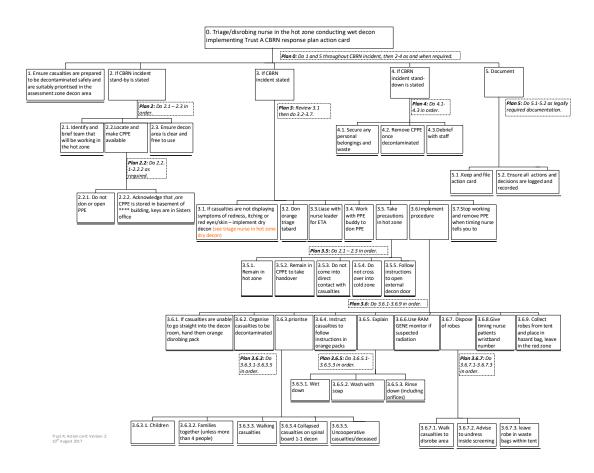
### Vol 2: Appendix 24. Trust A: Action Cards (V2)

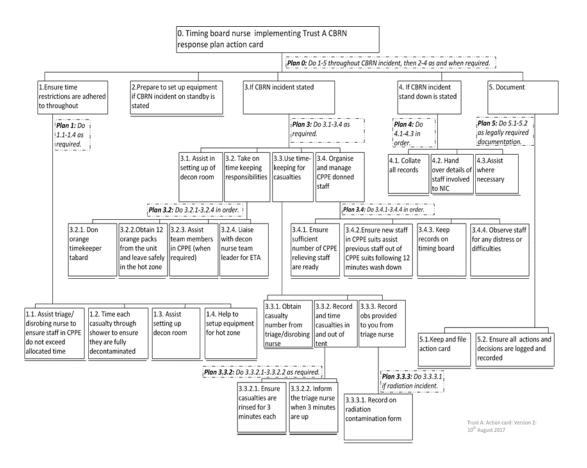
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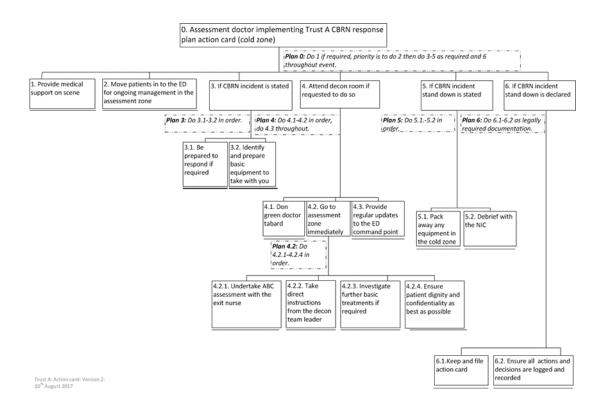


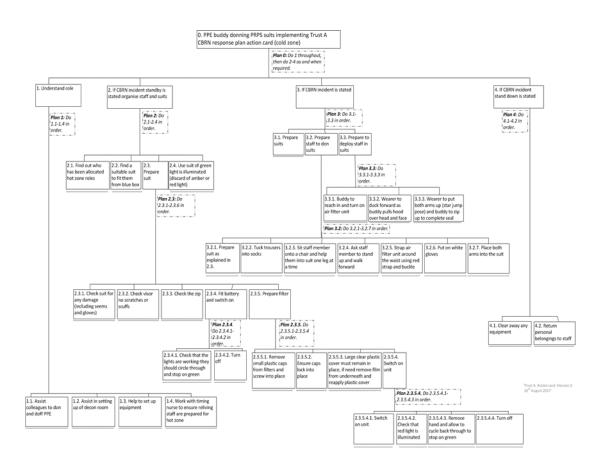


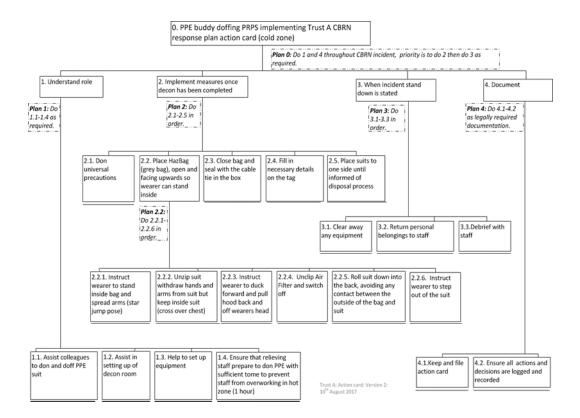






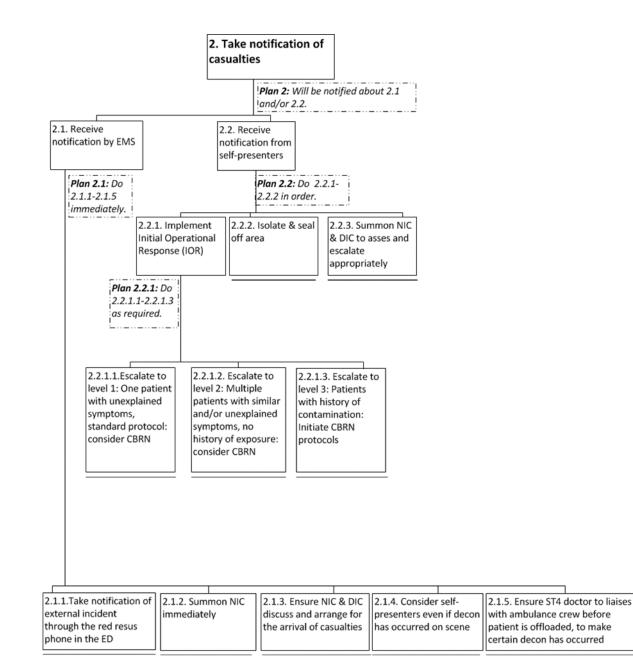






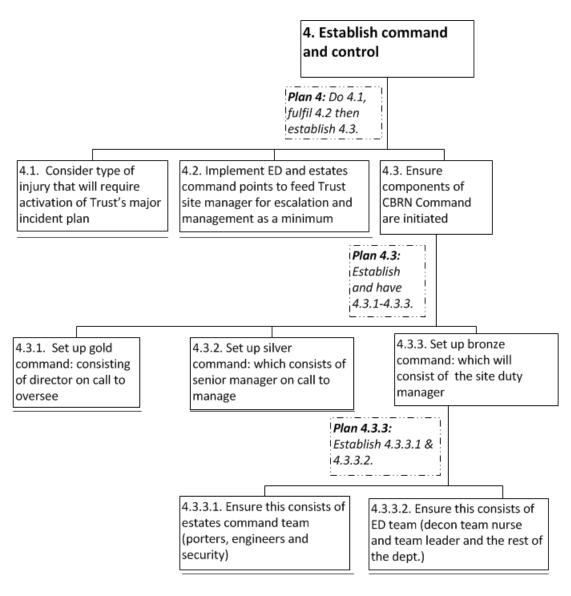
# Vol 2: Appendix 25. Trust A: General organisational responsibilities (V3)

					1. Understand rel	or and ro	spansibilities	-										
1. Understand roles and re									and an an an and a									
						l.	Pfan 1: Understand	the role of 1.1-1	1.7 and use i	is required.						_		
effective management of and manages CBRN material the management of casualties & plan for the Trust				ure police support I.5. Ensure Fire & Rescue Intervices provide specialist upport and advece to facilitate mass decontamination decontamination			int and advio	1.7. Ensure PHE provide ice to on appropriate management of contaminated casualities										
	Plan 1.1: Do 1.1.1 any order, to fulfil responsibilities.	1.1.5 in	Plan 1.2: Do 1.2.1-1 In order, to fulfil responsibilities.	.2.7	Plan 1.3: Do 1.3.1-1.3.6 in order, to fulfil iresponsibilities.	Final solar contraction and and and a	Plan 14: Do 1.4. 1.4.5 as required fulfil responsibilit	to		Plan 1.5: Do 1.5 (1.5.4 as require fulfil responsibil	d, to			1.6.5 05	5: Do 1.6.1- required, to ponsibilities.	Plan 1.7: Do 1.7.3 in orde fulfil responsibiliti	r, to	
					1.4.1. Undertake responsibilities defin in CBRN operational response plans	ned mai	1.5.1. Provide facilities in fine responsibilities operational resp operational resp operat	with defined in	by using t equipment st in tion of	g materials sp DIM It	uthorities ie respons	the deco self- pres	on of senters					
down			I.3.1. Implement lock form arrangements and form arrangements and				1.3.4. Notify contractors to deal with contaminated   the decon of trust & Em with contaminated   the decon of trust & Em			aise with 5 Environme or dischar	vith Severn nment charging		1.7.1. Establish mass decon facilities in line with responsibilities defined in operational response plans		ed in	1.7.2. Assist in identification of contaminants	1.7.3. Provide advice on the management of casualties	
									responsibil	blish mass ties in line with ties defined in I response plan	n of dec event	Notify the ED lared CBRN and potential resenters	1.6.3. Support decon o presente	f self-	1.6.4. Assist in clinical triage in hot zone	1.6.5. Make national stor equipment a prophylaxis	kpiles of	
	1.2.1. Isolate and contain contamir casualties & implement PPE	ated ass	ess and take D propriate		1.2.4. Seek professional help early regular	st room ly	1.2.6. Continue to provide normal services as far as reasonably practicable	1.2.7. Tr decon to emerger services	ncy	rust A: CBRN Plar <sup>of</sup> February 2019.		3:						
1.1.1.Establi command ar control		ivate multi- sponse	1.1.3. Plan for return to norm services		1.1.4. Provide information to staff, patients and visitors'		ek specialist d guidance											

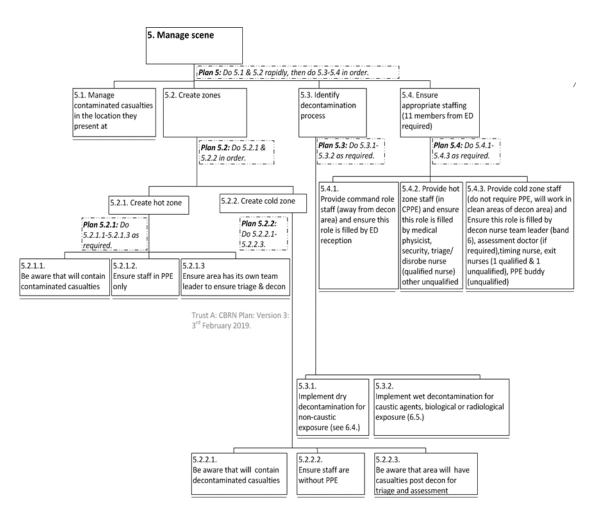


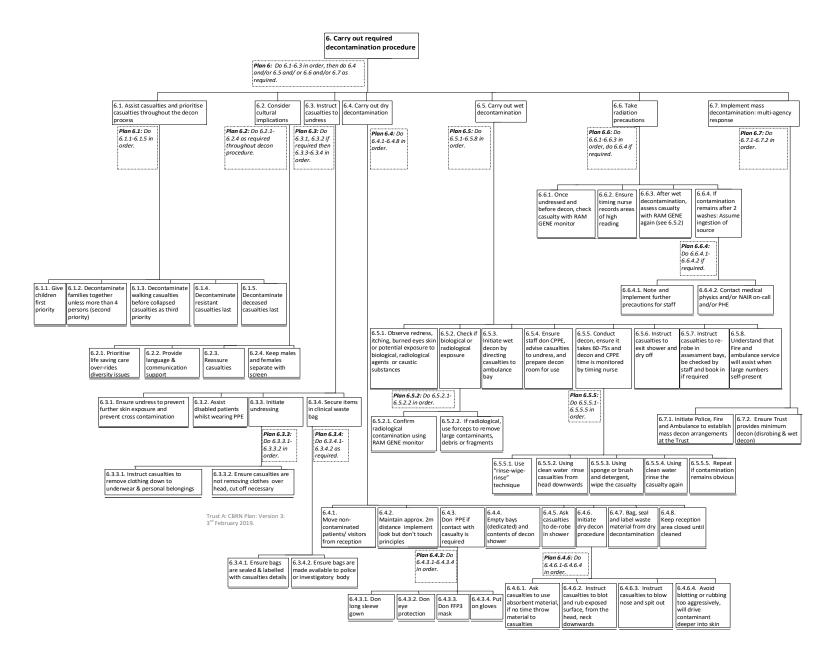
Trust A: CBRN Plan: Version 3: 3<sup>rd</sup> February 2019.

		3. Activate CBRN plan									
	make de		3.2. Update staff	3.3. Ensure potential lock down is decided b ED NIC & DIC	3.4. Initiate brief from the senior manager to the director on call	3.5. If multi-agency mass decon equipment required initiate contact via 999					
		Plan 3.1: Do 3.1.1-3.1.3 i order. Trust A: CE 3 <sup>rd</sup> Februa	a a a a a a a a a a a a a a a a a a a	:		<b>Plan 3.5:</b> Do 3.5.1-3.5.2 in order.					
3.1.1. Call switch board	in progress please activate	3.1.3. Ensure sw contact key peo staff (3.2)	ple to update	3.5.1. Decision and call to made by the duty manage senior manager on call		taminated self-presenters have spital we request activation of nation support"					

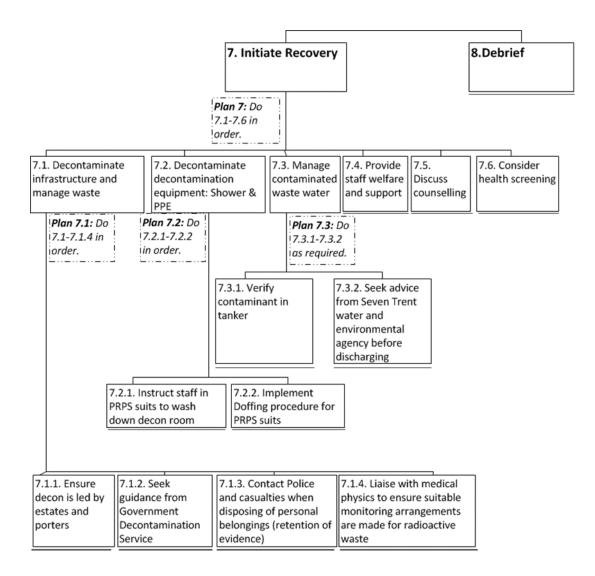


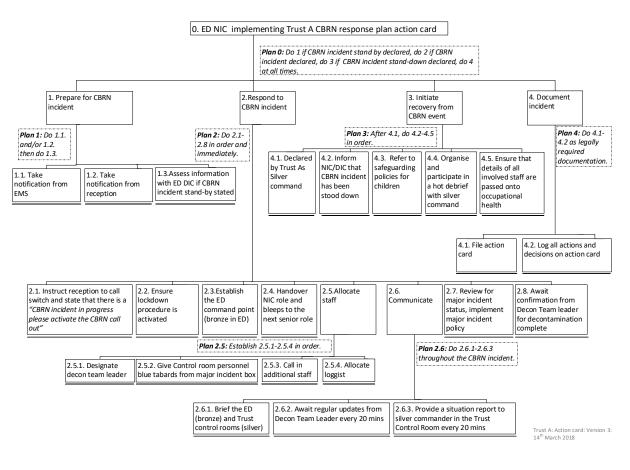
Trust A: CBRN Plan: Version 3: 3<sup>rd</sup> February 2019.





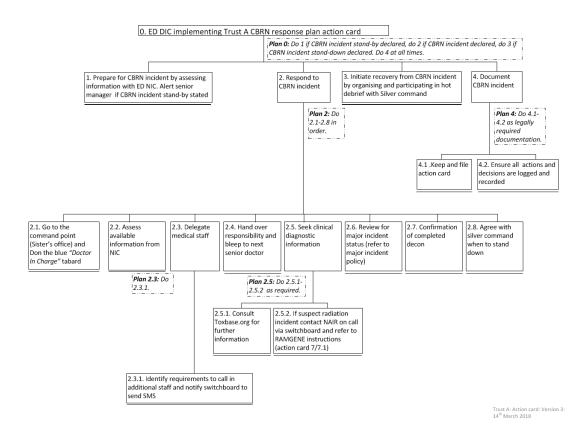
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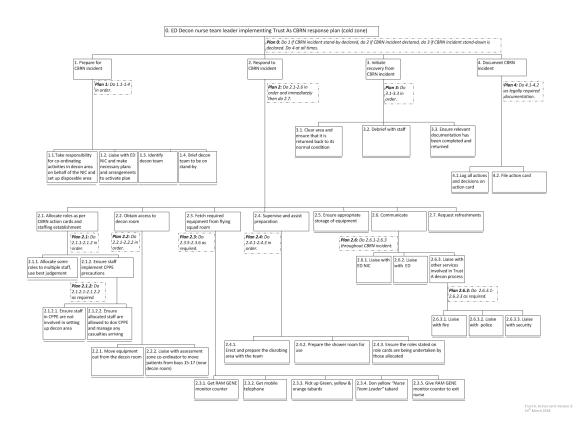


## Vol 2: Appendix 26. Trust A: Action cards (V3)

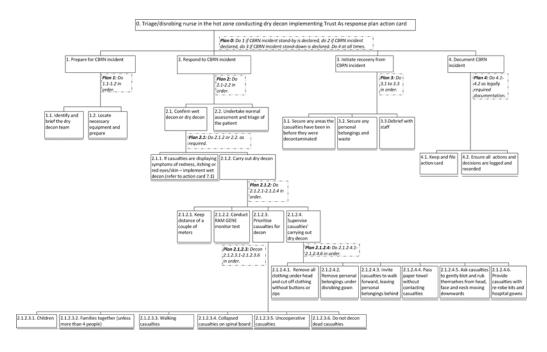
A26 1: ED NIC



A26 2: ED DIC

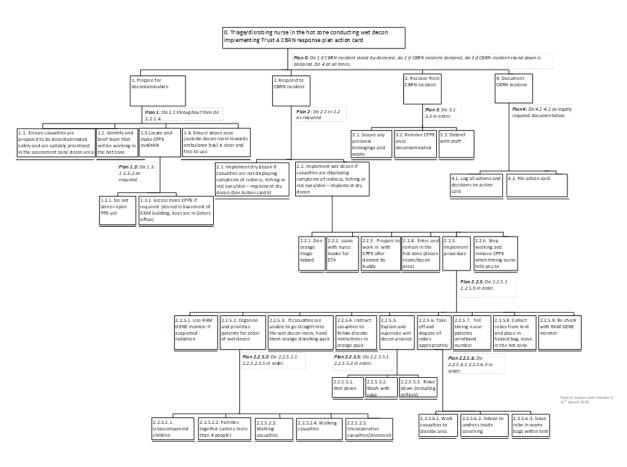


A26 3: Decontamination nurse team leader

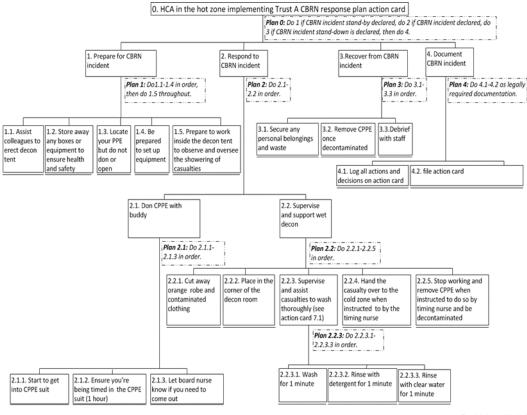


Trust A: Action card: Version 3 14<sup>th</sup> March 2018

#### A26 4: Triage/disrobing nurse (dry decontamination)

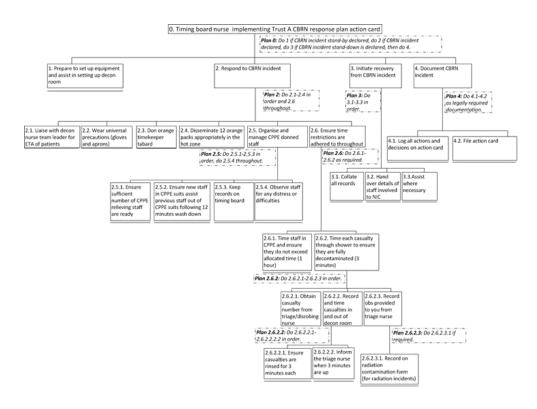


A26 5: Triage/decontamination nurse (wet decontamination)



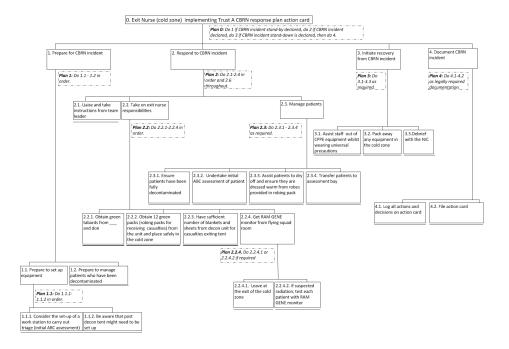
Trust A: Action card: Version 3: 14<sup>th</sup> March 2018





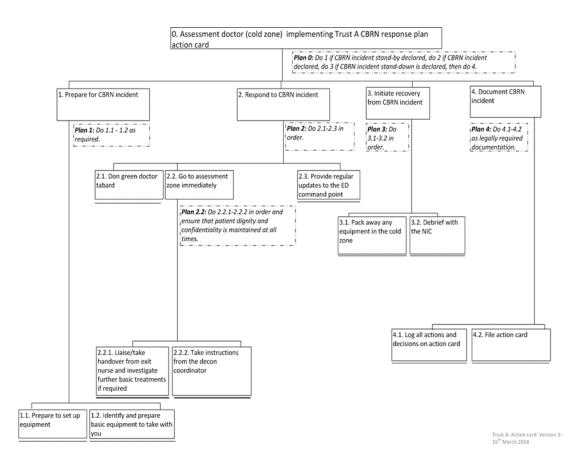
Trust A: Action card: Version 3: 4<sup>th</sup> April 2018

A26 7: Timing board nurse

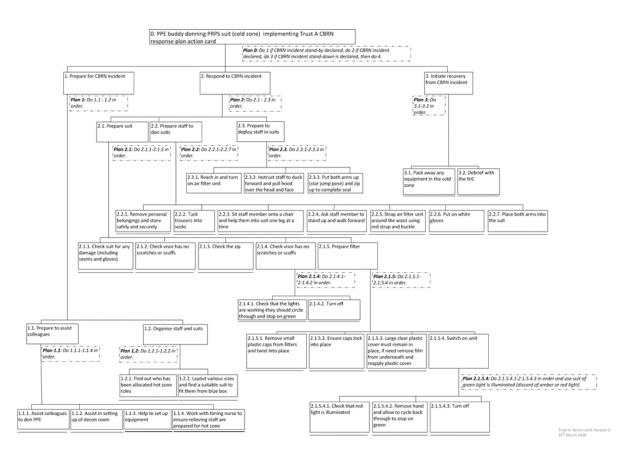


Trust A: Action card: Version 15<sup>th</sup> March 2018

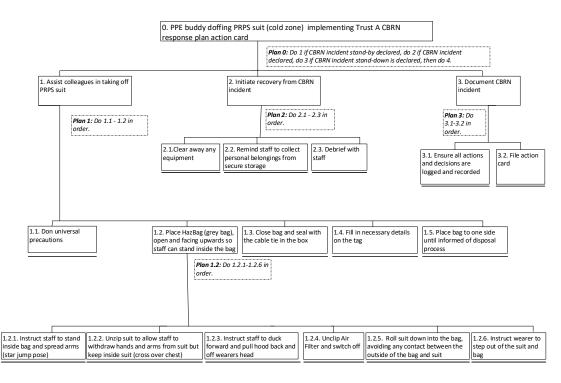




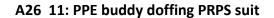
A26 9: Assessment doctor

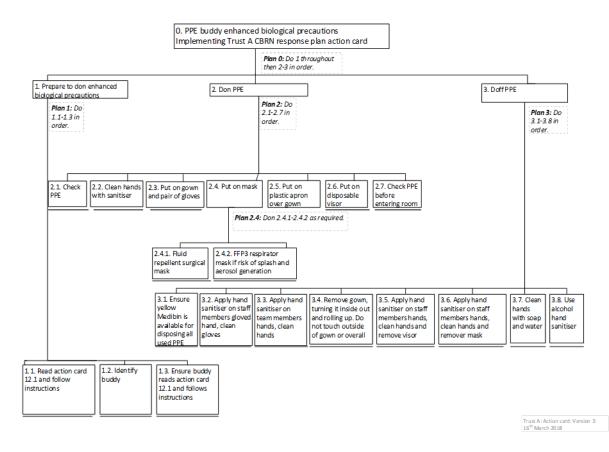


A26 10: PPE buddy donning Powered Respirator Suit (PRPS)

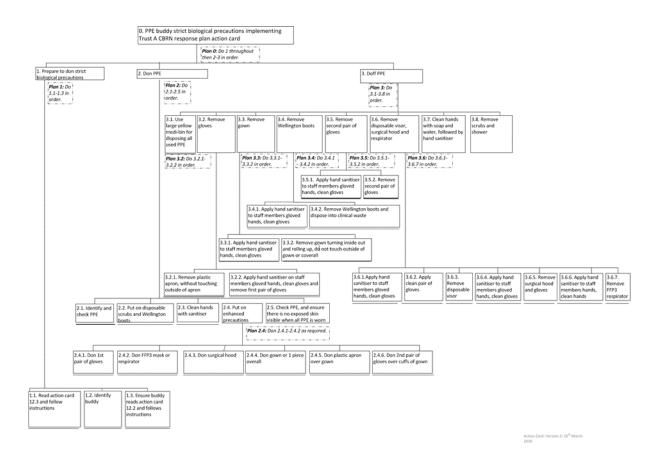


Trust A: Action card: Version 3: 16<sup>th</sup> March 2018

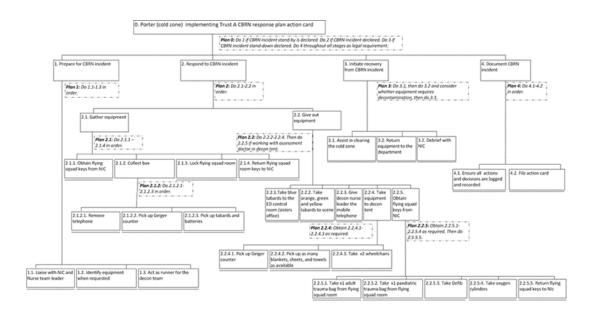




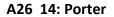
A26 12: PPE buddy (enhanced biological precautions)

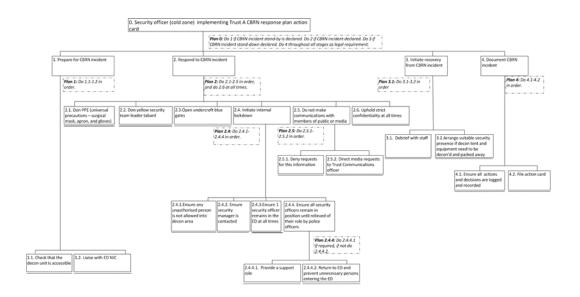


A26 13: PPE buddy strict biological precautions



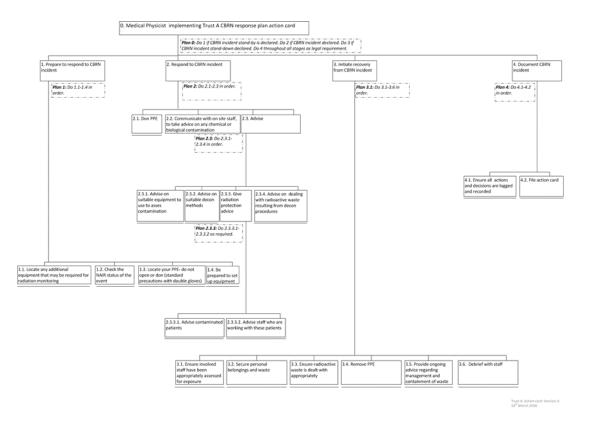
'Trant Ac Action quad, Version 3: 35<sup>10</sup> March 2018





Trust A: Action card: Version 3: 29<sup>th</sup> March 2028

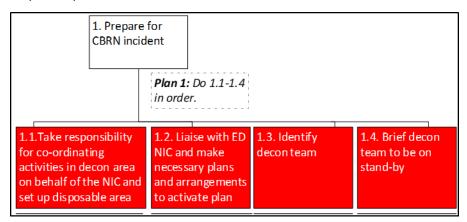




A26 16: Medical physicist

# Vol 2: Appendix 27. Trust A: WAI Analysis of HTAs

**2. Decontamination** was vital in Trust A GORs. Specific action cards were allocated to the decontamination process (e.g. decontamination team leader), highlighting decontamination as a part of the first receiver role when responding to a CBRN event at Trust A (A27 1):

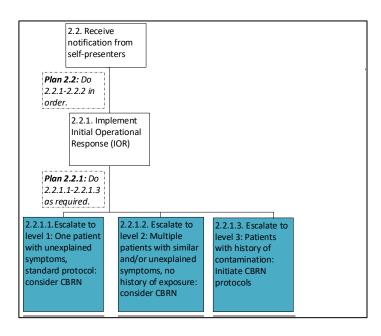


A27 1: Example of decontamination theme

**3. Clinical assessment** determines the type of treatment or care that would best suit the presenting conditions. This was included on the General Organisational Responsibilities through subordinate tasks such as: *"Be aware that the area will have casualties post decon for triage and assessment"* (subordinate task 5.2.2.3.).

**4. Isolate and contain** were core to the General Organisational Responsibilities and first receiver action cards at Trust A.

**5. Escalation** in the General Organisational Responsibilities was the organisational escalation (escalating the incident to an external organisation, or escalating the status of the incident within the department) as shown in A27 2 (p. 68).



# A27 2: Example of organisational escalation theme on general organisational responsibilities (Trust A)

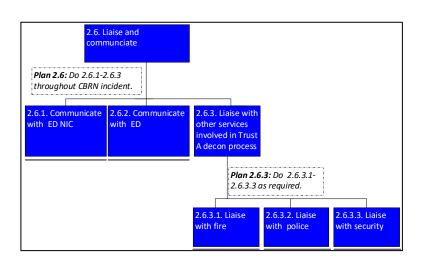
**6.** To **document** was mentioned once on Trust As General Organisational Responsibilities HTA, when implementing radiation precautions: *"Ensure timing nurse records areas of high reading"* (subordinate task 6.6.2). However, documentation was included as a legal requirement in all action cards.

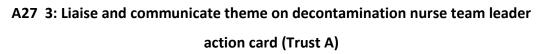
**7.** Guidance was a means of gaining practical information by carrying out subordinate tasks such as: *"Seek guidance from Government Decontamination Service"* (subordinate task 7.1.2).

**8. Management** was clearly demonstrated as a means of taking control of the CBRN event effectively. This was illustrated through superordinate tasks such as *"3. Activate CBRN plan"*.

**9.** To **liaise** was to contact external agencies and organisations by carrying out subordinate tasks such as *"Contact medical physics and/or NAIR\* on-call and/or PHE"* (subordinate task 6.6.4.2.). To **communicate** was to make contact and exchange information with internal colleagues, patients, and specialities. Such differentiation was also evident on first receiver action cards as shown in A27 3 (p. 69).

\* National Arrangements for Incidents involving Radioactivity

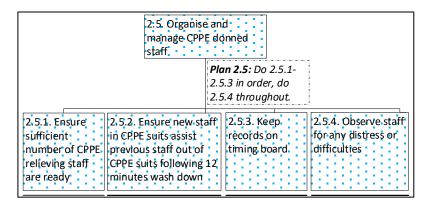




**10.** To **detect/identify** agent in the WAI HTA of Trust A's CBRN plan, was associated with external agencies such as the fire services and PHE assisting in identifying the contaminants.

**11.** The roles and actions required from **teams** in the General Organisational Responsibilities were clear, for example establishing the Command and Control structure of the CBRN response.

**12.** The theme of **manage staff** emerged in the HTA representation of the timing board action card as illustrated in A27 4:



A27 4: Example of manage staff theme on timing board nurse action card (Trust

**13.** Taking **notification of casualties** initiated the practical actions of the CBRN plan as shown in A27 5:

	2. Take notification of casualties					
	<b>Plan 2:</b> Wil notified ab 2.1 and/or					
2.1. Receive notification by EMS	2.2. Receive notification from self-presenters					

### A27 5: Example of notification of casualties within General Organisational Responsibilities (Trust A)

#### Action card specific themes (validation)

**14.** The theme of **recognising event occurring** was associated with acknowledging that a CBRN event was occurring by carrying out subordinate tasks such as *"Assess available information with NIC"* (subordinate task 2.2.).

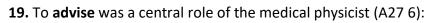
**15.** To **manage casualties** was illustrated on the action card HTA representation of the timing board nurse, through general actions such as recording observations.

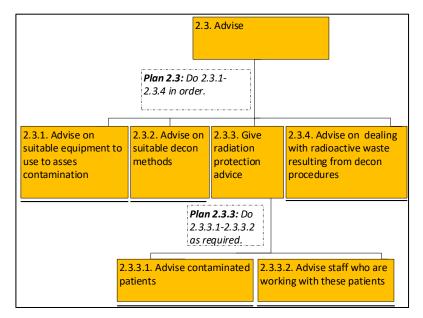
**16**. To **check** was the implementation of safety measures that were carried out by first receivers such as the PPE buddy donning PRPS, to ensure that equipment was safe to use.

**17.** The CBRN plan outlined that security officers were to **provide access** to decontamination facilities and staff only entrances, to the ED.

**18.** Security officers were expected to **secure** the ED by *"Initiating internal lockdown"* (subordinate task 2.4.). Security officers were further expected to **liaise/support** by

carrying out subordinate tasks such as *"Provide a support role"* (subordinate task 2.4.4.1.) and *"Debrief with staff"* (subordinate task 3.1.).





#### A27 6: Illustration of the advice theme on Trust A's medical physicist action card

**20.** To **access relevant equipment** during a CBRN event was an action expected to be fulfilled by receptionists.

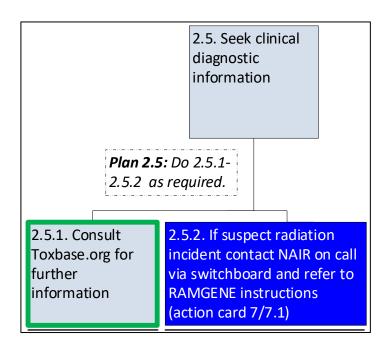
**21.** To **protect** was a part of the NIC's role according to Trust A's action cards. This would be done by carrying out actions such as *"Ensure details of all involved staff are passed onto occupational health"* (subordinate task 4.5).

**22**.Security officers at Trust A were expected to **assist ED** through tasks such as *"Provide a support role"*.

**23. Treat and provide patient care** were a part of first receiver action cards. For example, by the exit nurse.

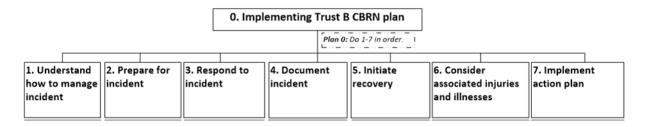
24. To time was a role allocated to the timing board nurse at Trust A.

**25.** Trust A Doctors in Charge (DIC) were expected to **diagnose** the presenting condition as illustrated in A27 7 (p. 72).

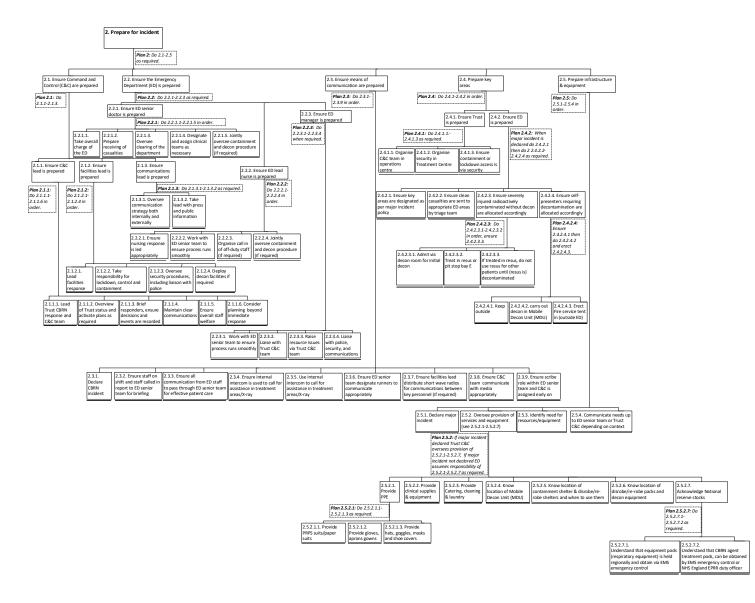


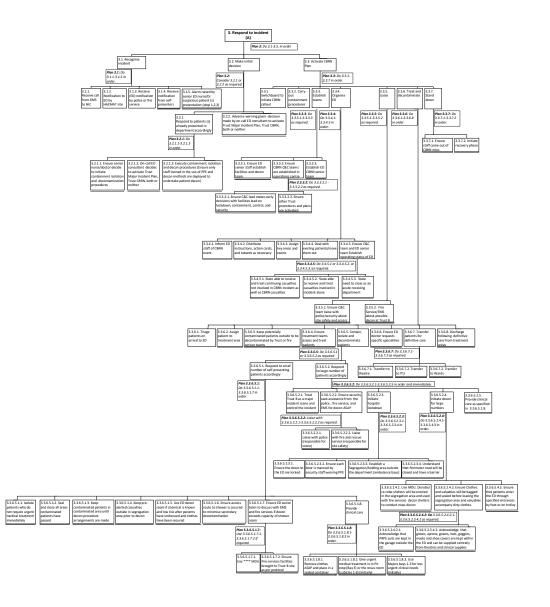
A27 7: HTA representation of DIC diagnosing presenting condition (Trust A)

# Vol 2: Appendix 28. Trust B: General Organisational responsibilities (V1)

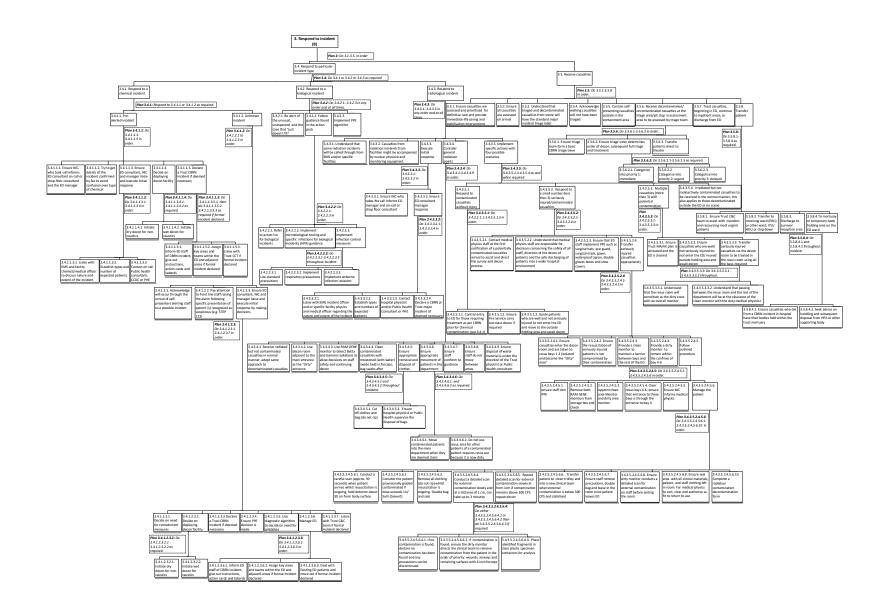


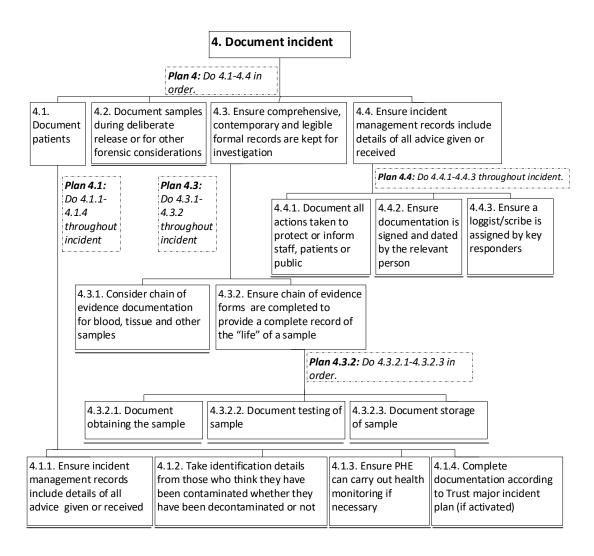
		nderstar age inci	id how to dent											
			Plan 1: Do 1.1 and when requ	-1.5 as nired.										
1.1. Implement incident management	1.2. Und roles and responsi of Acute	d bilities		of Emergency is to implement	1.4. Under potential incidents can occur	100000	1.5. Understa strategic objectives	and						
Plan 1.1: 0		Plan 1.2: 1.2.5 in a when rea			any	1.4: Be prep r combinat -1.4.4.		<b>n 1.5:</b> Do .1-1.5.6 in ler.						
						save	1. Prioritise to e, preserve and tect life	econom	I Minimise so nic and mental imp	a	1.5.3. Inform advise public	1.5.4. Assist in early return to normality (within reason)	1.5.5. Minimise risk to staff	1.5.6. Evaluate the response and identify lessons learned
			1.4.1 Anticipal Chemical ager incident			exposure to	ipate radioactive o a r large number of		1.4.4. Anti who fear t contamina	they have	influx of publi been	c I		
	_									PI	an 1.4.4: Do 1. 4.4.2. in order.			
v	1.2.1. Liaise with ambula Service	ance on	2.2. Supply site medical ident officer	1.2.3. Decontam casualties who a without an amb	rrive Englar	iaise with f	NHS 1.2.5. Pro aid	ovide mut	1.	4.4.1. Car ut risk sessment	furth	2. Provide er care		
		lan 1.2.1: ihen requi	Do 1.2.1.1-1.2. red.	4.2 as and				_						
1.2.1.1. Determin of require resources	e level ca	.2.1.3. Rec asualties f ssessment reatment	or further	1.2.3.1. Seek assistance from and police servic required	fire with o	. Co-ordina ther acute 1	rusts of addition	Seek provis onal suppo care/NHS centres)	ort					
1.1.1. Understar	nd 1.1.2		1.1.3. Rapid	ly identify 1	.1.4. Understan	the	1.1.5. Achieve a	_						
hazards and risk associated with incident	ks Imple	ement tive contro	indicators, r	medical signs to the test of the test of the test of the test of test of the test of t	o implement eff nd life saving m	rement a	rapid, co-ordinate and organised response	ed						



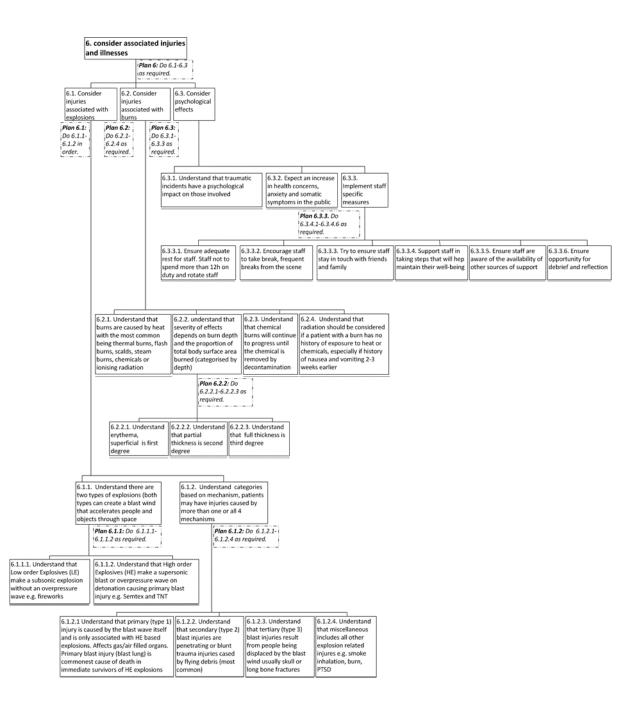


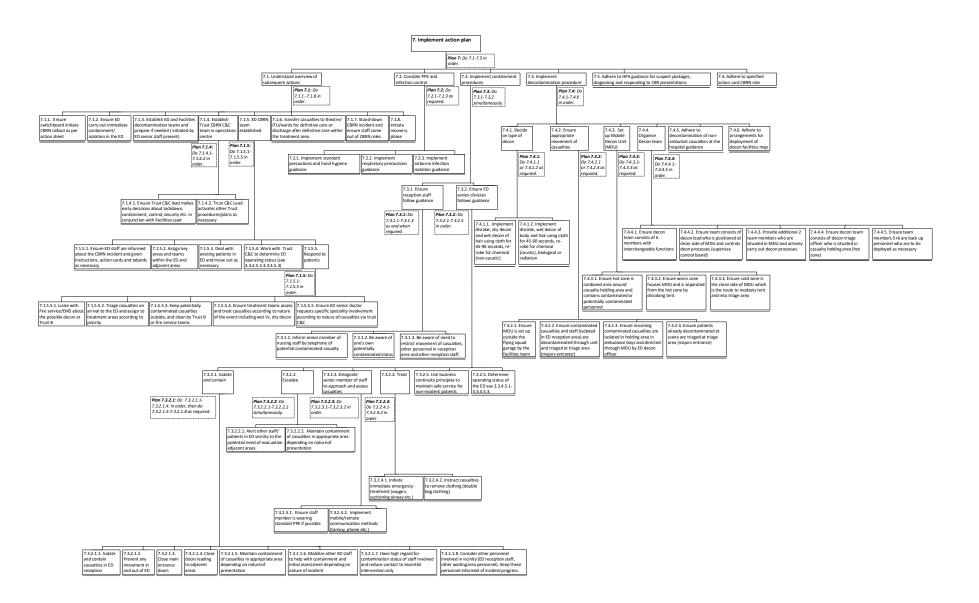
Volume 2

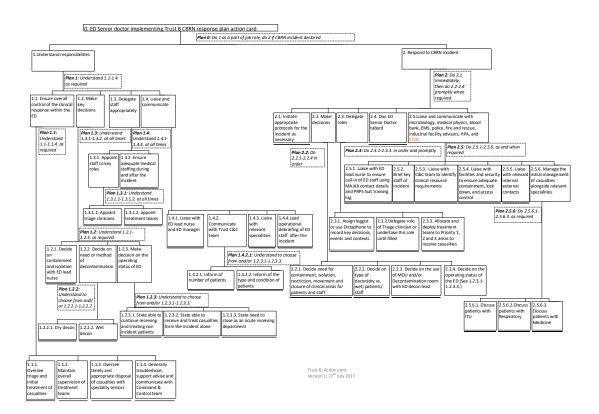




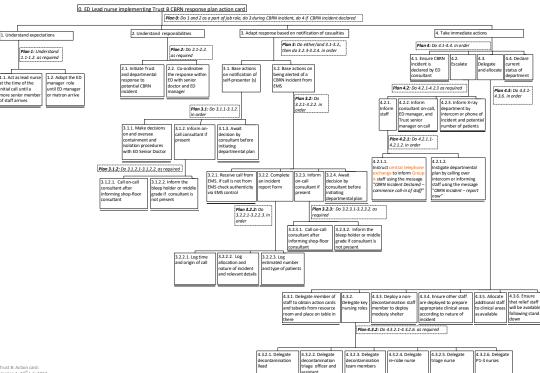
				5. Initiate re	covery
			Plan 5: D	o 5.1-5.3 in order.	
			5.1. Initiate esolution	5.2. Initiate reflection	5.3. Initiate audit
		Plan Do 5 5.1.3 orde	1.1- in	Plan 5.2: Do 5.2.1- 5.2.5 in order.	Plan 5.3: Do 5.3.1- 5.3.4 in order.
command a phased si declared C	tand down of clinic BRN incident admi	Execute resolution pl ring staffing levels, ong al need, number of pa tted, ITU occupancy ar oment levels	oing team a tients contin	Ensure ED senior and CBRN staff ue to work to ıntil otherwise d	
5.2.1. Ensure staff debriefing is co-ordinated and undertaken by ED senior team (and Trust CCT if deal red incident)	5.2.2. Ensure individual or group debriefing sessions address operational and psychological aspects	5.2.3. Make sure senior staff briefly speak to all staff leaving shift during or after an incident	5.2.4. Arrar subsequent informal de over the fo week	t is available briefing confidentia	re counselling e and can be ally arranged uest of any f staff
	5.3.1. Ensure for the overall Trust carried out durin following any inc	response is give give the weeks	2. Focus on cai n and efficacy Frust and artmental plar	of communication between	



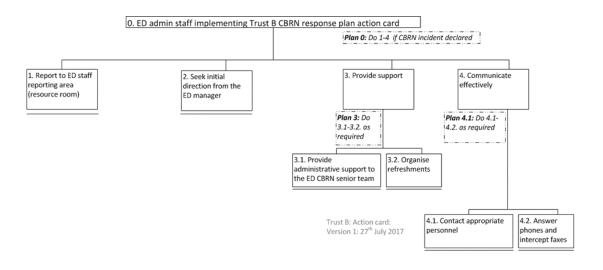


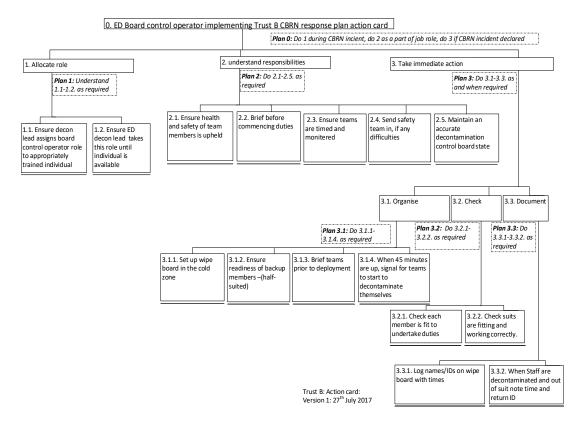


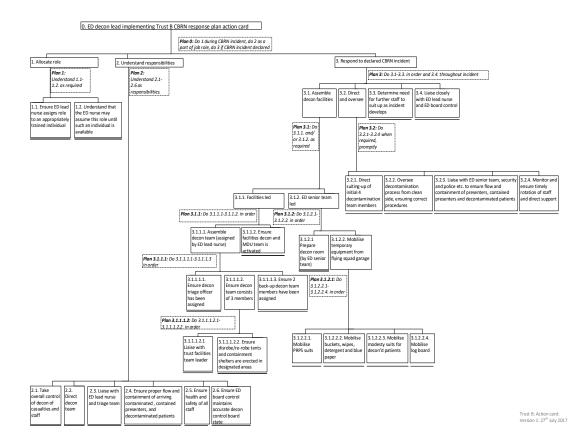
#### Vol 2: Appendix 29. Trust B: Action card HTAs (V1)



Trust B: Action card: Version 1: 27<sup>th</sup> July 2017



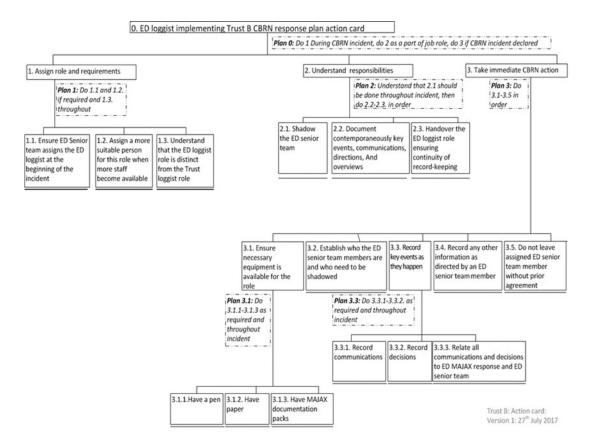


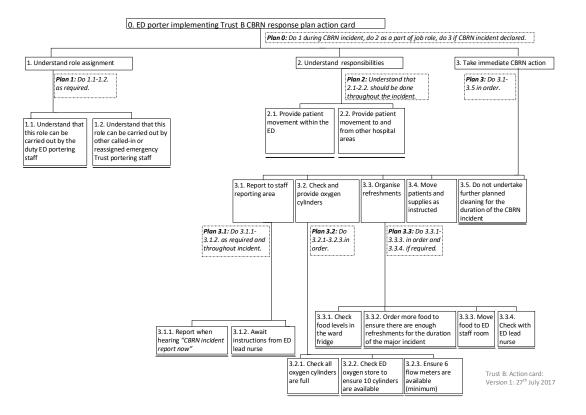


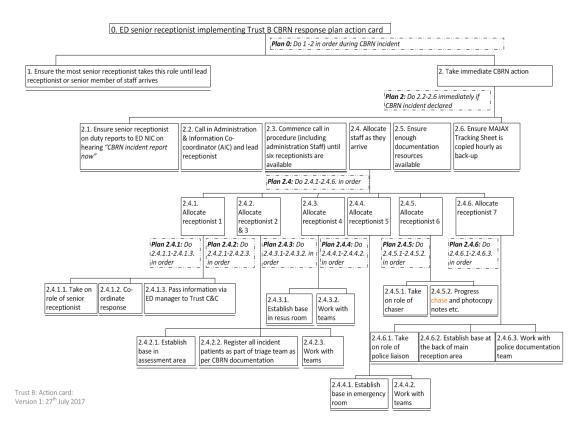
Assign role and requirements	2. Understand	Plan 0: Do 1 during CB	IRN event, do 2	as a part of job role, d		nt de clared
Plan 1: Understand 1.1-1.2. in		Plan 2: Understand 2.2 must be done in 2.3 throughout inc	order and		3.5. in	: Do 3.1 order and throughout
I. Ensure ED nurse signs the role to an propriately trained dividual	2.1. Conduct initial assessment of contaminated casualties	2.2. Assign the order of decontamination of casualties and staff	2.3. Liaise an direction fror decon lead			
		mber of potentially ord	. Prioritise Jer for contamination	3.4. Ensure monitoring and reassurance of contaminated casualties and staff	3.5. Police and escort arriving casualties to holding area	3.6.Provide support other decontaminat team members
	·		<b>Plan 3.</b> 3.3.1-3 order			
		3.3.1. Decon non-walking, symptomatic	3.3.2. Decon walking, symptomatic	walking, not	3.3.4. Decon walking, not symptomatic	

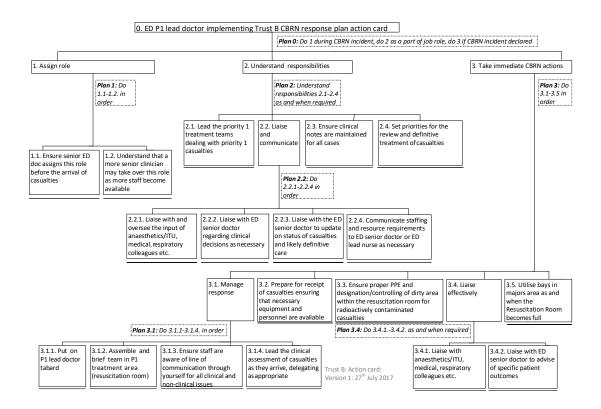
Trust B: Action card: Version 1: 27<sup>th</sup> July 2017

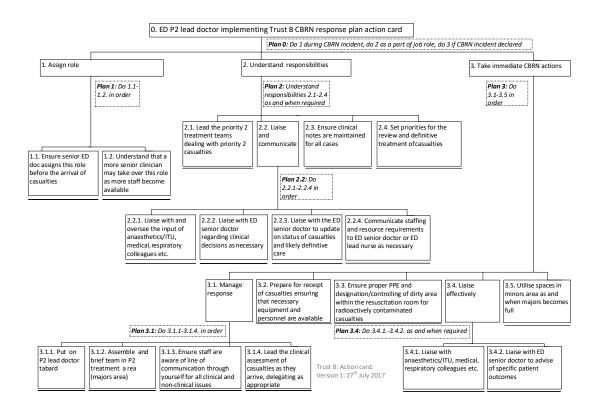
#### Razak, S

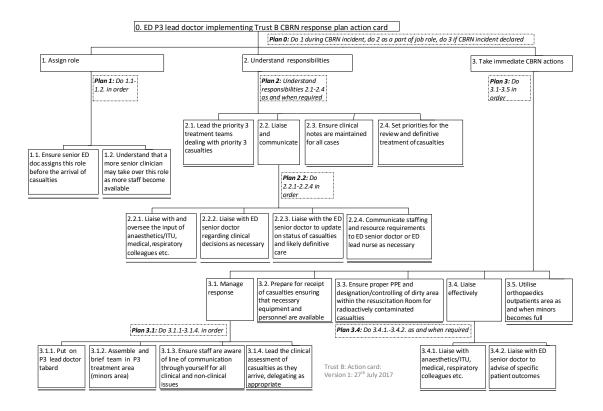


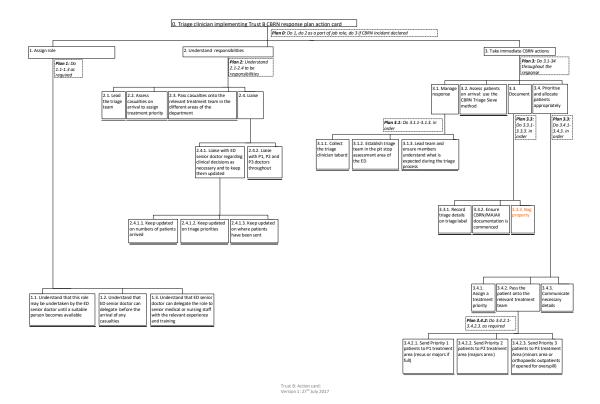




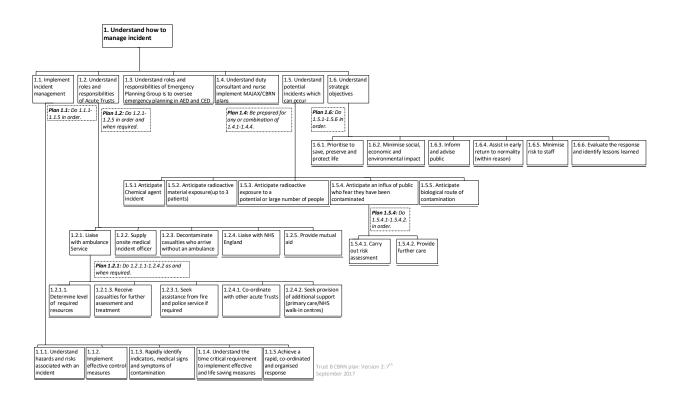


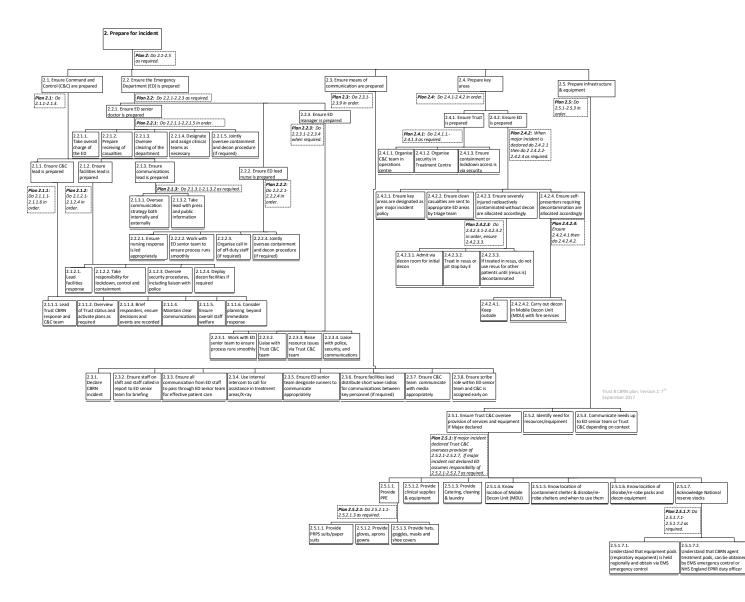


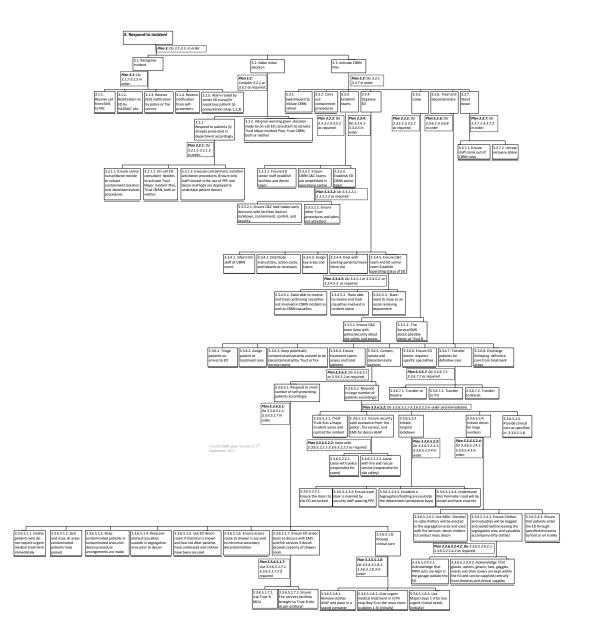


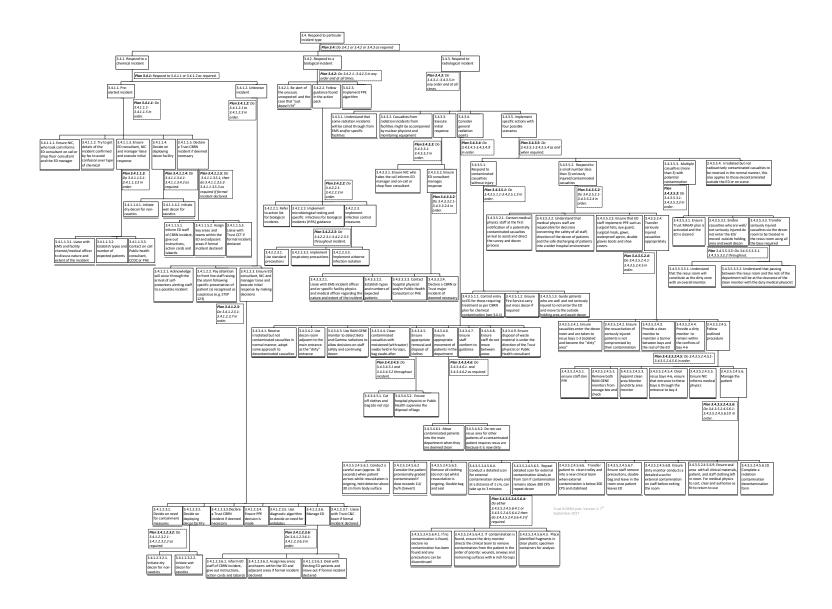


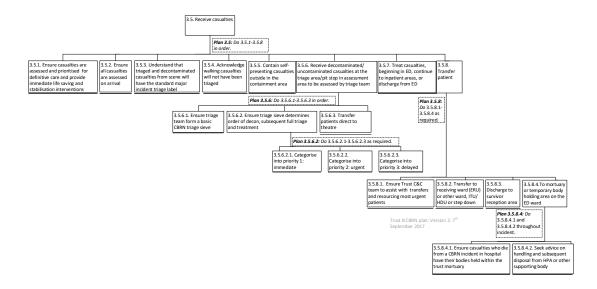
## Vol 2: Appendix 30. Trust B: General organisational responsibilities (V2)

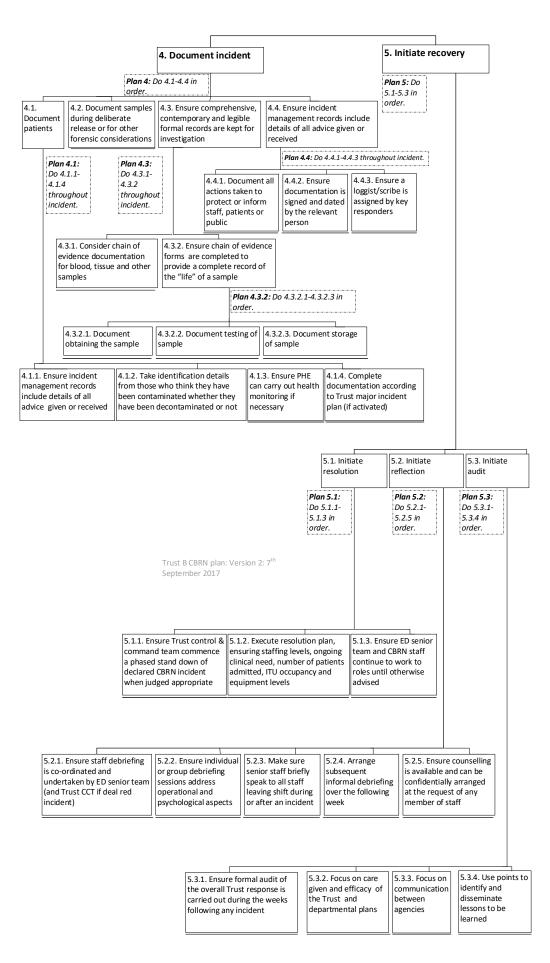


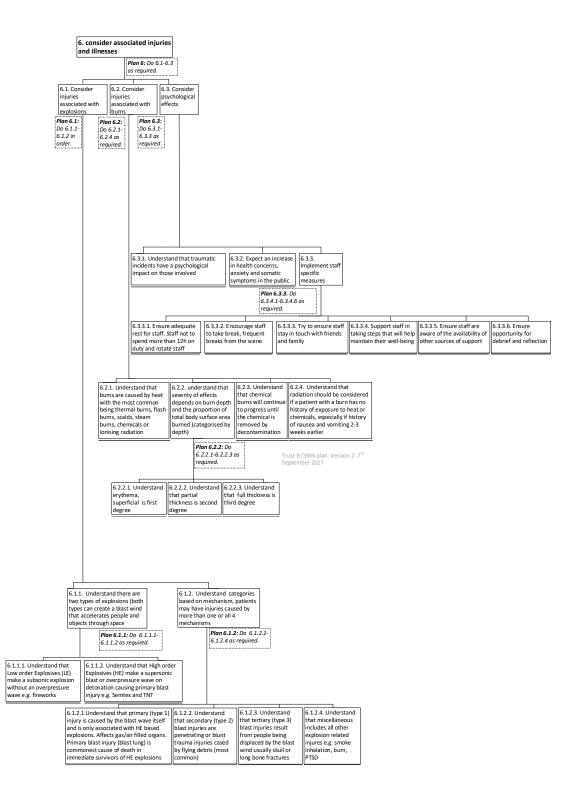


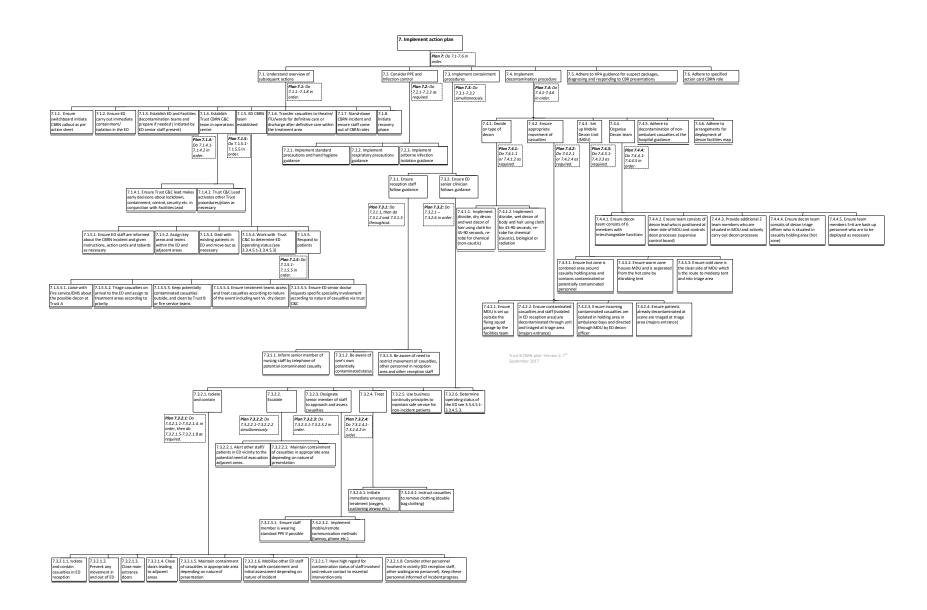


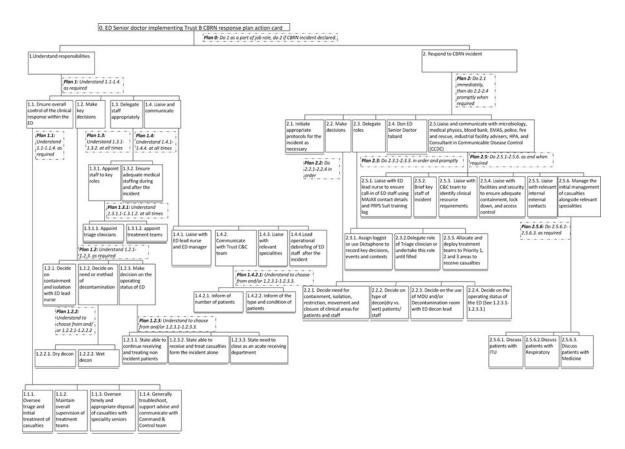




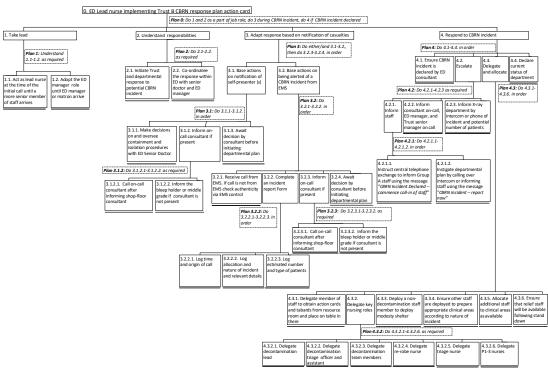




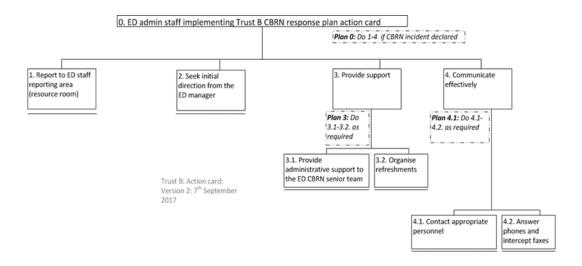


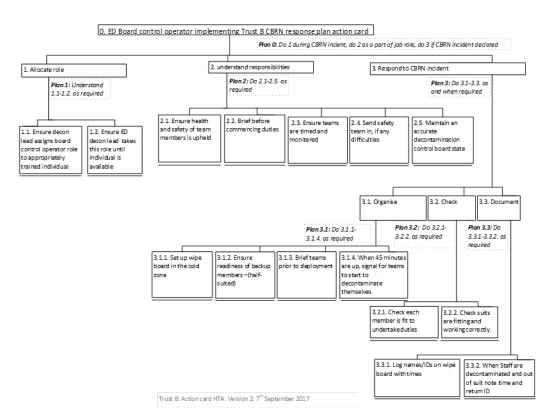


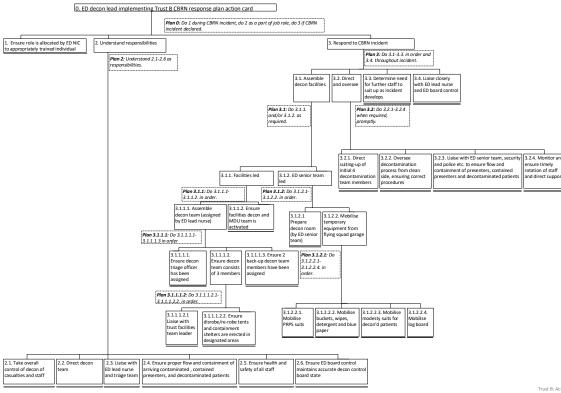
#### Vol 2: Appendix 31. Trust B: Action card HTAs (V2)



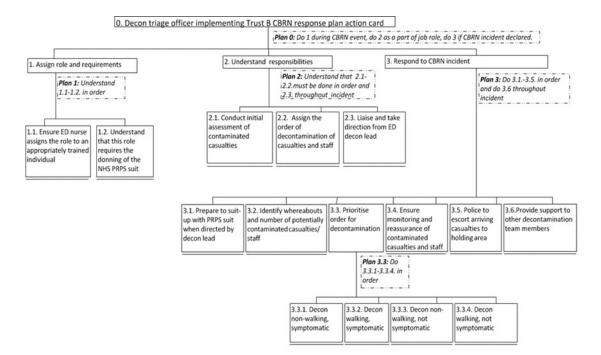
Trust B: Action card: Version 2: 7th September 2017



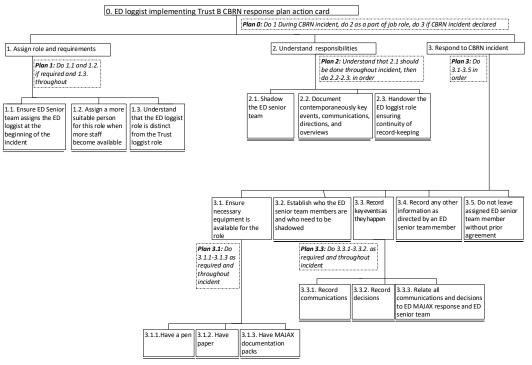




Trust B: Action card Version 2: 7<sup>th</sup> September 2017

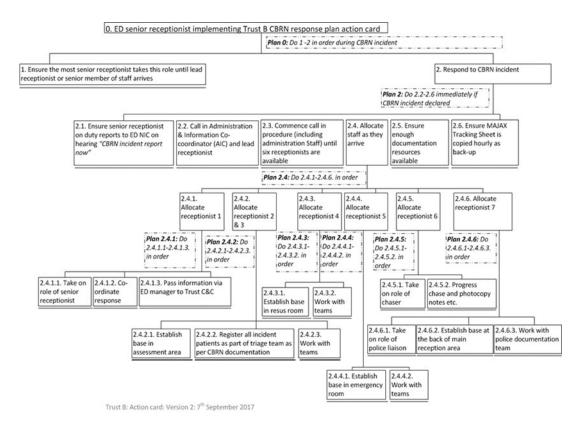


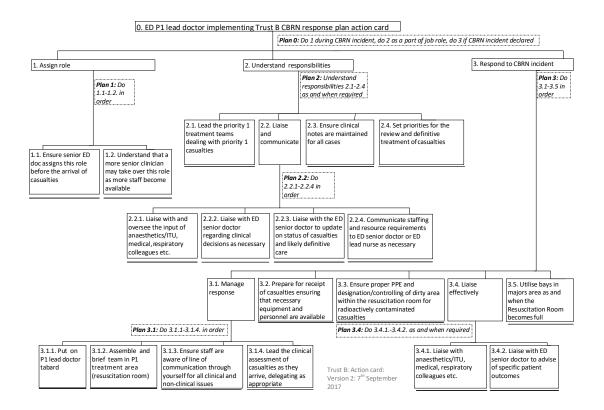
Trust B: Action card: Version 2: 7th September 2017

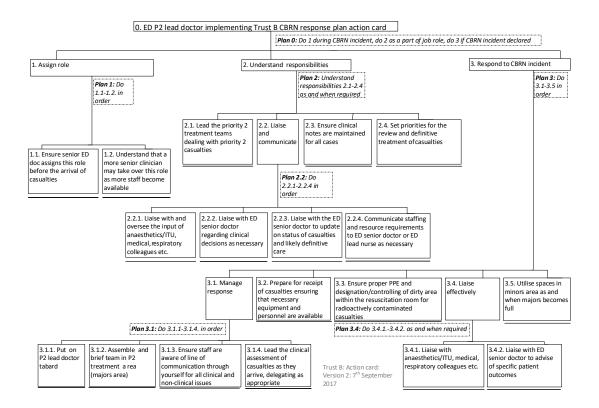


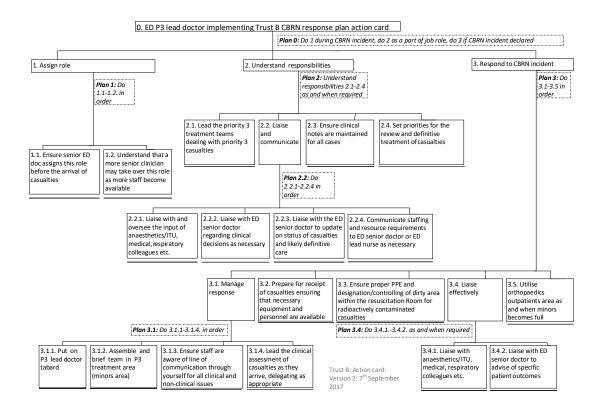
Trust B: Action card: Version 2: 7<sup>th</sup> September 2017

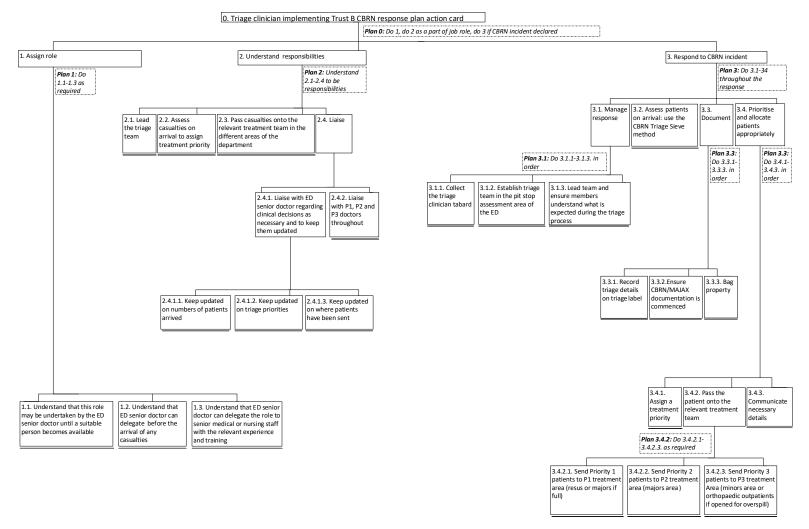
0. ED porter implementin	g Trust B CBRN respons	se plan action	n card	]	
	Plan 0: D	o 1 during CBR	N incident, do 2	as a part of job role, do	3 if CBRN incident declared
. Understand role assignment		2. Understand	d responsibilitie	is	3. Respond to CBRN incident
Plan 1: Do 1.1- 1.2. as required				erstand that 2.1-2.2. one throughout the	Plan 3: Do 3.1-3.5 in order
. Understand that role can be ried out by the y ED portering ff Tust portering staff		ide patient nt within the	2.2. Provide p movement to from other ho areas	and	
	3.1. Report to staff reporting area	3.2. Check an provide oxyge cylinders		I 3.4. Move patients and supplies as instructed	3.5. Do not undertake further planned cleaning for the duration of the CBRN incident
	Plan 3.1: Do 3.1.1-3.1.2 as required and throughout incident	Plan 3.2 3.2.1-3.2 order		Plan 3.2: Do 3.3.1- 3.3.3. in order and 3.3.4. if required	
3.1.1. Report when hearing "CBRN incid report now"	3.1.2. Await instructions from ED lead nurse	3.3.1.0 food le the wa fridge	evels in ensur rd refre	. Order more food to re there are enough shments for the duratio e major incident	3.3.3. Move food to ED staff room urse
Trust B: Action card: Version 2: 7 <sup>th</sup> September	0	.2.1. Check all xygen cylinders re full	3.2.2. Check I oxygen store ensure 10 cyl are available	to flow meters an	







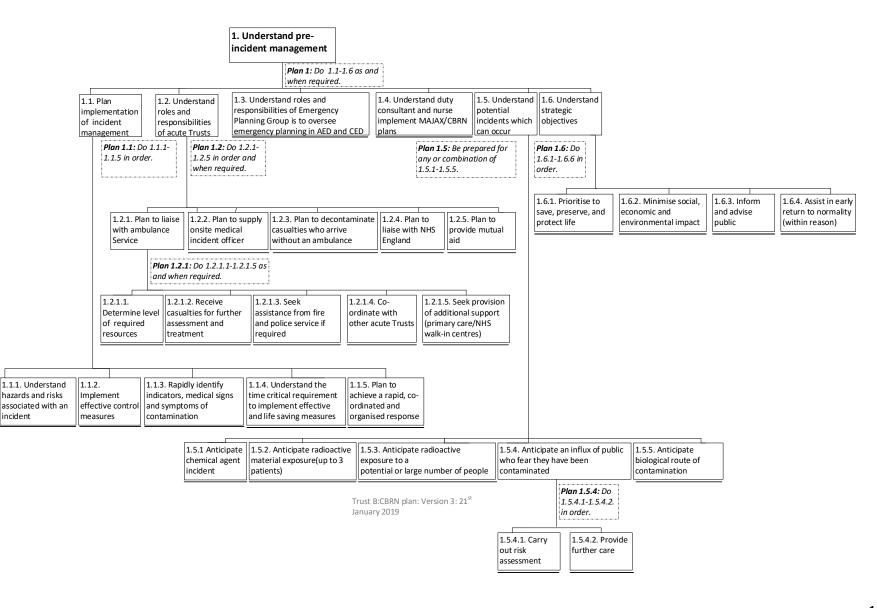


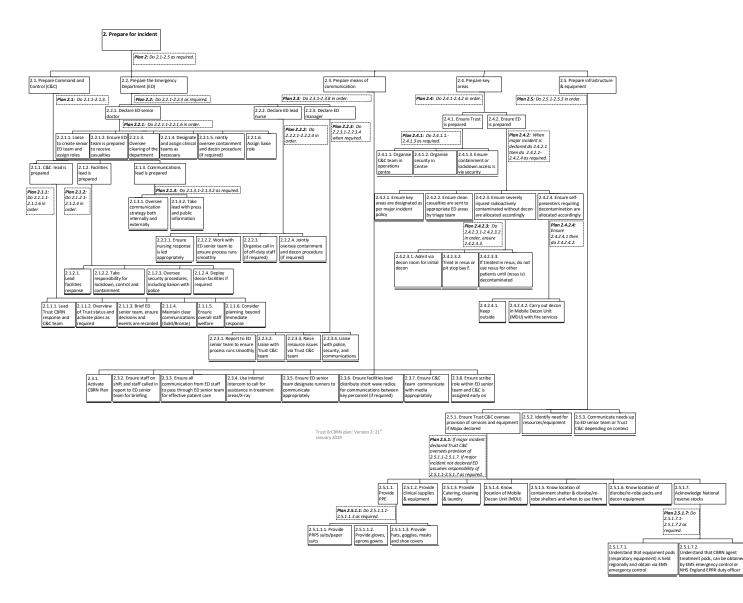


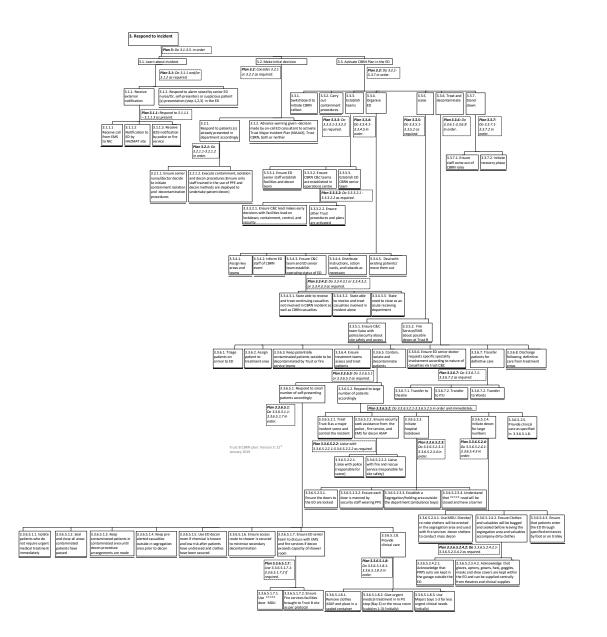
Trust B: Action card: Version 2: 7<sup>th</sup> September 2017

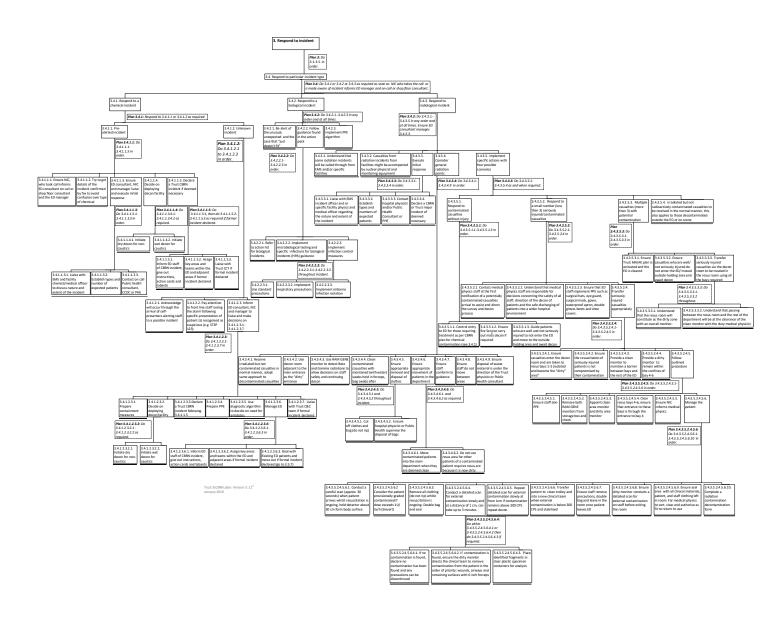
# Vol 2: Appendix 32. Trust B: General organisational responsibilities (V3)

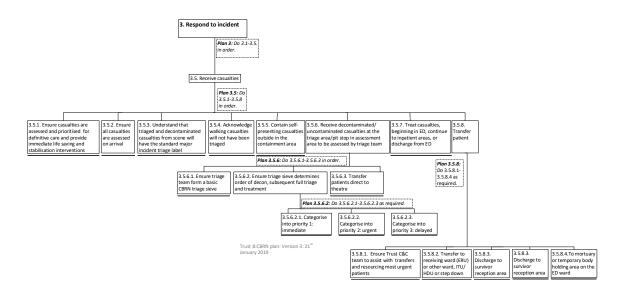
		0. Ir	nplementing 1	n				
	Plan 0: Do 1-6 in order, ensure 5 is done throughout incident.							
1. Understand pre-incident management	2. Prepa inciden		3. Respond to incident	4. Imp action	lement pack	5. Doc incide		6. Initiate recovery

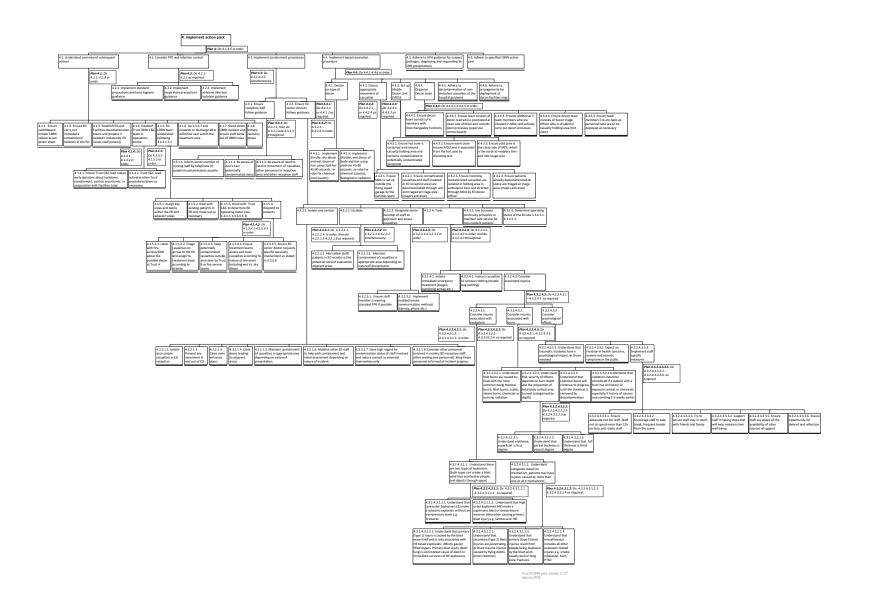


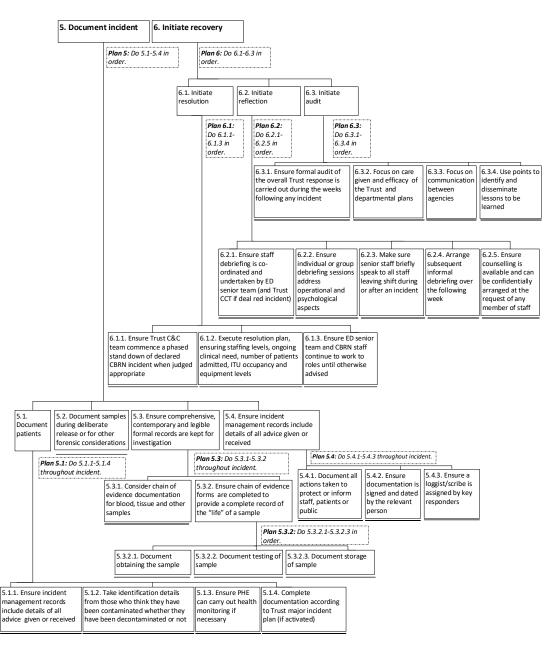






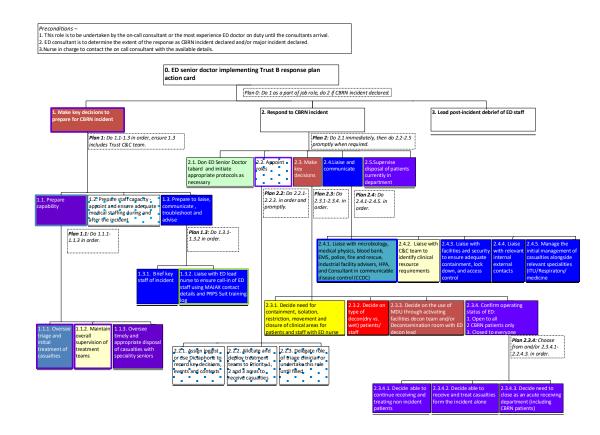






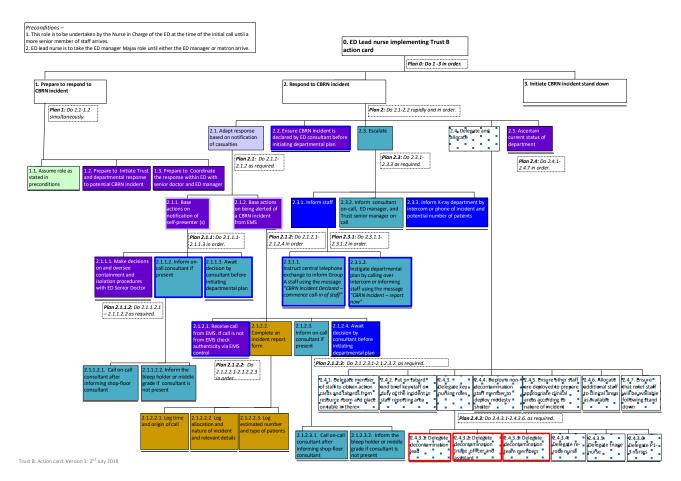
Trust B: CBRN plan: Version 3: 21<sup>st</sup> January 2019

## Vol 2: Appendix 33. Trust B: Action card HTAs (V3)

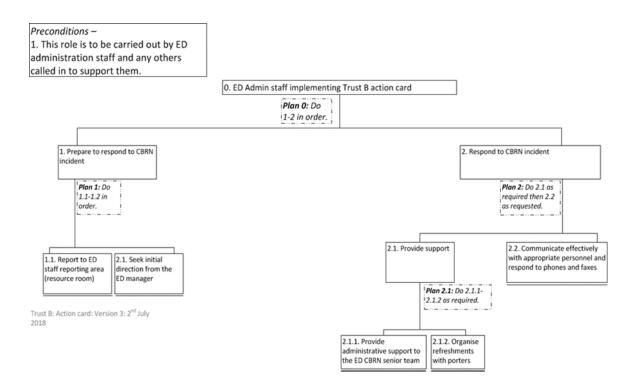


Trust B: Action card: Version 3: 2<sup>nd</sup> July 2018

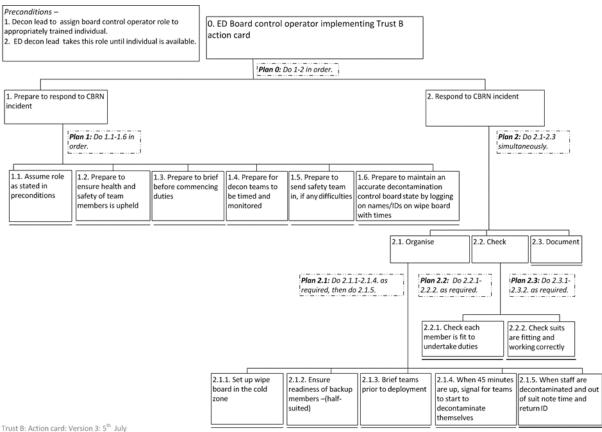




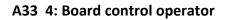
A33 2: Lead nurse

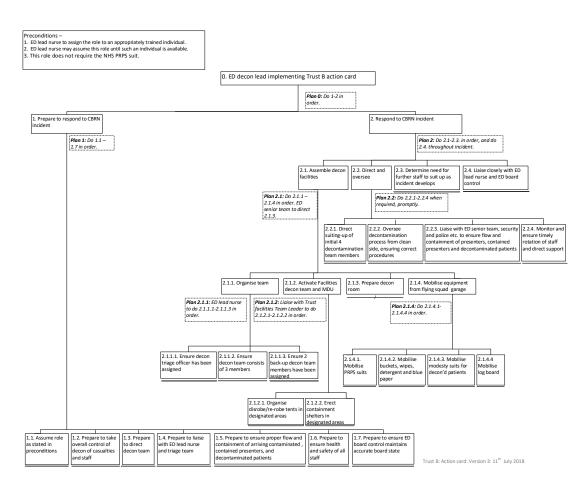


A33 3: Administration staff

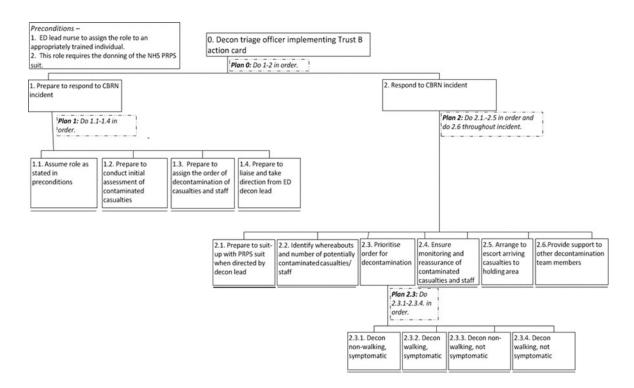


Trust B: Action card: Version 3: 5<sup>th</sup> July 2018



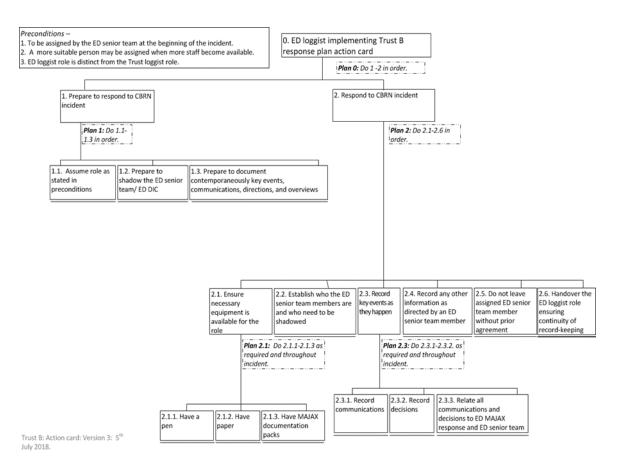


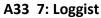
A33 5: Decontamination lead

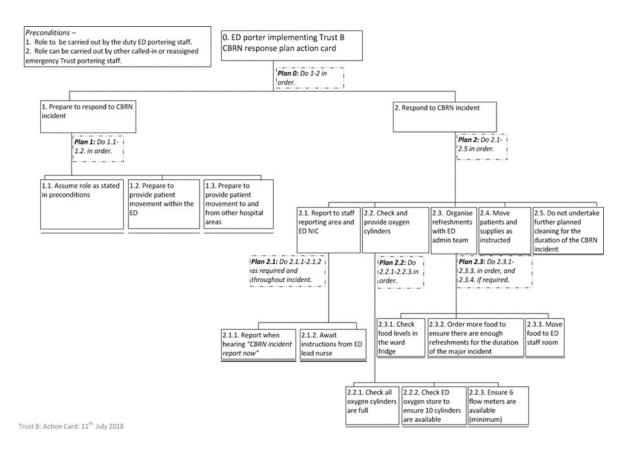


Trust B: Action card: Version 3:  $5^{\rm th}\,$  July 2018

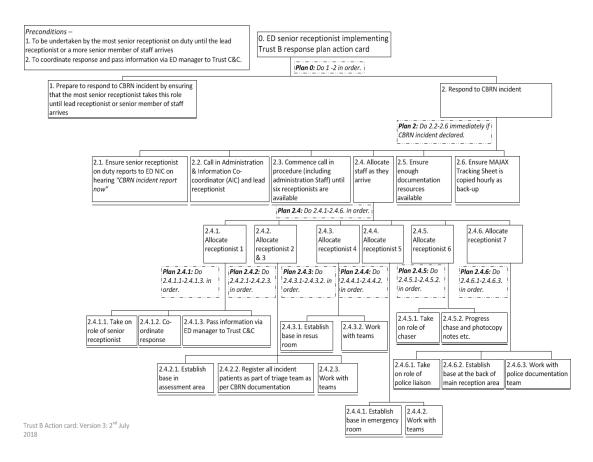
#### A33 6: Decontamination triage officer

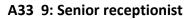




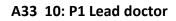


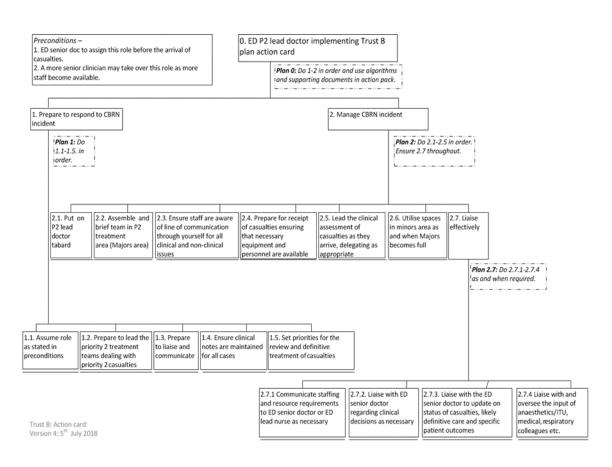
A33 8: Porter

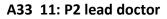


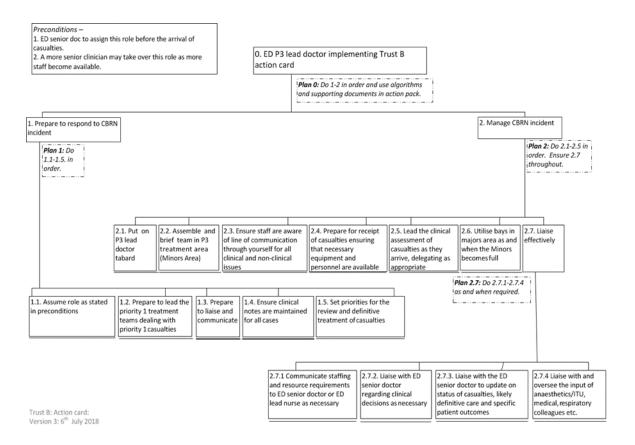


Preconditions – 1. ED senior doc to assign this role before the arrival of casualties. 2. A more senior clinician may take over this role as more staff become available.	0. ED P1 lead docto card	r implementing Trust	B action		
		Plan 0: Do 1-2 in order and supporting docum			
1. Prepare to respond to CBRN incident		-	2. Manage CE	3RN incident	
Plan 1: Do 1.1.1.5. in order.			0 2	<b>lan 2:</b> Do 2.1-2.5 in rder. Ensure 2.7 and .8 throughout.	
2.1. Put on P1 lead     2.2. Assemble and brief team in P1 treatment     2.3. Ensure staff       doctor     of line of community treatment     of line of community through yoursell clinical and non- issues	unication of casualties en f for all that necessary	nsuring assessment casualties as d arrive, deleg	of in Majors they and when	area as designation/contro area within the resu ion room room for radioactiv	lling of dirty effectively uscitation ely
					<b>2.8:</b> Do 2.8.1-2.8.4 d when required.
as stated in priority 1 treatment to liaise and m	notes are maintained review	iet priorities for the w and definitive ment of casualties			
Trust B: Action card: Version 3: 6 <sup>th</sup> July 2018	and reso to ED ser	urce requirements ser nior doctor or ED reg	3.2. Liaise with ED nior doctor garding clinical cisions as necessary	2.8.3. Liaise with the ED senior doctor to update on status of casualties, likely definitive care and specific patient outcomes	2.8.4 Liaise with and oversee the input of anaesthetics/ITU, medical, respiratory colleagues etc.

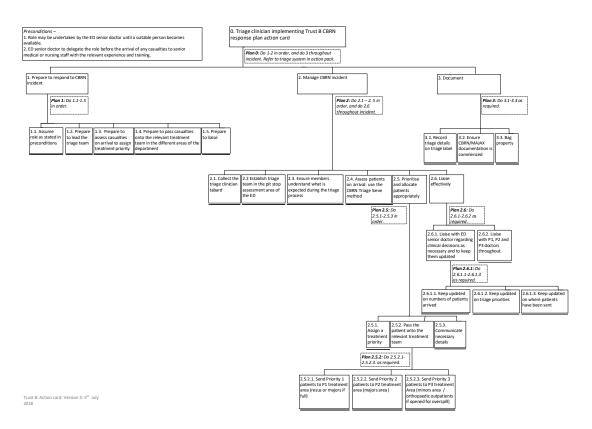








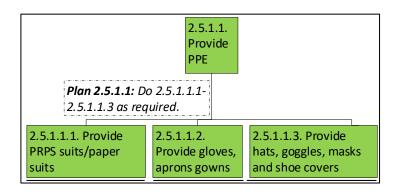






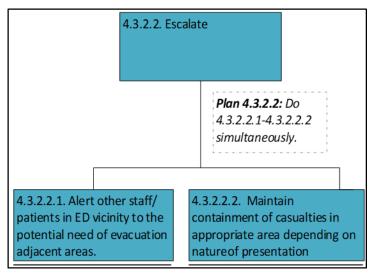
# Vol 2: Appendix 34. Trust B: WAI Analysis of HTAs

**1**. The implementation of **PPE** was core to both the General Organisational Responsibilities and individual first receiver action cards. For example, PPE was a part of preparing the infrastructure and equipment in Trust Bs general organisational responsibilities as shown in A34 1. The implementation of PPE was mentioned on one action card (P1 lead doctor).



A34 1: PPE theme in GOR (Trust B)

**3**. The theme of **escalation** (A34 2) was organisational escalation whereby the department would share information of the event as a means of limiting the spread of the contaminant.



A34 2: Organisational escalation on the general

organisational responsibilities HTA (Trust B)

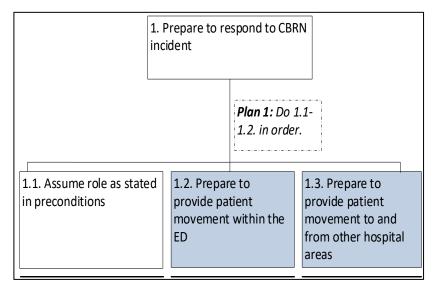
**4.** The **management** of a CBRN event was demonstrated through key tasks such as *"Prepare for incident", "Respond to incident",* and *"Initiate recovery"* being superordinate tasks on the GOR HTA.

**5. Document** incident was a superordinate task on Trust B's General Organisational Responsibilities and consisted of subordinate tasks such as *"Document samples during deliberate release or for other forensic considerations"* (subordinate task 5.2.).

6. To liaise and communicate was crucial in GOR actions in Trust Bs CBRN plan.

All first receiver action cards included the theme of liaise and communicate.

**7.** The theme of **capacity** was associated with the flow of patients during a CBRN event *"Deal with existing patients in ED and move out as necessary"* (subordinate task 4.1.5.2.). To assist with **patient flow** was a task expected from porters (A34 3):



#### A34 3: Patient flow theme illustrated on porter action card HTA (Trust B)

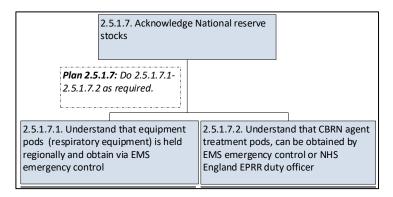
**8.** The theme of **protect staff** emerged as a subordinate task during the recovery phase of the CBRN response: *"Ensure counselling is available and can be confidentially arranged at the request of any member of staff"* (subordinate task 6.2.5).

**9.** To **isolate and contain** was pivotal in the General Organisational Responsibilities of Trust B (A34 4, p. 139).

4.3.2.1. Isolate and contain											
							<b>Plan 4.3.2.1:</b> Do 4.3.2.1.1- 4.3.2.1.4. in order, then do 4.3.2.1.5-4.3.2.1.8 as required.				
4.3.2.1.1. and conta casualties reception	ain s in ED	4.3.2.1.2. any move and out o	ement in	4.3.2.1 Close entrar doors	main	4.3.2.1.4 doors lea to adjace areas	ading	4.3.2.1.5. Maint of casualties in a depending on na presentation	appropriate area	4.3.2.1.6. Mobilise to help with conta initial assessment nature of incident	ainment and depending on

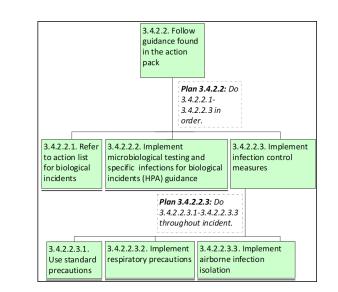
# A34 4: Extract General Organisational Responsibilities illustrating isolate and contain (Trust B)

To isolate and contain was demonstrated in the porter action card through the subordinate task of *"Do not undertake further planned cleaning for the duration of the CBRN incident"* (subordinate task 2.5.) as a means of containing the contaminant. **10.** The GOR HTA demonstrated the theme of **provide/access equipment/stock** by showing knowledge of where stock and equipment would be accessible as shown in A34 5:



A34 5: Illustration of Provide/access equipment/stock on General Organisational

### **Responsibilities HTA (Trust B)**



11. Adhering to guidance was a part of the General Organisational ResponsibilitiesA34 6:

A34 6: Guidance theme illustrated on general organisational responsibilities (Trust B)

Guidance was also a part of the senior doctor's action card through carrying out subordinate tasks such as: *"Liaise with the ED lead nurse to ensure call in of ED staff using MAJAX contact details and PRPS suit training log"* (subordinate task 1.3.2.).

**12.** To **clinically assess/triage** was illustrated on the GOR representation of the CBRN plan. To clinically assess/triage was also crucial to the role of the triage clinician, the decontamination triage officer.

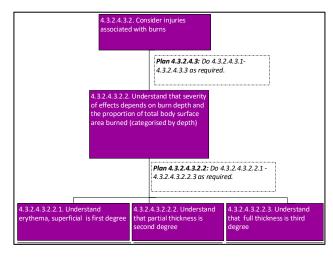
**13.** To **manage staff** was exemplified on the GOR HTA through tasks such as "Ensure team consists of decon lead who is positioned at clean side of MDU and controls decon processes (supervise control board)".

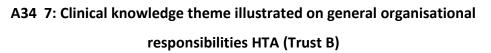
**14.** The theme of **teams** was prevalent across action cards, for example, subordinate tasks for the *"Command and Control"* team were clearly stated.

**15.** The **notification of casualties'** theme encompassed the varying patient presentations of CBRN events such as *"Respond to alarm raised by senior ED nurse/Dr, self-presenters or suspicious patient (s) presentation (step 1,2,3) in the ED"* (subordinate task 3.1.2.).

### GOR specific themes (validation)

**16. Clinical knowledge** of potential CBRN presentations was evident in the General Organisational Responsibilities for Trust B as shown in A34 7:





**17.** To **detect/identify** the contaminant was a part of the General Organisational Responsibilities.

**18.** To **respond** was demonstrated through subordinate tasks such as *"Plan to achieve a rapid, co-ordinated, and organised response"* (subordinate task 1.1.5.).

**19.** The theme of **incident type** was defined by having distinct response plans through subordinate tasks such as: *"Advance warning given, decision made by on-call ED consultant to activate Trust Major Incident Plan (MAJAX), Trust CBRN, both or neither"* (subordinate task 3.2.2.).

**20. Incident knowledge** consisted of subordinate tasks such as *"Consider planning beyond immediate response"* (subordinate task 2.1.1.6) and *"Understand overview of subsequent actions"* (subordinate task 4.1.).

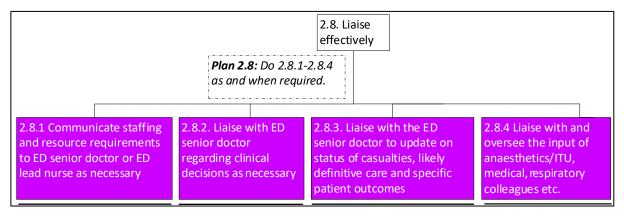
### Action card specific themes (validation)

**16.** The theme of **time** was specific to the board control operator role (Vol 2: Appendix 33, A33 4, p. 127) who was expected to implement subordinate tasks such as *"Prepare for decon teams to be timed and monitored"* (subordinate task 1.4.).

**17.** To **support/assist** was a theme associated with the action cards of admin staff through subordinate tasks such as *"Provide administrative support to the ED CBRN senior team"* (subordinate task 2.1.1.).

18. The theme of **shadow** was specific to the loggist role.

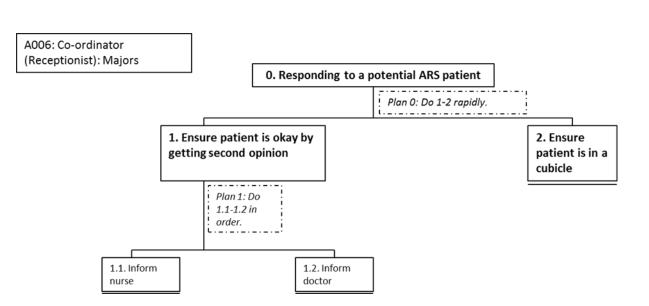
**19**. The theme of **clinical escalation** on Trust B action cards, was associated with communicating the clinical needs of the presentation with a senior member of the ED team or another speciality. This theme was evident on the action cards of the NIC, triage clinician, and P1 (A34 8), P2, and P3 doctors.



A34 8: Clinical escalation theme exemplified on P1 doctor action card (Trust B)

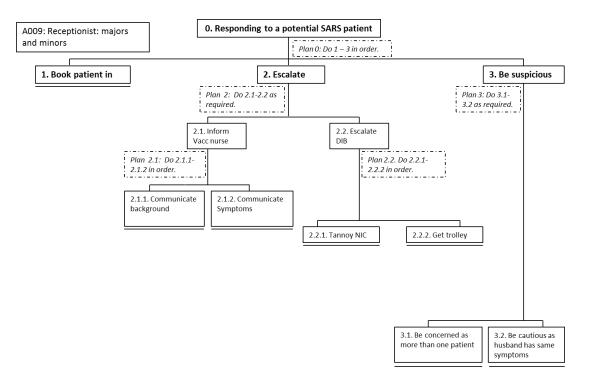
**20.** As well as providing and accessing relevant equipment. Porters at Trust B were also required to **check** that the equipment was intact through tasks such as "check ED oxygen store to ensure 10 cylinders are available" (subordinate task 2.2.2.).

**21. Make decisions** was an action expected from Trust B senior doctors.

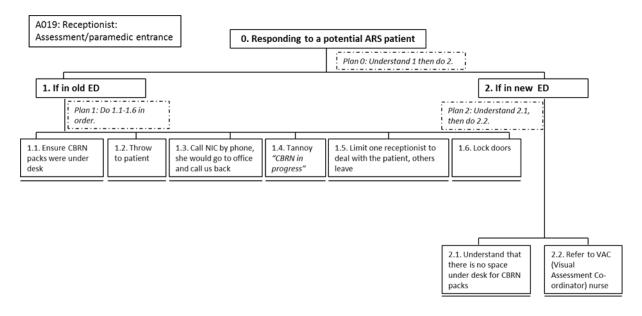


### Vol 2: Appendix 35. Trust A: Receptionist WAD HTAs

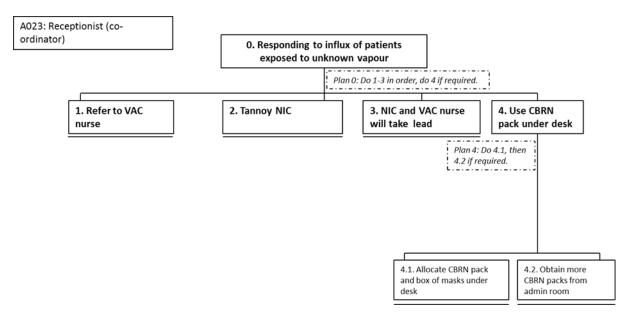




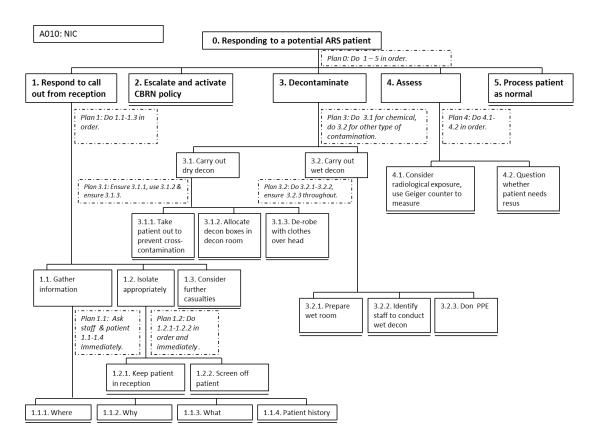




A35 3: A019: Receptionist HTA

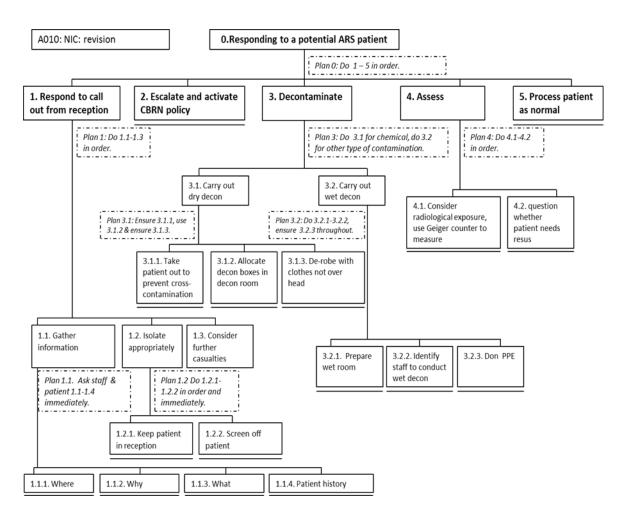




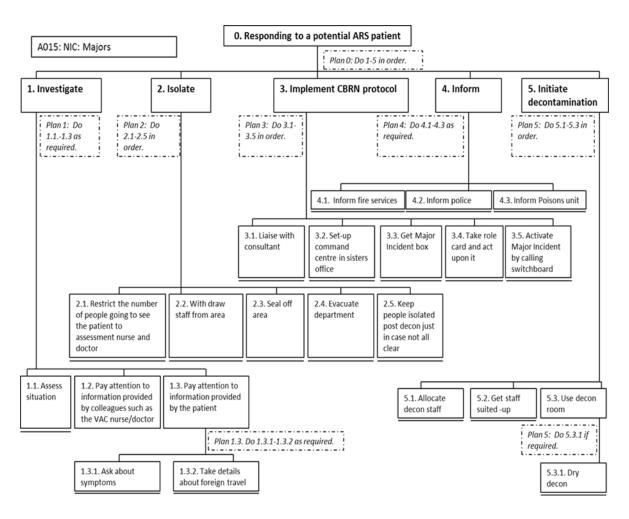


## Vol 2: Appendix 36. Trust A: NICs WAD HTAs

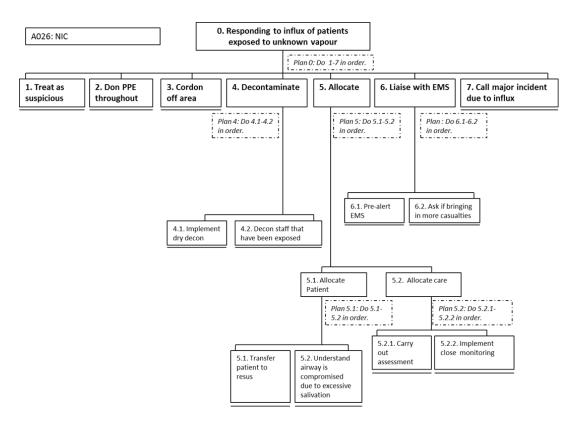
A36 1: A010: NIC HTA



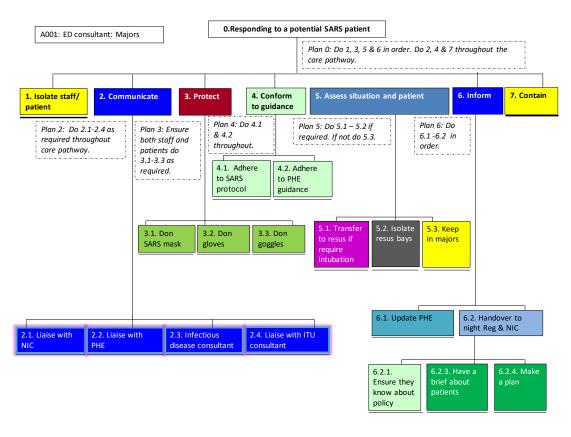
A36 2: A010: NIC HTA (revision)



A36 3: A015: NIC HTA

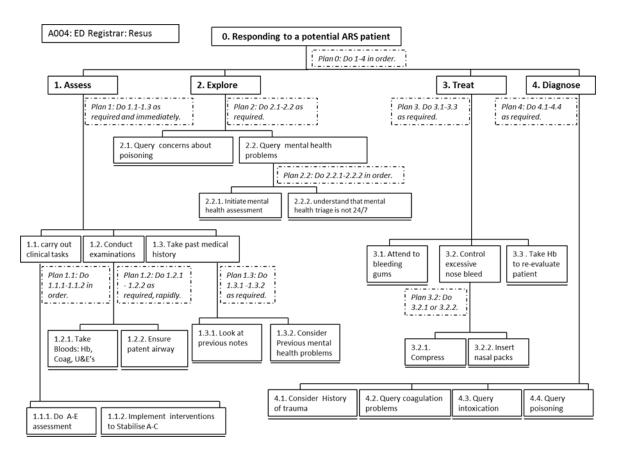


A36 4: A026: NIC HTA

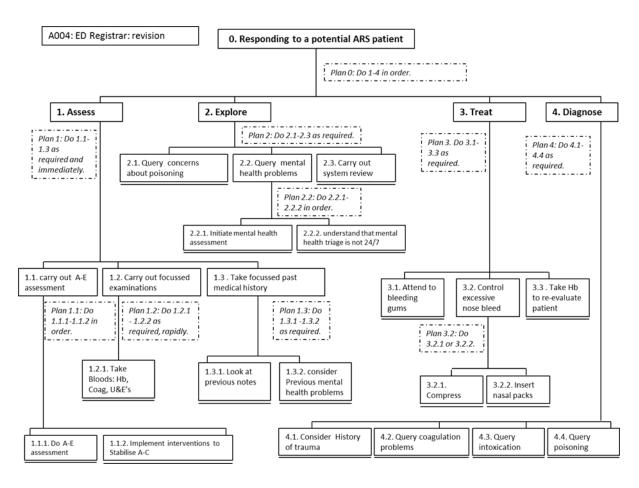


## Vol 2: Appendix 37. Trust A: Doctors WAD HTAs

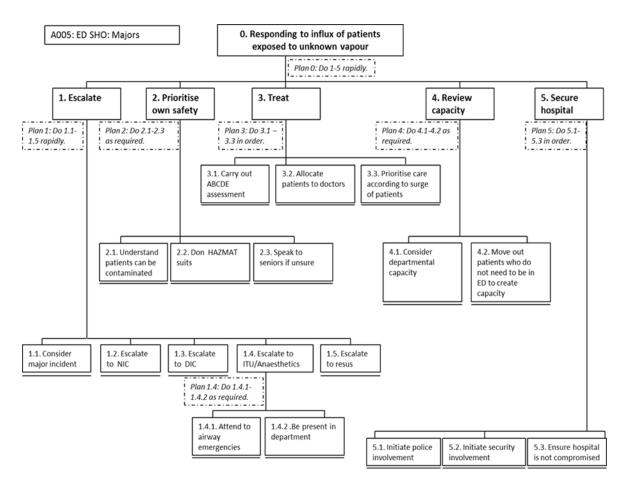
A37 1: A001: Consultant HTA



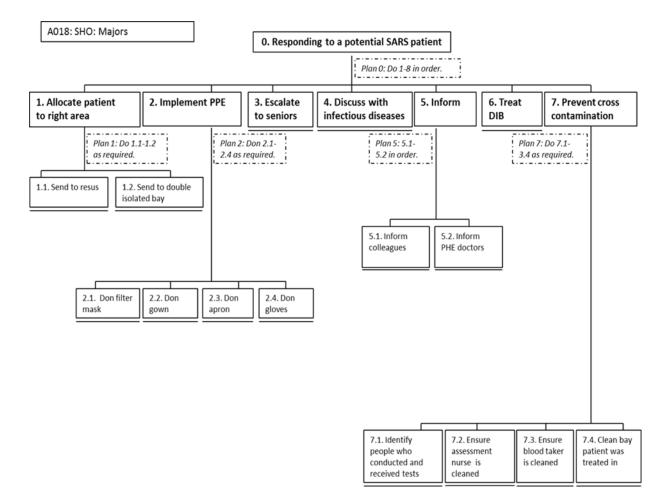
A37 2: A004 Registrar HTA: Version 1



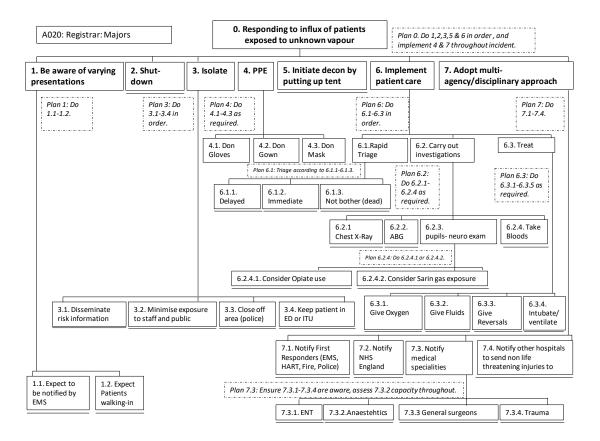
A37 3: A004 Registrar HTA (revision)



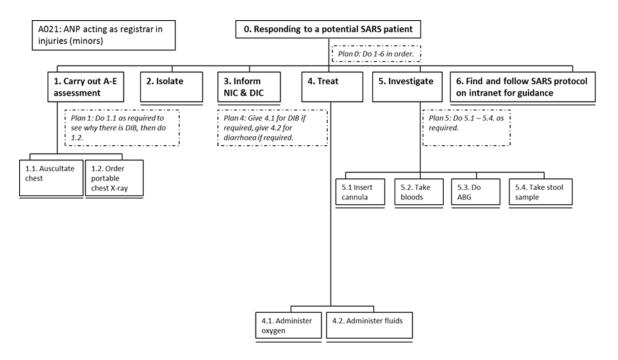
A37 4: A005: SHO HTA



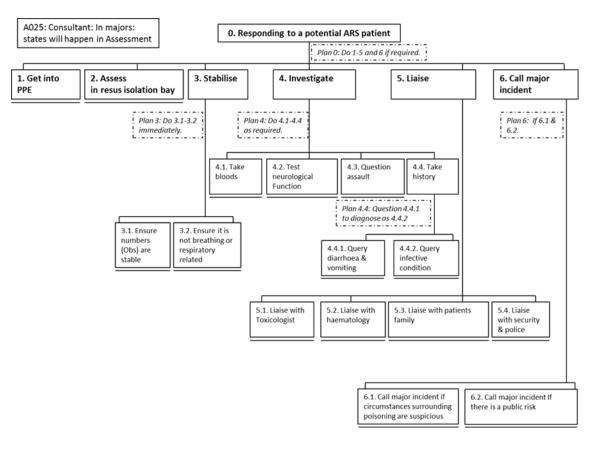
A37 5: A018: SHO HTA



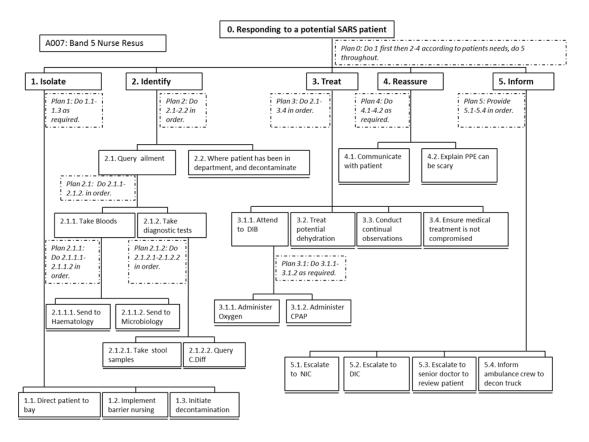
A37 6: A020: Registrar HTA



A37 7: A021: Band 7 ANP acting as registrar

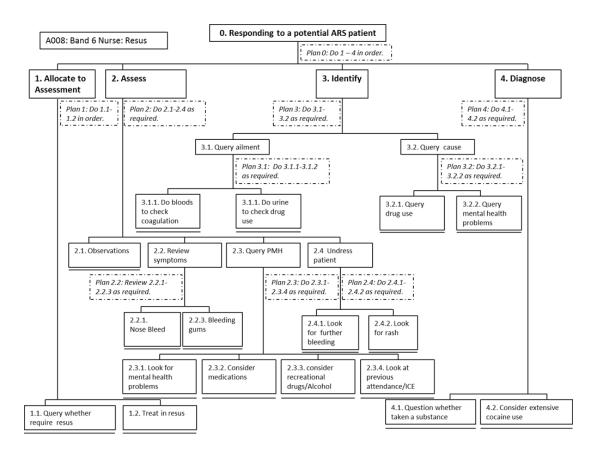


A37 8: A025: Consultant HTA

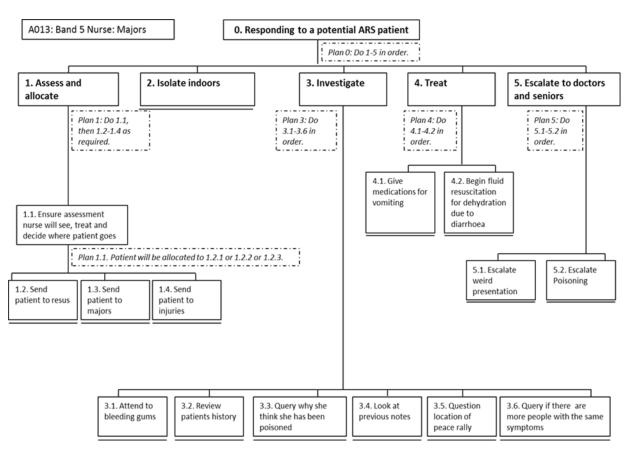


# Vol 2: Appendix 38. Trust A: Nurses WAD HTAs

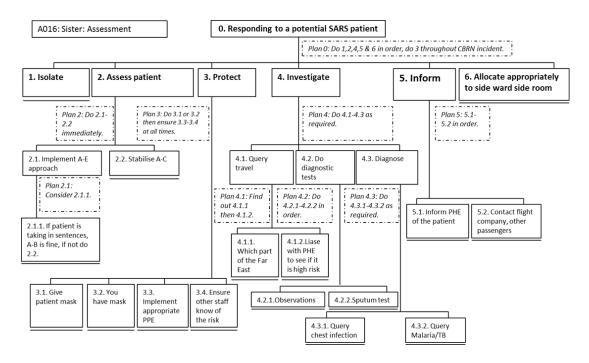
A38 1: A007: Band 5 nurse



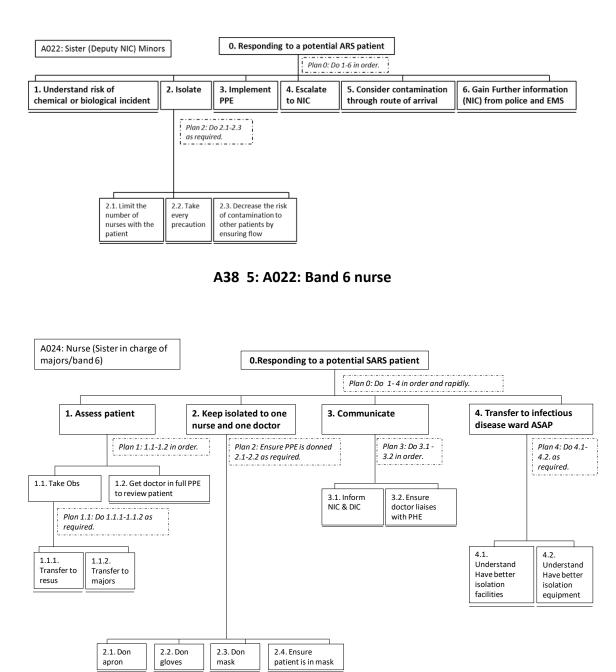
A38 2: A008: Band 6 nurse



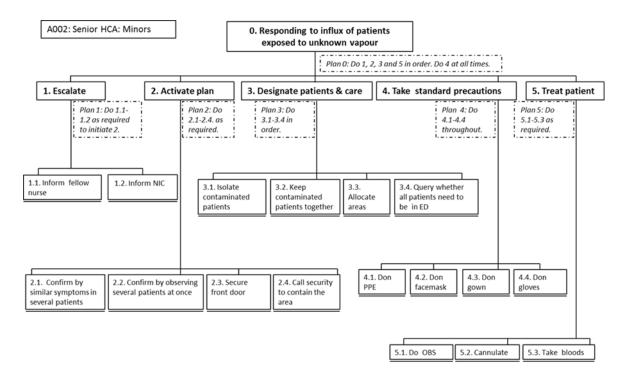
A38 3: A013: Band 5 nurse



A38 4: A016: Band 6 nurse

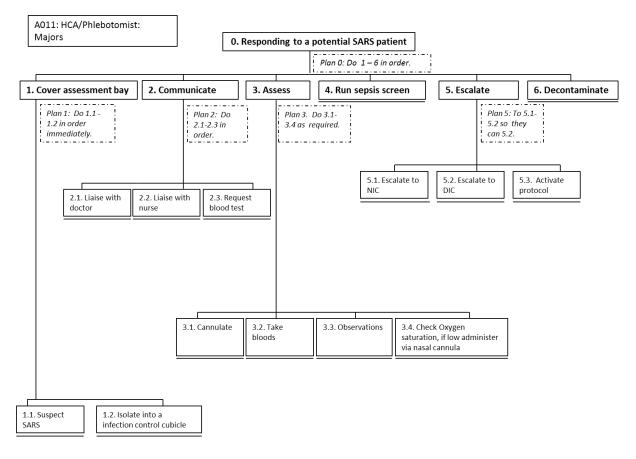


A38 6: A024: Band 6 nurse

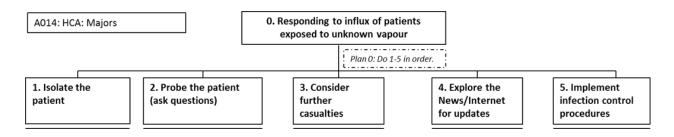


## Vol 2: Appendix 39. Trust A: HCAs WAD HTAs

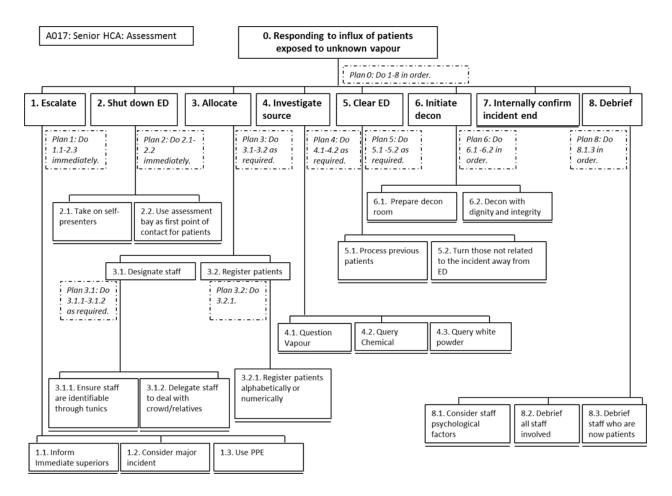
A39 1: A002: HCA



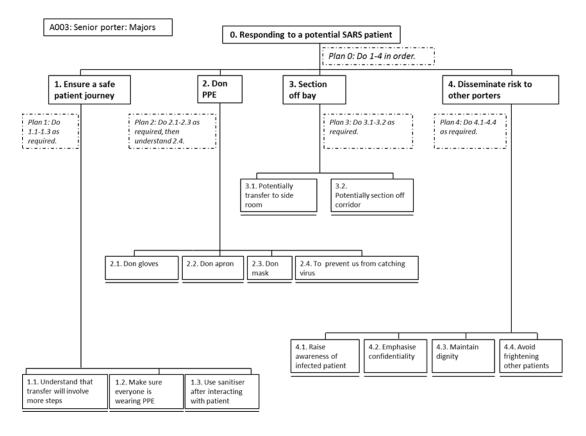
A39 2: A011: HCA



A39 3: A014: HCA

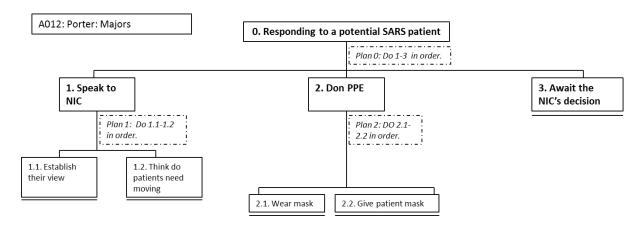


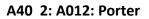
A39 4: A017: HCA



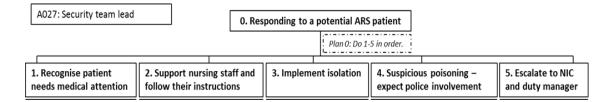
## Vol 2: Appendix 40. Trust A: Porters WAD HTAs

A40 1: A003 Porter

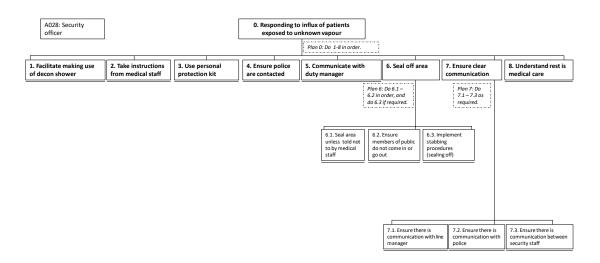




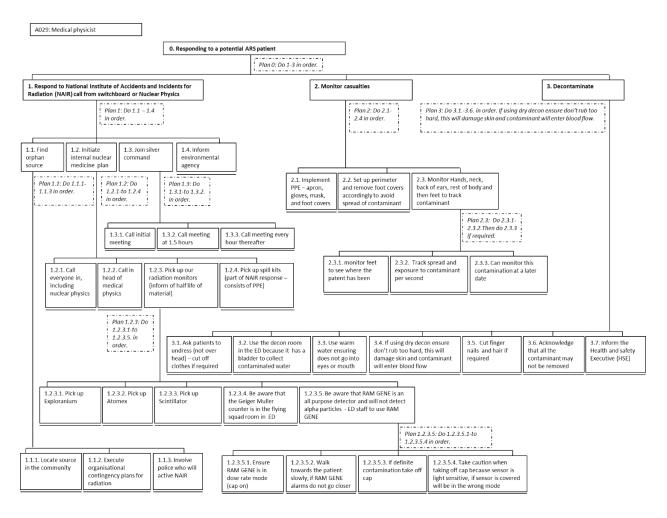
## Vol 2: Appendix 41. Trust A: Security officer WAD HTAs



#### A41 1: A027: Security officer (lead)

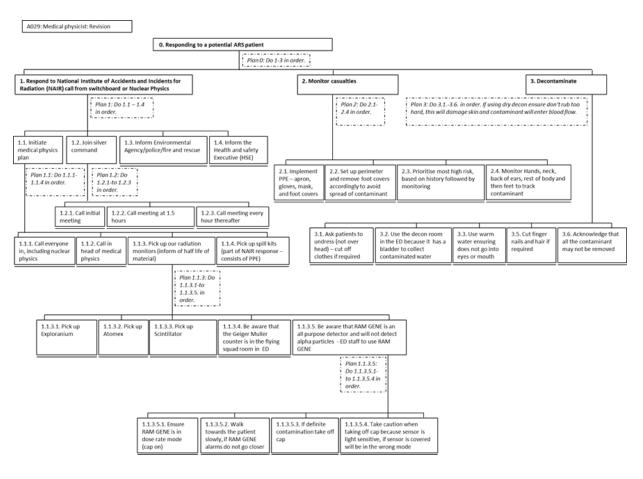


A41 2: A028: Security officer



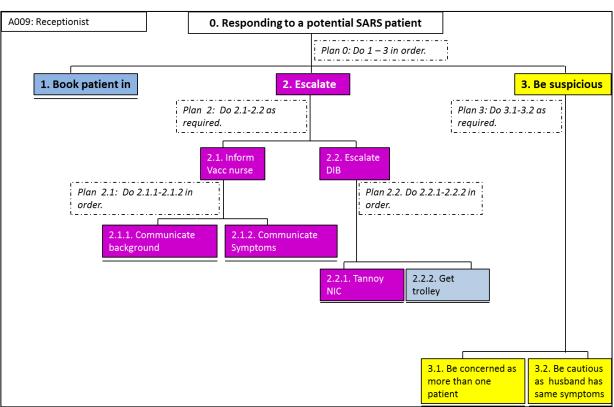
### Vol 2: Appendix 42. Trust A: Medical physicist WAD HTA

A42 1: Medical physicist (version 1)



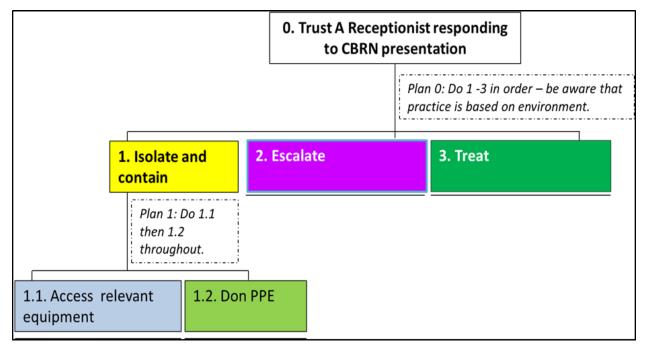
A42 2: A029: Medical physicist (revision)

## Vol 2: Appendix 43. Trust A: WAD additional results



#### Receptionists

A43 1: HTA representation of Trust A receptionist responding to ARS presentation

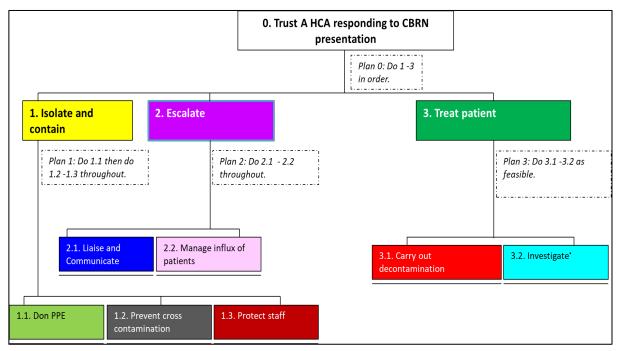


A43 2: Trust A receptionist group synthesis

#### HCAS

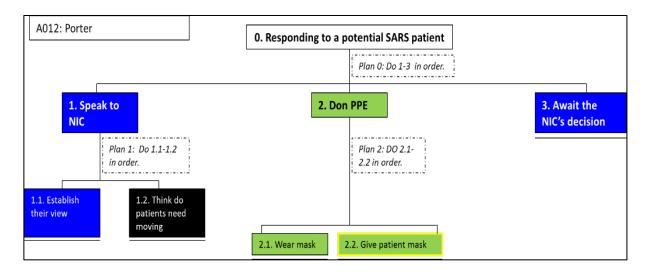
A002: HCA		0. Responding to influx of patients exposed to unknown vapour						
		Plan 0: Do 1, 2, 3 and 5 in			order. Do 4 at all times.			
1. Escalate 2. Acti	vate plan	3. Designate pati	ents & care	4. Take	standard precautions	5. Treat patient		
Plan 1: Do 1.1- 1.2 as required to initiate 2. 1.1. Inform fellow nurse 1.2. Inform NIC	Plan 2: Do 2.1-2.4. as required. 3.1. Isolate contaminat patients				Plan 4: Do 4.1-4.4 throughout.	Plan 5: Do 5.1-5.3 as required.		
2.1. Confirm by similar symptoms in several patients			urity		4.2. Don facemask gown	4.4. Don gloves		

#### A43 3: HTA representation of Trust A HCA responding to a Sarin presentation

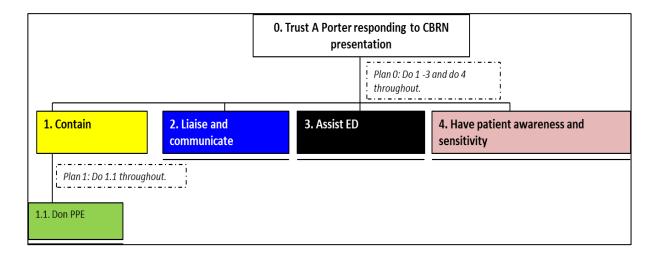


#### A43 4: HTA representation of Trust A HCA responding to a Sarin presentation

### Porters



#### A43 5: HTA representation of Trust A Porter responding to a SARS presentation



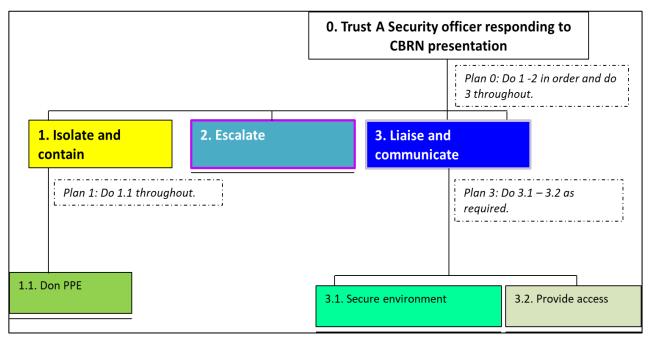
A43 6: Trust A Porters group specific WAD HTA

## Security officers

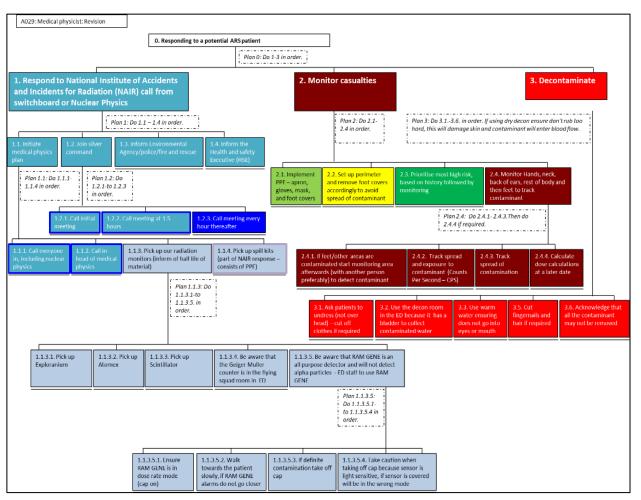
4027: Security team lead		0. Res	ponding to a	potential ARS	patient		
<b>F</b>				Plan 0: Do 1	-5 in order.	Γ	
1. Recognise patient needs medical attention	2. Support nursi follow their inst	-	3. Implem	ent isolation		us poisoning – ce involvement	5. Escalate to NIC and duty manager

### A43 7: HTA representation of Trust A security officer responding to an ARS

#### presentation



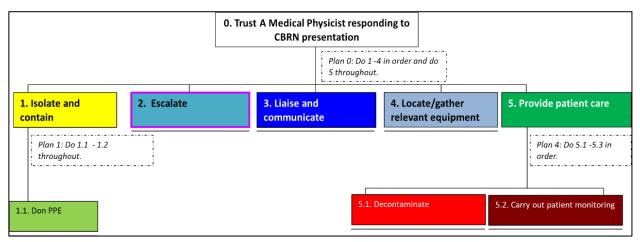
#### A43 8: Trust A security officers group synthesis



### **Medical physicist**

A43 9: HTA representation of Trust A medical physicist responding to an ARS

presentation

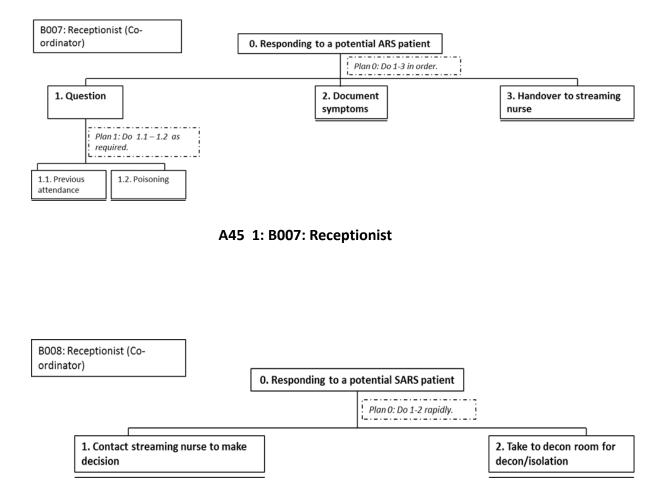


A43 10: Trust A medical physicist synthesis

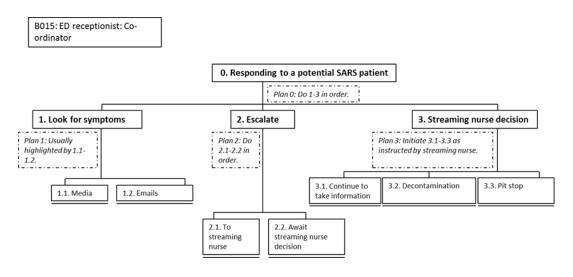
					Trust A				
Participant	Scenario card		Common themes						
	C	В	R	Isolate and Contain	Liaise & Communicate	Escalate	Implement PPE	Treat	
A001				✓	$\checkmark$	×	✓	$\checkmark$	
A002				✓	×	√	✓	$\checkmark$	
A003				✓	×	×	✓	×	
A004				×	×	×	×	$\checkmark$	
A005				√	$\checkmark$	$\checkmark$	✓	$\checkmark$	
A006				✓	×	$\checkmark$	×	×	
A007				✓	$\checkmark$	√	✓	$\checkmark$	
A008				×	*	×	×	√	
A009				✓	*	√	×	√	
A010				✓	*	√	×	$\checkmark$	
A011				×	$\checkmark$	√	×	×	
A012				✓	$\checkmark$	×	✓	×	
A013				✓	*	√	×	$\checkmark$	
A014				✓	×	×	×	×	
A015				✓	$\checkmark$	√	✓	×	
A016				✓	$\checkmark$	√	✓	$\checkmark$	
A017				✓	$\checkmark$	√	×	×	
A018				✓	$\checkmark$	√	✓	$\checkmark$	
A019				✓	$\checkmark$	√	✓	×	
A020				✓	$\checkmark$	√	✓	$\checkmark$	
A021				✓	$\checkmark$	√	×	$\checkmark$	
A022				✓	$\checkmark$	√	✓	×	
A023				×	$\checkmark$	√	✓	×	
A024				✓	$\checkmark$	×	✓	$\checkmark$	
A025				×	$\checkmark$	$\checkmark$	✓	$\checkmark$	
A026				✓	$\checkmark$	√	✓	×	
A027				✓	$\checkmark$	√	×	x	
A028				✓	$\checkmark$	√	✓	×	
A029				✓	✓	×	✓	×	

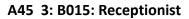
# Vol 2: Appendix 44. Trust A: Synthesis of WAD

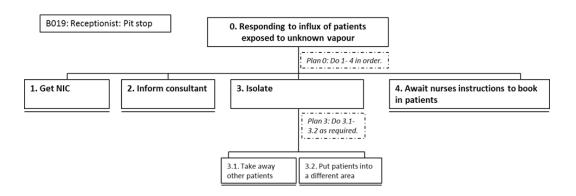
# Vol 2: Appendix 45. Trust B: Receptionists WAD HTA



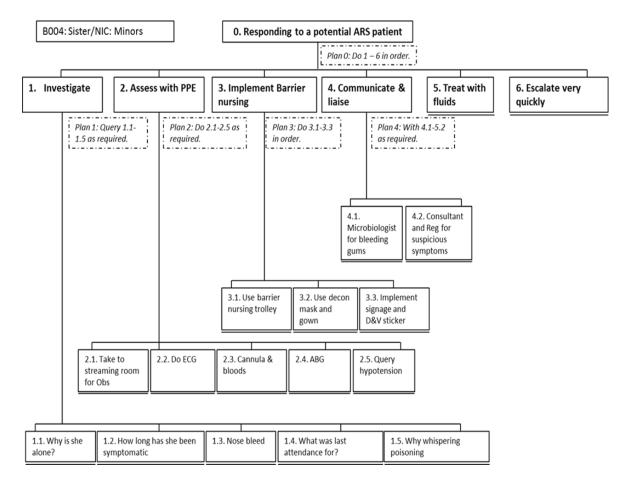






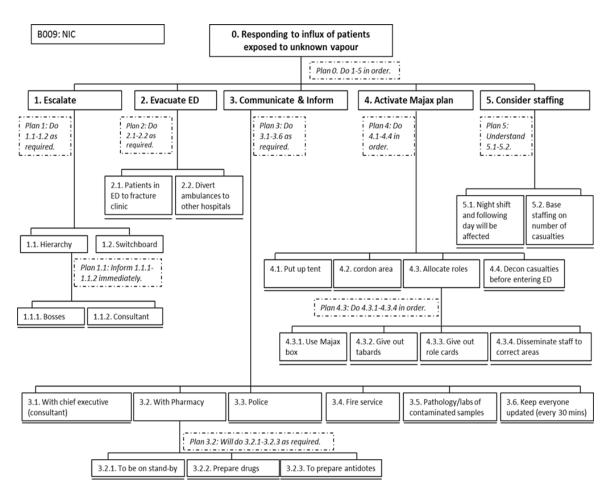


A45 4: B019: Receptionist

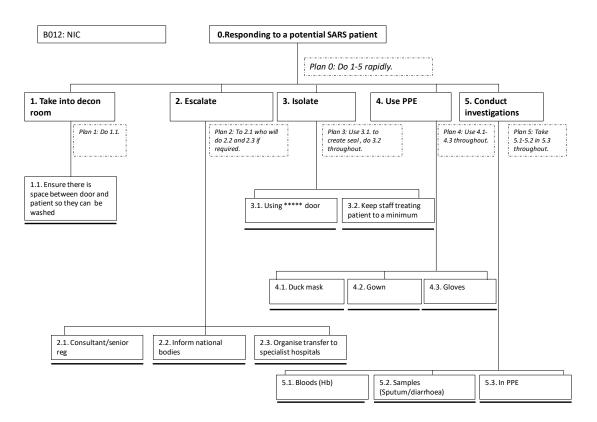


## Vol 2: Appendix 46. Trust B: NIC WAD HTA

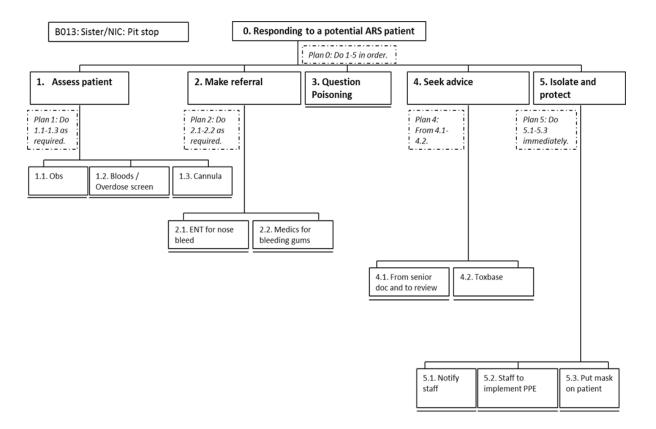
A46 1: B004 ED NIC WAD HTA



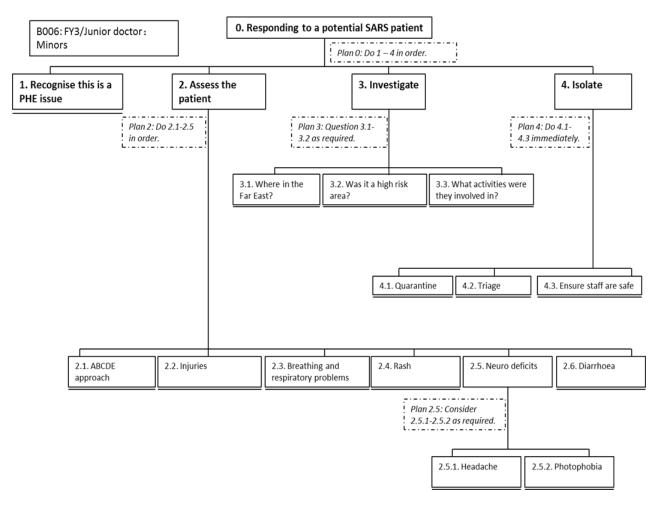
A46 2: B009 NIC WAD HTA



A46 3: B012: NIC

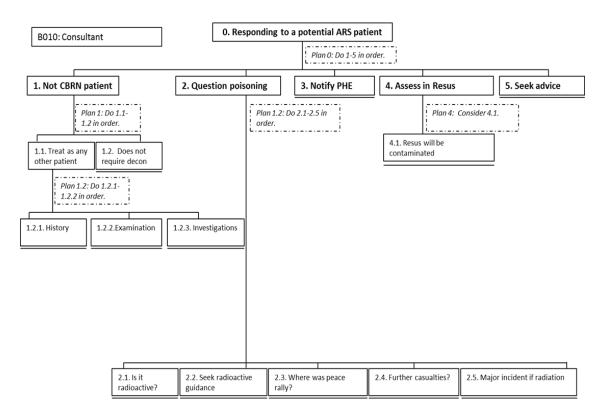


A46 4: B013: NIC

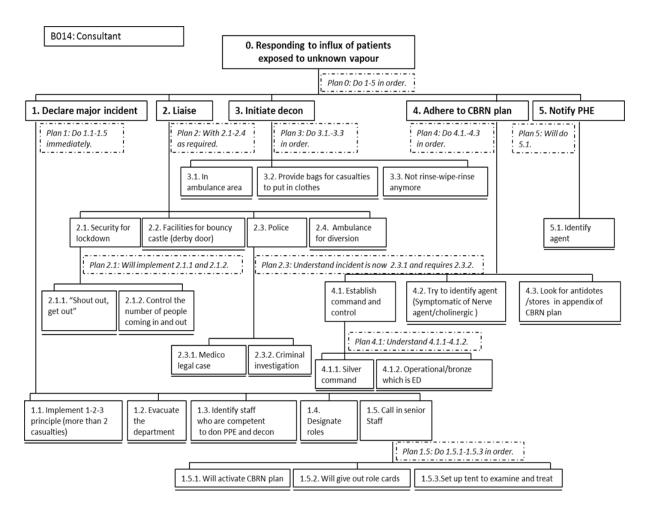


## Vol 2: Appendix 47. Trust B: Doctors WAD HTAs

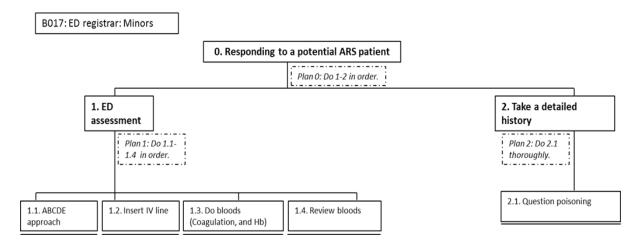
A47 1: B006: FY3 WAD HTA



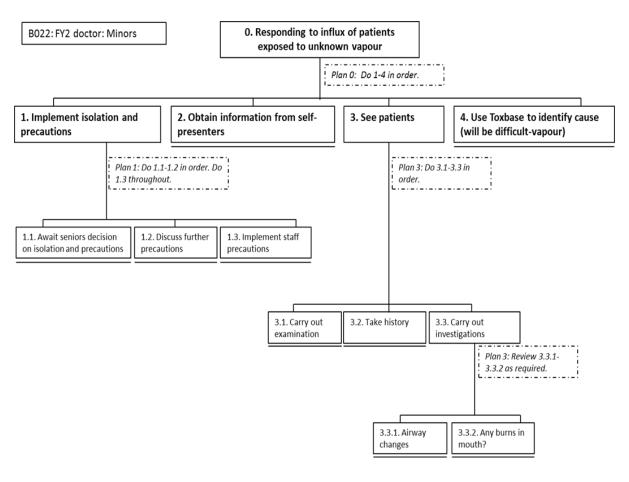
A47 2: B010: Consultant WAD HTA



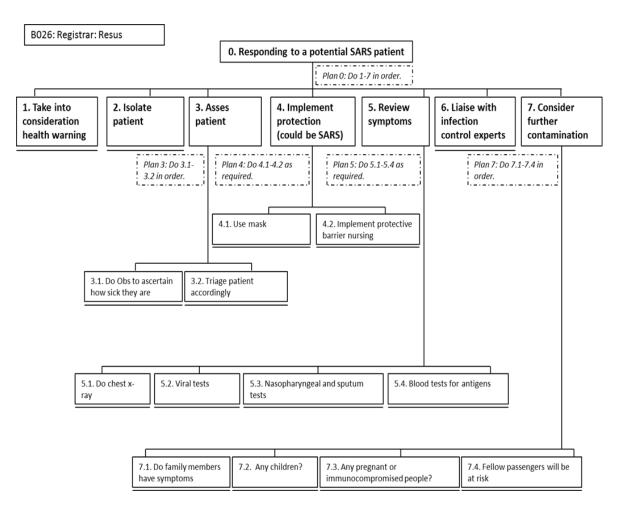
A47 3: B014: Consultant WAD HTA



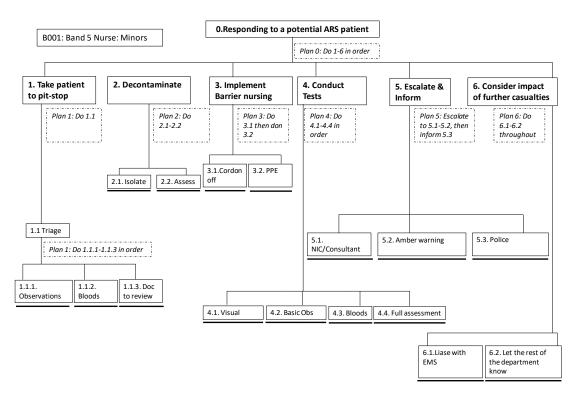
A47 4: B017: Registrar WAD HTA



A47 5: B022: FY2 Doctor

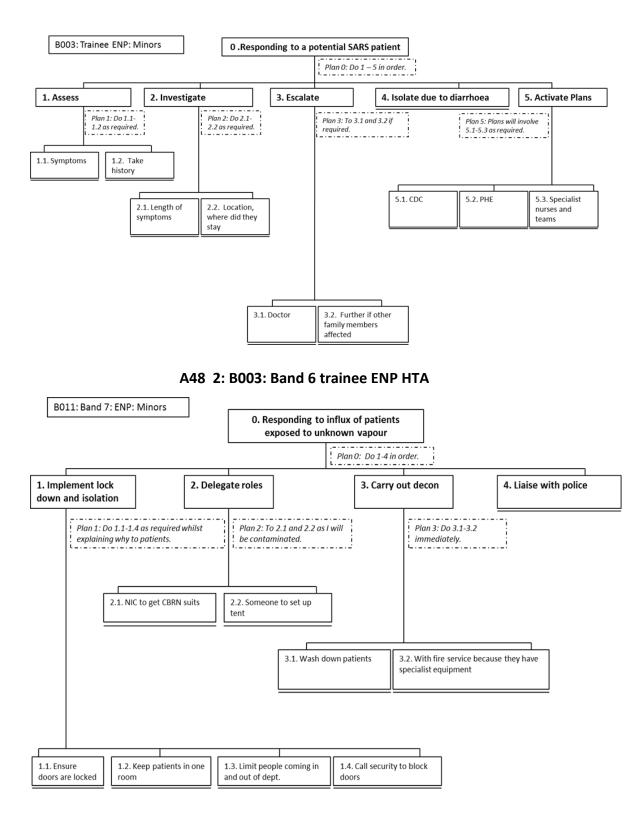


A47 6: B026: Registrar WAD HTA

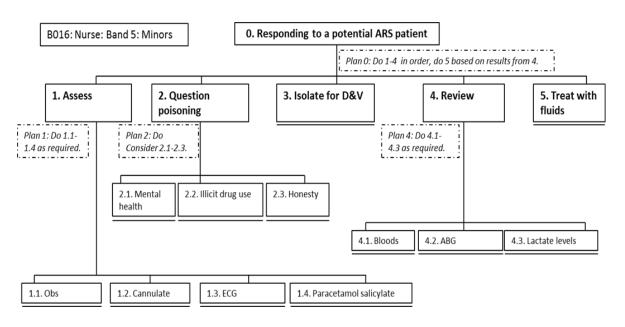


## Vol 2: Appendix 48. Trust B: Nurses WAD HTAs

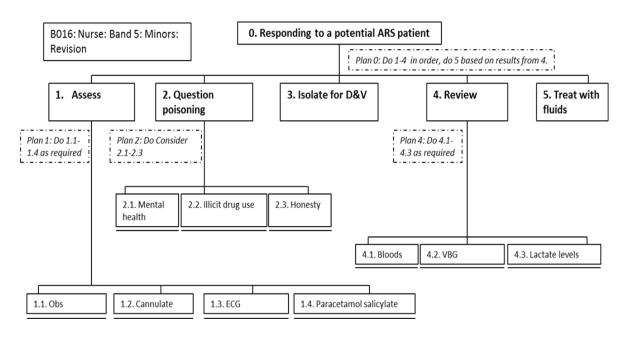
A48 1: Band 5 nurse WAD HTA



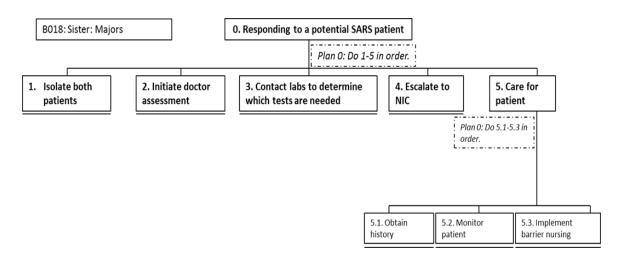
A48 3: B011: Band 7 ENP WAD HTA



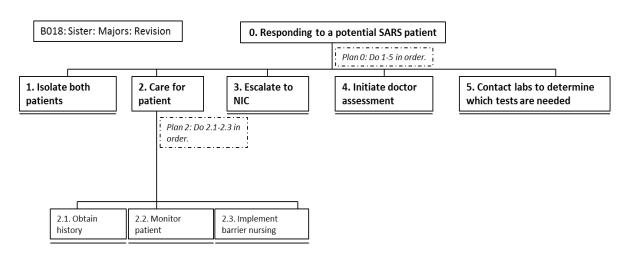




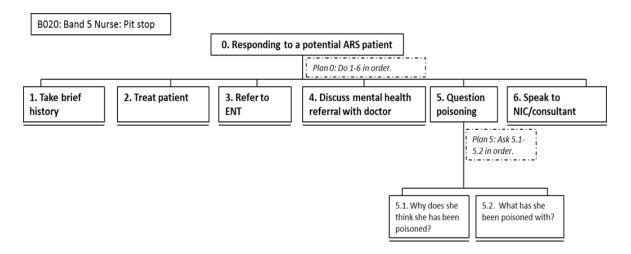
A48 5: B016: Band 5 nurse (revision)

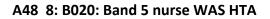


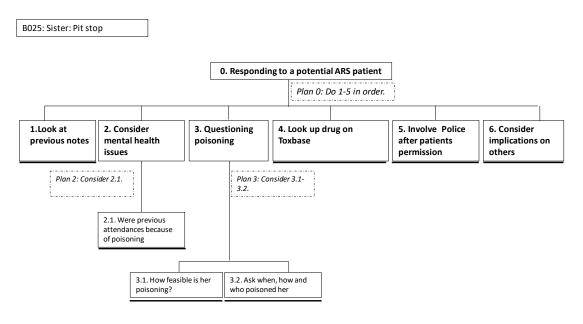




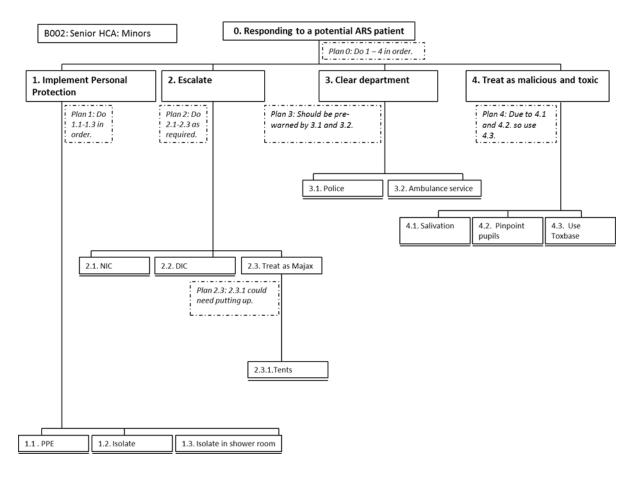
A48 7: B018: Band 6 sister (revision)





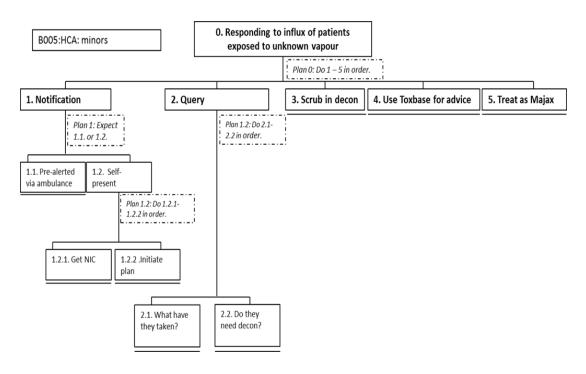


A48 9: Band 6 sister WAD HTA

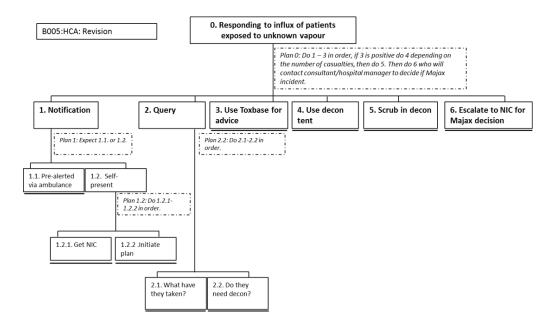


## Vol 2: Appendix 49. Trust B: HCAs WAD HTAs

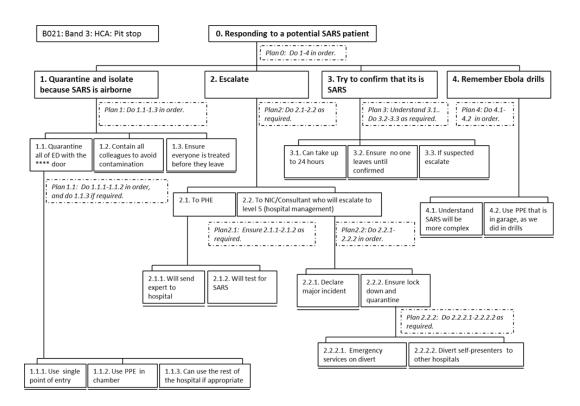
A49 1: B002: HCA WAD HTA



#### A49 2: B005: HCA WAD HTA (version 1)



A49 3: B005: HCA WAD HTA (revision)

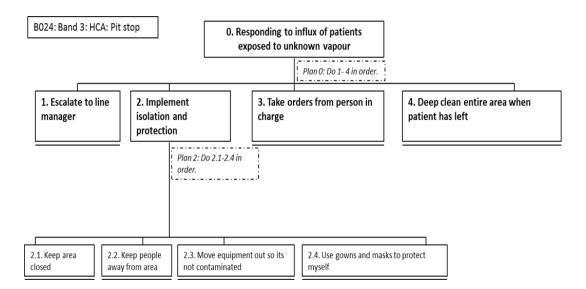


A49 4: B021: HCA WAD HTA

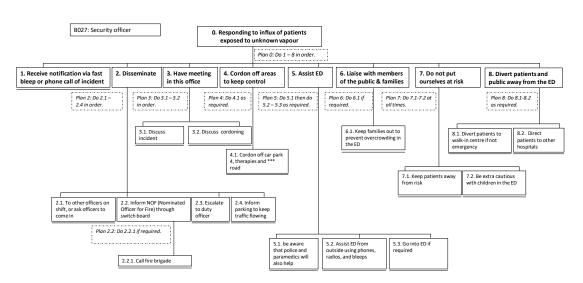
B023: Band 1 EDA: Minors

0. Responding to a potential ARS patient				
	Plan 0: Do 1.			
1. Escalate	to NIC			

A49 5: B023: EDA WAD HTA

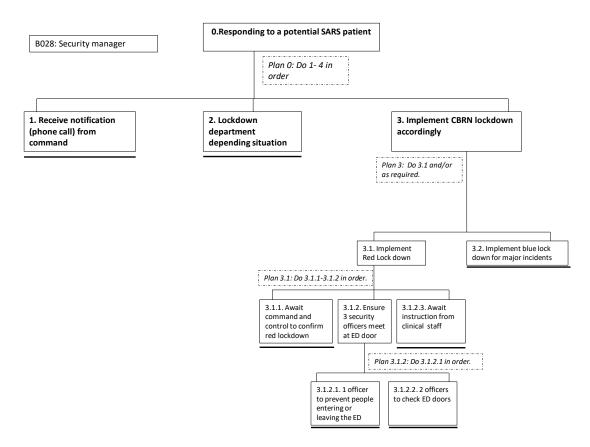


A49 6: B024: HCA WAD HTA

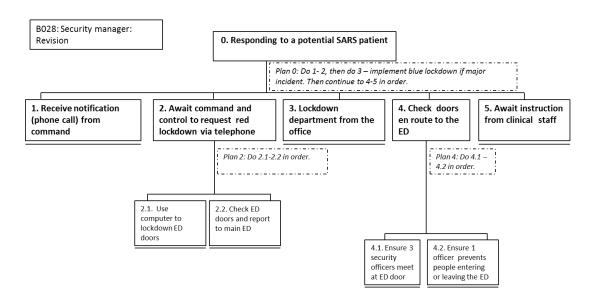


## Vol 2: Appendix 50. Trust B: Security officers WAD HTAs

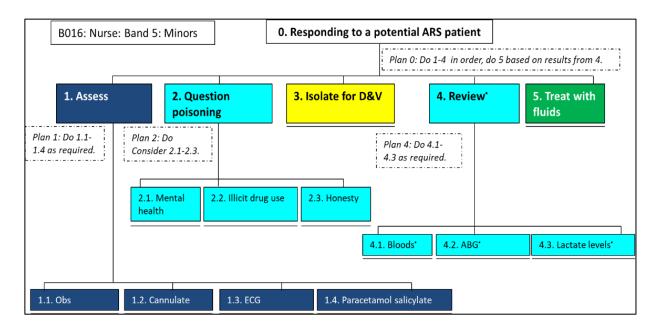
A50 1: B027: Security officer: WAD HTA



A50 2: Security manager WAD HTA (Version 1)



A50 3: B028: Security manager WAD HTA (revision)



## Vol 2: Appendix 51. Trust B: WAD additional results

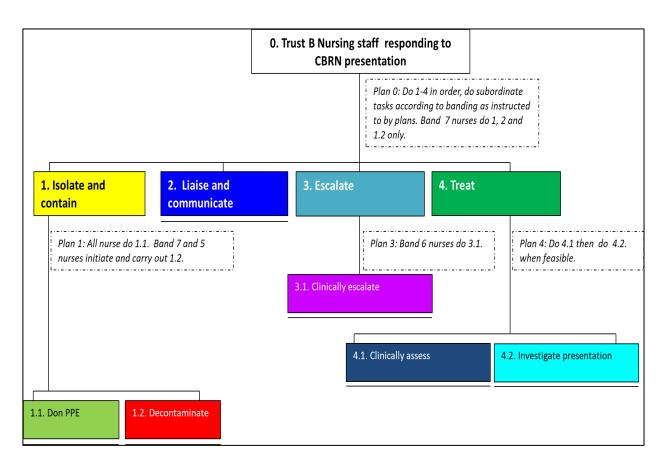
#### A51 1: HTA representation of Trust B band 5 nurse responding to ARS

#### presentation

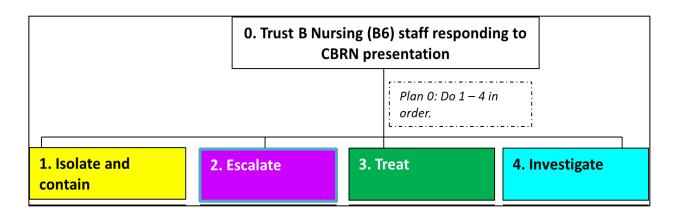
B025: Sister: Pit sto	p								
	0. Responding to a potential ARS patient								
					Plan 0: D	Do 1-6 in order.		1	
1. Look at previous notes	2. Consid mental he issues		3. Ques poisoni	tioning ng	4. Look up Toxbase	drug on	5. Involve after pati permissio	ients	6. Consider implications on others
Plan 2: Consider 2.	2.1. Were p attendance: of poisoning	s because	le is her	i	Consider 3.1-3.2.				

#### A51 2: HTA representation of Trust B band 6 nurse responding to ARS

#### presentation



A51 3: Trust B nurses' group specific WAD HTA



A51 4: Trust B band 6 group synthesis

## HCAs

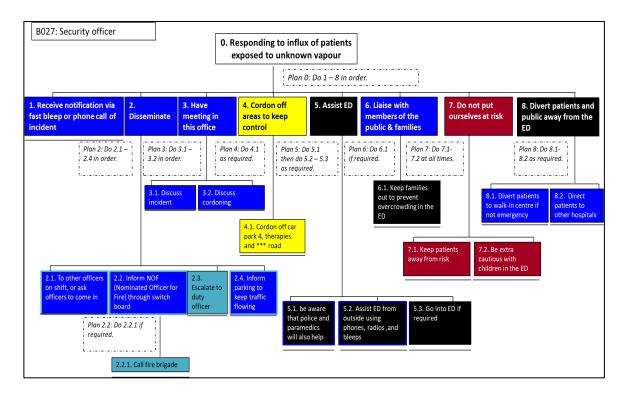
B002: Senior HCA: Minors	0. Respo	nding to influx o	of patients expose Plan 0: Do 1 – 4 In	ed to unknown var	oour	
1. Implement Personal Protection	2. Escalate		3. Clear departr	ment	4. Treat as malici	ious and toxic
Plan 1: Do 1.1- 1.3 in order.	Plan 2: Do 2.1- 2.3 as required.	Plan 3: Shoul warned by 3.		3.2, Ambulance servic	Plan 4: Due to 4. and 4.2. so use 4.3.	1
				4.1. Salivation*	4.2. Pinpoint pupils'	4.3. Use Toxbase
2.1. NIC	2.2. DIC Plan 2.3: 2.3.1 c need putting up					
1.1. PPE 1.2. Isolate	1.3. Isolate in showe	r room				

## A51 5: HTA representation of Trust B HCA responding to a Sarin presentation

			0. Trus	t B HCAs/EDA prese	s respond ntation	ing to CBRN	
	[				Plan 0: only.	Do 1 – 4 in order, do 5 v	vhen feasible. EDAs do 4
1. Isolate contain	and	2. Take notifica casualties	ition of	3. Liaise commun		4. Escalate	5. Investigate presenting condition
	Plan 1: Do order.	1.1-1.3 in					
1.1. Don PPE	1.2.	Protect staff	1.3. Decontan	ninate			

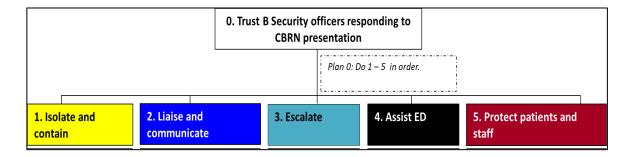
#### A51 6: Trust B HCAs group specific WAD HTA

## Security officers



## A51 7: HTA representation of Trust B security officer responding to a Sarin

#### presentation



A51 8: Trust B security officers' group synthesis

					Trust B			
Participant	Scenario card Common themes							
	C	В	R	Isolate and Contain	Liaise & Communicate	Escalate	Decontaminate	Investigate
B001				✓	✓	✓	✓	×
B002				$\checkmark$	$\checkmark$	✓	×	✓
B003				$\checkmark$	×	✓	×	$\checkmark$
B004				$\checkmark$	$\checkmark$	✓	×	$\checkmark$
B005				×	×	✓	$\checkmark$	✓
B006				✓	×	✓	×	$\checkmark$
B007				×	✓	×	×	✓
B008				✓	✓	×	✓	×
B009				$\checkmark$	✓	$\checkmark$	$\checkmark$	×
B010				$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$
B011				$\checkmark$	$\checkmark$	×	$\checkmark$	×
B012				✓	×	$\checkmark$	✓	✓
B013				$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$
B014				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×
B015				×	$\checkmark$	✓	$\checkmark$	$\checkmark$
B016				$\checkmark$	×	×	×	$\checkmark$
B017				×	×	×	×	✓
B018				$\checkmark$	×	$\checkmark$	×	✓
B019				$\checkmark$	$\checkmark$	$\checkmark$	×	×
B020				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×
B021				$\checkmark$	×	$\checkmark$	×	$\checkmark$
B022				$\checkmark$	$\checkmark$	×	×	$\checkmark$
B023				×	×	✓	×	×
B024				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×
B025				×	×	$\checkmark$	×	$\checkmark$
B026				$\checkmark$	$\checkmark$	×	×	$\checkmark$
B027				✓	$\checkmark$	✓	×	$\checkmark$
B028				$\checkmark$	$\checkmark$	×	×	×

# Vol 2: Appendix 52. Trust B: Synthesis of WAD

# Vol 2: Appendix 53. Trust A: Similarities between WAI action cards and WAD responses.

First receiver	Common WAI and WAD themes
ED Reception staff	Contain, escalate (clinical and organisational), access relevant equipment, PPE
ED nurse in charge	Recognise event occurring, manage, isolate and contain, liaise, organisational escalation, protect, decontamination, manage staff
ED doctor in charge	Take lead, liaise and communicate, follow guidelines, escalate (organisational/clinical), diagnose, treat
Decon nurse team leader (Band 6)	Liaise and communicate, Implement PPE
Triage/Disrobing nurse (Band 6) (dry decontamination)	PPE, liaise and communicate, isolate and contain, protect
Triage/Disrobing nurse (wet decontamination) ( <i>Band 6</i> )	Liaise and communicate, isolate and contain, PPE
Unqualified (HCA)	Decontaminate, PPE
Timing board nurse?	PPE, liaise and communicate
Exit nurse (Band 5 and HCA)	Liaise and communicate
Assessment doctor (doctors)	Escalate (organisational), liaise, treat, clinically assess
PPE buddy donning Powered Respirator Suit (PRPS) (HCA)	Liaise and communicate, don PPE, prevent cross contamination, protect staff
PPE buddy doffing PRPS suit (HCA)	Liaise and communicate, prevent cross contamination, protect staff
PPE buddy (enhanced biological precautions) (Band 5)	PPE, protect, isolate and contain, don PPE
PPE buddy strict biological precautions (Band 5)	Isolate and contain, PPE (all tasks), protect
Porter	Assist, liaise and communicate
Security officer	PPE, provide access, secure, escalate (organisational)
Medical physicist	Liaise and communicate, PPE, equipment, isolate and contain

# Vol 2: Appendix 54. Trust A: Differences between WAI action

# cards and WAD responses.

First receiver	WAI differences	WAD differences
ED Reception staff	Document	Treat
ED nurse in charge	Document	Treat/provide patient care, PPE.
ED doctor in charge	Document	Isolate and contain, PPE, protect staff,
		prevent cross contamination, investigate
Decon nurse team	Document, decontaminate,	Escalate, investigate/*, diagnose, treat,
leader (B6)	equipment, manage staff	
Triage/Disrobing nurse	Document, clinically	Escalate (organisational/clinical),
(dry decontamination)	asses/triage, identify/detect,	investigate/* treat, diagnose, treat,
	manage staff, access/provide equipment, team,	investigate/•
	decontaminate	
Triage/Disrobing nurse	Document, access/provide	Protect staff, escalate (organisational and
(wet decontamination)	equipment, manage casualties,	clinical), diagnose, treat, investigate/*
(,	decontaminate, team, clinically	
	asses/triage, identify/detect	
Unqualified (HCA)	Document, communicate,	Isolate and contain, prevent cross
	access/provide equipment,	contamination, manage influx of casualties,
	time	liaise and communicate, escalate
		(organisational/clinical), treat, investigate/*
Timing board nurse	Document, access/provide	Isolate and contain, protect (staff), Escalate
	equipment, manage staff, time,	(organisational/clinical), treat, investigate/•
Evit numer	assist	lealate and contain DDE protect (staff)
Exit nurse	Document, access/provide relevant equipment,	Isolate and contain, PPE, protect (staff), treat, escalate (organisational/clinical),
	identify/detect, clinically	investigate/•
	asses/triage	investigate,
Assessment doctor	Document, access relevant	Take lead, take notification of casualties,
	equipment	isolate and contain, don PPE, protect,
		capacity, diagnose, guidance, diagnose,
		patient care/treat, investigate/*
PPE buddy donning	Initiate recover from CBRN	Escalate (clinical/organisational), manage
Powered Respirator Suit	incident, assist, check,	influx of patients, treat, decontamination,
(PRPS)	access/provide relevant	investigate/*
DDE buddy doffing DDDS	equipment	Icolate and contain dan DDE manage influx
PPE buddy doffing PRPS suit	Document	Isolate and contain, don PPE, manage influx of patients, treat, carry out
Suit		decontamination, escalate
		(clinical/organisational), investigate/•
PPE buddy (enhanced	-	Escalate (clinical/organisational),
biological precautions)		investigate/•
PPE buddy strict	Communicate	Escalate (clinical/organisational), treat,
biological precautions		investigate/•
Porter	Document	Isolate and contain, don PPE, have patient
		awareness and sensitivity
Security officer	Document	Manage
Medical physicist	Document, advise, protect	Escalate (clinical/organisational), patient
	(self/staff/environment)	care/treatment, decontaminate, monitoring

Vol 2: Appendix 55. Trust B: Similarities between WAI action

## cards and WAD responses.

First receiver <sup>*#</sup>	Common WAI and WAD themes
Senior doctor	Manage incident, liaise and communicate, make decisions
Lead nurse	Manage incident, liaise and communicate, Escalate (clinical and organisational)
Admin staff	Liaise and communicate
Board control operator (Band 5 nurse)	Liaise and communicate
Decontamination lead (Band 6 or 7)	Liaise and communicate, manage incident, decontaminate, protect (staff) (B7)
Decontamination Triage officer (Band 5 nurse)	Liaise and communicate, clinically assess, decontaminate.
Loggist (Admin staff)	Liaise and communicate, document
Porter	Did not interview
Senior receptionist	Liaise and communicate
P1 lead doctor	Lead/manage incident, liaise and
(Allocation based on time of day/mostly senior – doctors HTA used)	communicate, clinically assess, and PPE
P2 lead doctor (Allocation based on time of day/mostly senior – doctors HTA used)	Lead/manage, liaise and communicate, and clinically asses
P3 lead doctor (Allocation based on time of day/mostly senior – doctors HTA used)	Lead/manage, liaise and communicate, and clinically asses
Triage clinician (Doctors HTA used)	Manage incident, clinically assess, liaise and communicate

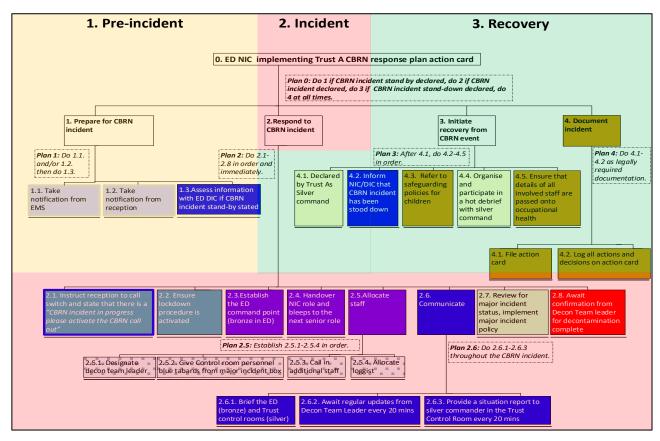
\*No action card for security officers  $\,$ <sup>#</sup> No specific action cards for HCAs

# Vol 2: Appendix 56. Trust B: Differences between WAI action

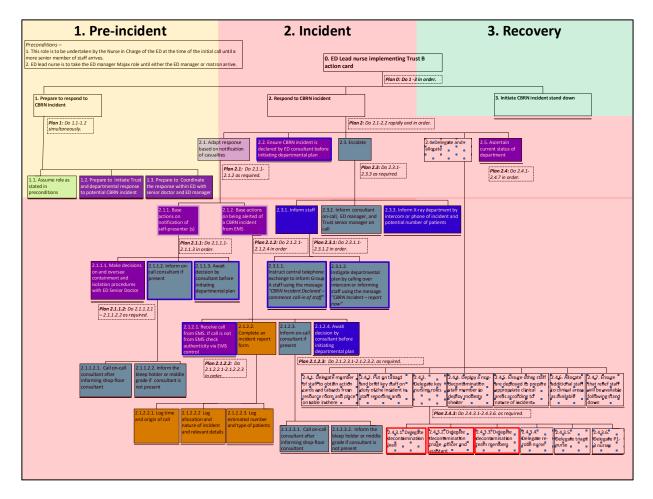
# cards and WAD responses.

First receiver*#	WAI differences	WAD differences
Senior doctor	-	Recognise event occurring, manage staff, isolate and contain,
		secure department, prevent cross contamination, have incident
		knowledge, escalate (organisational), follow guidance, establish
		teams, provide equipment, decontaminate, investigate
		(presentation), detect/identify agent, clinically assess, treat.
Lead nurse	Document, manage	Isolate and contain, protect (staff), don PPE, decontamination,
	staff	clinically assess, treat, investigate presenting condition.
Admin staff	Support	Clinically escalate, isolate and contain, guidance, patient flow,
		investigate presentation, consider decontamination, document.
Board control	Protect (team), time,	Isolate and contain, don PPE, decontaminate, escalate
operator	document, manage	(organisational and clinical), treat, clinically assess, investigate
	incident	presentation
Decontamination	Document, organise	(B7) Isolate and contain, don PPE, assess and treat, investigate
lead	equipment	presenting condition
	equipment	(B6) Isolate and contain, escalate (clinical/organisational) treat,
		investigate (presentation)
Decontamination	Support, protect	Isolate and contain, don PPE, escalate (organisational/clinical),
Triage officer	(staff), manage	treat, clinically assess, investigate presentation
inage officer	incident, monitor	treat, chilically assess, investigate presentation
Loggist	Document	Clinically escalate, isolate and contain, follow guidance, patient
Loggist	Document	
Dortor		flow, investigate presentation, decontamination, document Did not interview
Porter	NA	
Senior receptionist	Manage staff,	Clinically escalate, isolate and contain, follow guidance, patient
	document.	flow, investigate presentation, consider decontamination,
		document.
P1 lead doctor	Document	Isolate and contain, PPE, make decisions, protect (staff), escalate
		(organisational and clinical), treat, investigate (presentation and
		symptoms).
P2 lead doctor	Document	Isolate and contain, PPE, make decisions, protect (staff) escalate
		(organisational/clinical), treat, investigate (symptoms and
		presenting condition).
P3 lead doctor	Document	Isolate and contain, PPE, make decisions, protect (staff) escalate
		(organisational/clinical), treat, investigate (symptoms and
		presenting condition).
Triage clinician	Document	PPE, make decisions, protect (staff), escalate
		(organisational/clinical) investigate (symptoms and presenting
		condition), treat.
Security	No security action	Isolate and contain, liaise and communicate, escalate
	card	(organisational), assist ED, protect patients and staff

#### Vol 2: Appendix 57. Comparing WAD across NICs



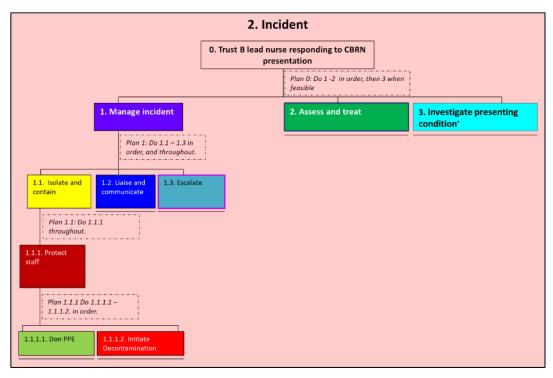
A57 1: Trust A: NIC action card



A57 2: Trust B Lead nurse

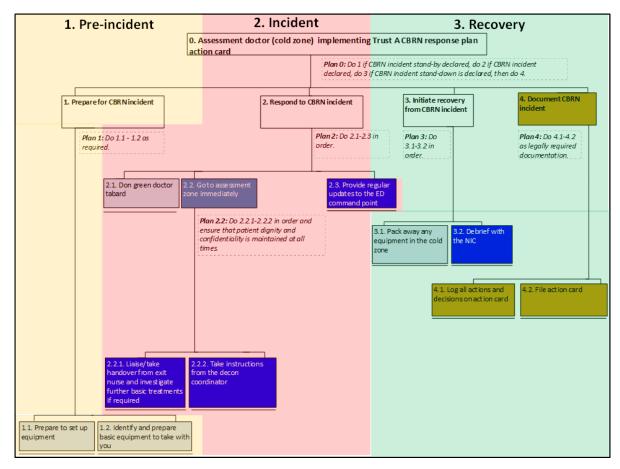
1. Pre-incident	2. Incident
	0. Trust A NIC responding to CBRN presentation
	Plan 0: Do 1 -3 in order.
1. Recognise CBRN threat	2. Take lead 3. Provide patient care
	Plan 2: Do 2.1 - 2.3 in         Plan 3: Do 3.1 - 3.2 as           order, and do 2.4         feasible.           throughout.         feasible.
2.1. Isolate and Contain	2.2. Llaise and communicate         2.3. Escalate         2.4. Protect staff and environment         2.5. Manage staff
	Plan 2.4: Do 2.4.1 and 2.4.2 in order.
	2.4.1. Organise donning PPE 2.4.2. Organise decontamination
	3.1. Investigate" 3.2. Treat

A57 3: Trust A: NIC responding to a CBRN event



A57 4: Trust B lead nurses responding to as CBRN event

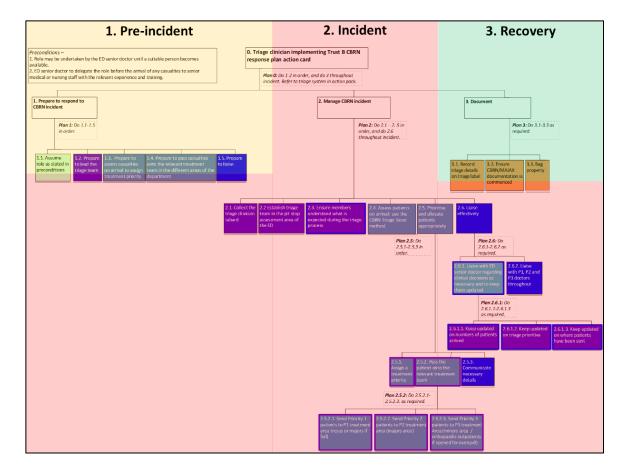
#### Vol 2: Appendix 58. Comparing WAD across doctors



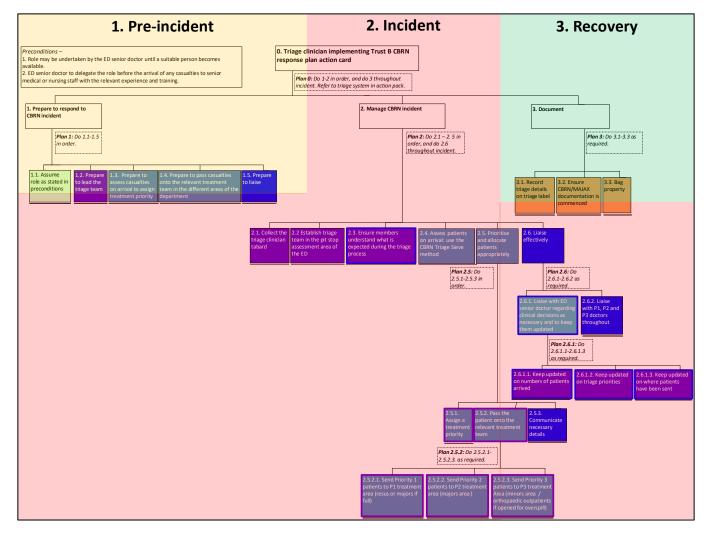
A58 1: Trust A: Assessment doctor action card

1. Pre-incident	2. Incident
Preconditions – 1. ED senior doc to assign this role before the arrival of casualties. 2. A more senior clinician may take over this role as more staff become available.	0. ED P1 lead doctor implementing Trust B action card Plan 0: Do 1-2 in order and use algorithms and supporting documents in action pack.
1. Prepare to respond to CBRN incident Plan 1: Do 1.1-1.5. in order.	2. Manage CBRN incident Plan 2: Do 2.1-2.5 in order. Ensure 2.7 and 2.8 throughout.
2.1. Put on P1 lead doctor tabard P2 lead doctor tabard P1 lead doctor tabard P1 lead prief team in P1 treatment area (Resuscitation room) P1 lead treatment clinic of communit through yourself of clinic of clinic of clinic of through yourself of clinic of clinic of clinic of through yourself of clinic of through yourself of clinic of through yourself of clinic of clinic of through yourself of clinic of through yourself of	ication of casualties ensuring assessment of casualties as they and when area within the resuscitation designation/controlling of dirty effectively
as stated in priority 1 treatment to liaise and not	i. Ensure clinical tes are maintained all cases       1.5. Set priorities for the review and definitive treatment of casualties         2.8.1 Communicate staffing and resource requirements to ED senior doctor or ED lead nurse as necessary       2.8.2. Liaise with ED senior doctor to update on status of casualties, likely definitive care and specific patient outcomes       2.8.4 Liaise with and oversee the input of anaesthetics/TU, medical, respiratory colleagues etc.

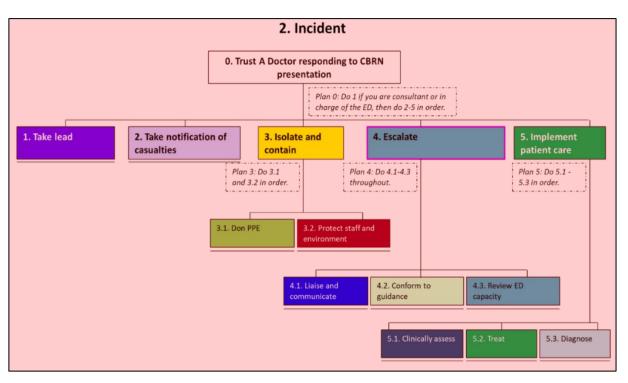
A58 2: Trust B: P1 doctor response to CBRN event



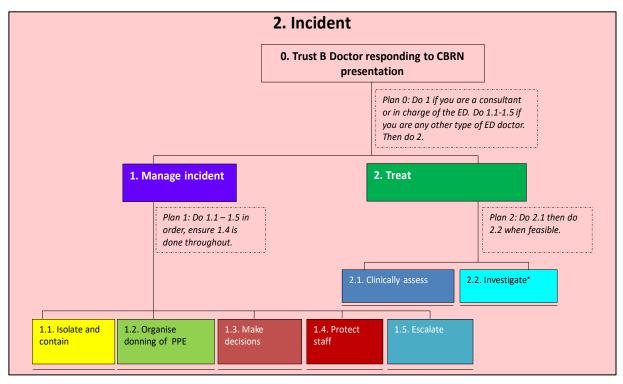
A58 3: Trust B: Triage clinician response to CBRN event



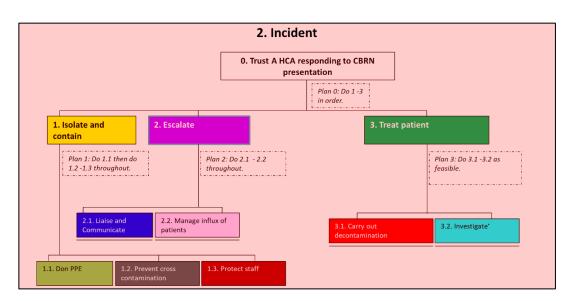
A58 4: Trust B: Triage clinician response to CBRN event



A58 5: Trust A: Doctor response to CBRN event

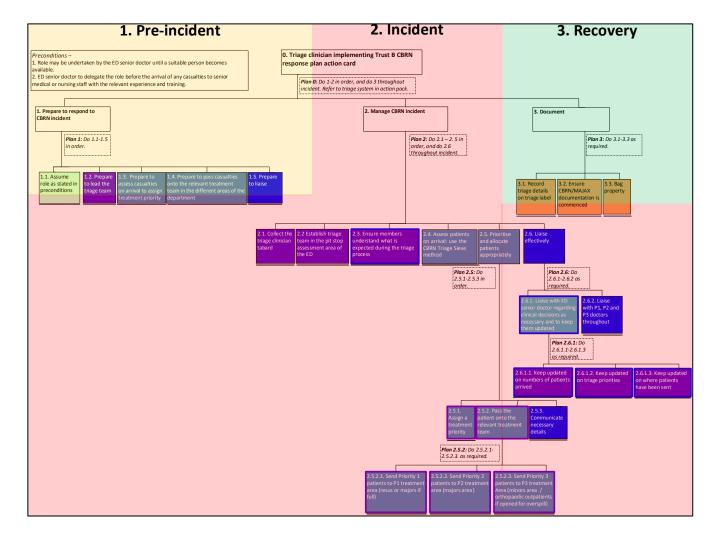


A58 6: Trust B: Doctor responding to a CBRN event

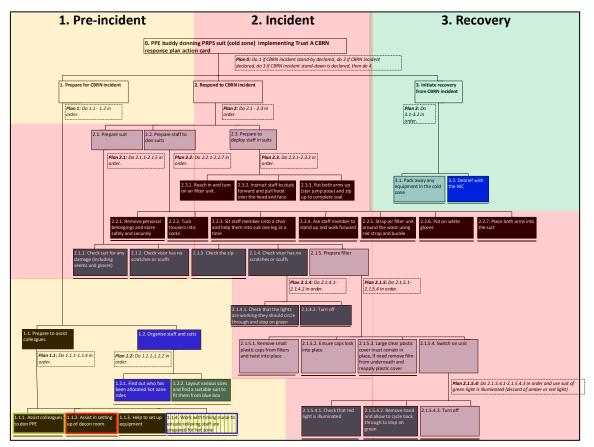


## Vol 2: Appendix 59. Comparing WAD across HCAs

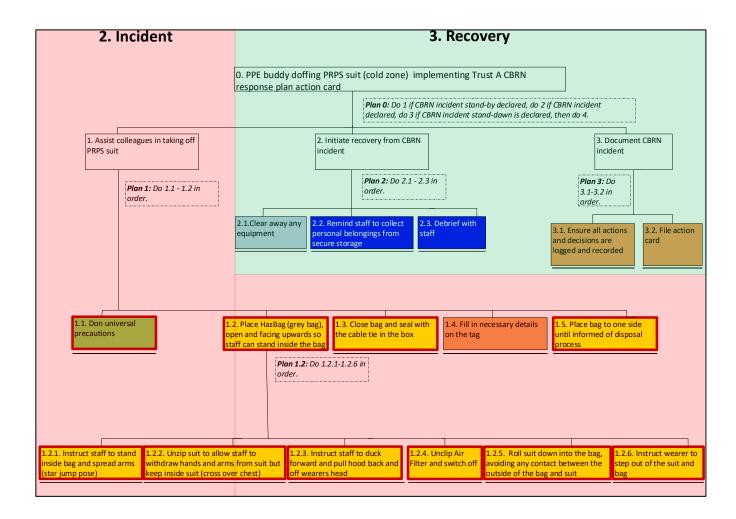
A59 1: Trust A: HCA responding to a CBRN event



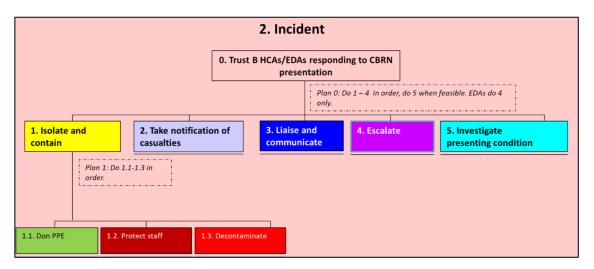
A59 2: Trust A: HCA action card



A59 3: Trust A: PPE buddy donning PRPS suit (HCA)

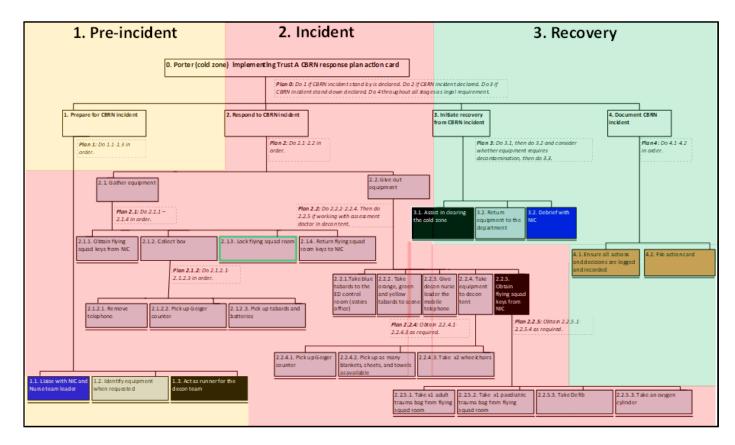


A59 4: Trust A: PPE buddy doffing PRPS suit (HCA)

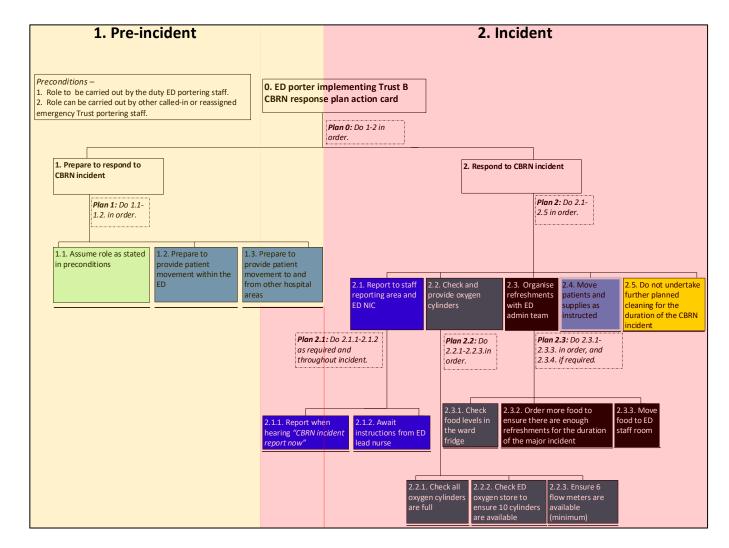


A59 5: Trust B: HCA responding to a CBRN event

## Vol 2: Appendix 60. Comparing WAD across Porters



A60 1: Trust A: Porter action card

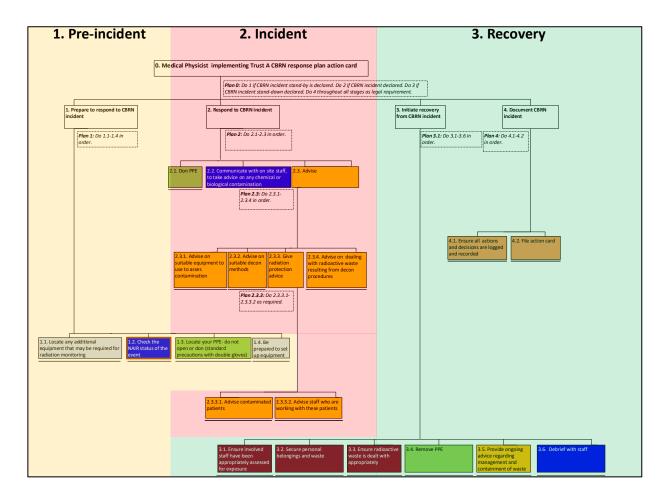


A60 2: Trust B: Porter action card

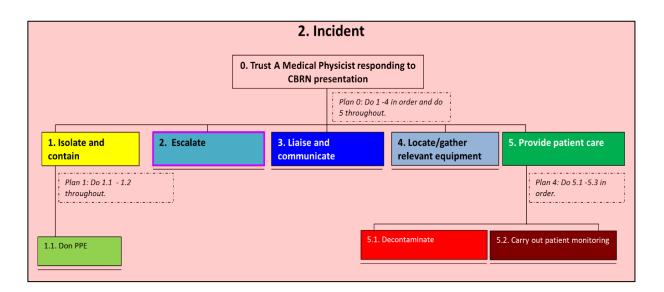
		2. Incident 0. Trust A Porter responding to CBRN presentation		BRN	
			Plan 0: Do 1 -3 throughout.	and do 4	7
1. Isolate and contain	2. Liaise and communicate	3. Assist ED		4. Have patien sensitivity	nt awareness and
Plan 1: Do 1.1 throu	ighout.				
.1. Don PPE					

A60 3: Trust A porter's response to CBRN event

## Vol 2: Appendix 61. WAI vs WAD for the medical physicist



A61 1: Trust A: Medical physicist action card



A61 2: Trust A: Medical physicist response to CBRN event