

[HOSPITAL / HEALTH AUTHORITY NAME]

MASS-CASUALTY INCIDENT AND DISASTER RESPONSE

Protocol 56: All-Hazards Activation; Hospital Incident Command; Facility-Based Mass-Casualty Triage; Clinical Zones; Patient Tracking; Surge; CBRN Safety; Family Reunification; Fatality Management; Recovery; and Quality Governance

DRAFT FOR EMERGENCY MEDICINE, NURSING, HOSPITAL EXECUTIVE / INCIDENT COMMAND, SURGERY, ANAESTHESIA, CRITICAL CARE, PAEDIATRICS, OBSTETRICS, AMBULANCE SERVICES, EMERGENCY MANAGEMENT, POLICE, FIRE / HAZMAT, PUBLIC HEALTH, LABORATORY, IMAGING, BLOOD BANK, PHARMACY, FACILITIES, SECURITY, COMMUNICATIONS, SOCIAL SERVICES, MORTUARY, AND CLINICAL GOVERNANCE

STATUS: This is a draft all-hazards clinical-governance and operational-safety document. It must be integrated with the national and hospital disaster plans, incident-command structure, ambulance and emergency-services arrangements, fire and evacuation plans, CBRN / decontamination procedures, security plan, regional referral agreements, blood and oxygen contingency plans, mass-fatality plan, communication systems, and current Saint Kitts and Nevis law before implementation.

CORE RULE: A mass-casualty incident exists when the number, acuity or special needs of actual or anticipated patients exceed the facility ability to manage them using usual resources and procedures. Activate early, establish command, protect staff and infrastructure, triage every arrival, preserve one-way patient flow, and move patients rapidly to the care area where they are most likely to benefit.

TRIAGE RULE: During full activation, use one approved facility-based mass-casualty triage system for all arrivals, including unrelated emergencies. Triage is dynamic: reassess after interventions, deterioration, delay or a change in available resources. A colour category is a current priority, not a permanent prognosis or a substitute for clinical care.

CONTAMINATION / SECURITY OVERRIDE: Do not allow a contaminated, armed or otherwise uncontrolled threat to enter the clinical care area. Stop entry, protect staff, establish hot / warm / cold zones, request fire / HAZMAT / police support, and perform life-saving actions only within the protection and competence available. Staff safety and facility function are prerequisites for sustaining patient care.

Document control	Details
Document owner	Emergency Department / Hospital Emergency Management Committee / Medical Services Directorate / Nursing Services / Executive Management / Clinical Governance
Clinical leads	Emergency Medicine; Nursing; Surgery; Anaesthesia; Critical Care; Paediatrics; Obstetrics; Ambulance Services; Emergency Management; Public Health; IPC; Blood Bank; Pharmacy; Laboratory; Imaging; Facilities; Security; Communications; Social Services; Mortuary
Applies to	All hospital staff, patients, accompanying persons, responders and approved volunteers during an actual or anticipated incident that may overwhelm routine capacity or disrupt essential hospital function.
Hazards included	Mass transport crash; fire; explosion; structural collapse; earthquake; hurricane; flood; maritime or aviation incident; mass gathering; violence; chemical, biological, radiological or nuclear exposure; infectious surge; infrastructure failure; and other all-hazards events.
Exclusions	This protocol does not replace scene command, prehospital triage, specialist CBRN procedures, the hospital evacuation plan, business-continuity plan, mass-fatality plan, or incident-specific clinical protocols. These plans may operate concurrently.
Interfaces	Protocol 1 ED Care Pathway; Protocol 3 Triage; Protocol 4 Assessment and Documentation; Protocol 6 Deterioration; Protocol 31 Major Trauma; Protocol 35 Burns / Wounds; Protocol 36 Environmental Emergencies; Protocol 40 Paediatrics; Protocol 48 Airway; Protocol 49 Major Haemorrhage; Protocol 52 Palliative Emergencies and Death; Protocol 54 IPC; Protocol 55 Crowding / Surge; Protocol 57 Downtime; Protocol 58 Security / Staff Safety; Protocol 59 Quality Assurance.
Version / status	Draft 1.0 for local multidisciplinary, emergency-services, public-health, legal, executive and clinical-governance validation.
Approval date / review	Approval: _____ Review: _____ Immediate review after every activation, exercise revealing a major gap, relevant law / national-plan change, facility redesign or major equipment / staffing change.
Mandatory local documents	Hospital emergency operations plan; activation matrix; command roster; hazard vulnerability assessment; site and zone maps; call-out list; communications plan; mutual-aid and regional-transfer agreements; CBRN plan; mass-fatality plan; family-reunification plan; staff welfare plan; downtime packs; recovery and debrief process.

1. Purpose

To provide a practical, auditable framework for preparing for, activating, managing and recovering from a mass-casualty incident or disaster affecting the emergency department and hospital. The protocol prioritizes early command, staff and facility safety, rapid facility-based triage, effective clinical zones, patient tracking, resource stewardship, communication, definitive disposition, compassionate care, continuity of routine emergencies and structured recovery.

2. Core principles

- Activate on anticipated demand and operational risk, not only after the emergency department is visibly overwhelmed. A credible warning may justify heightened readiness before casualties arrive.
- Use an all-hazards structure with incident-specific modules. Command, communication, safety, triage, tracking, zones, logistics and recovery should remain familiar across different hazards.

- The incident commander coordinates the response; clinical priority remains with designated clinical leads. Roles, authority, reporting lines and handovers must be explicit.
- During true resource mismatch, allocate scarce resources to those most likely to benefit while providing respectful assessment, symptom relief and non-abandonment for every patient.
- Use the simplest safe processes that preserve accuracy. Minimize duplicate registration, repeated handovers, low-value testing and treatment that delays definitive haemorrhage control, surgery, critical care or transfer.
- Protect routine emergency care. Stroke, myocardial infarction, sepsis, obstetric emergency, child illness and other unrelated time-critical conditions continue during a disaster.
- Separate contaminated from clean patients, public from clinical zones, walking from non-walking casualties, and family / media activity from clinical operations.
- Track every patient, unidentified person, transfer and death with a unique incident identifier and a single source of truth for location and disposition.
- Children, pregnant patients, older adults, people with disability, non-English speakers, unaccompanied persons and those with mental-health or safeguarding needs require planned adaptations, not improvised exceptions.
- Triage and resource decisions must be reassessed as patients and capacity change. Recovery includes delayed care, staff wellbeing, replenishment, documentation, family needs and formal learning.

3. Scope and definitions

Term	Working definition
Mass-casualty incident (MCI)	An event producing more patients, often with higher acuity or special needs, than the facility can manage using usual resources and procedures; the threshold varies with time, staffing, capacity and hazard.
Disaster	A serious disruption that exceeds the affected community or organization ability to cope using routine arrangements and may involve casualty surge, infrastructure damage or both.
Heightened readiness	A preparatory phase when an incident is possible or casualty numbers / timing are uncertain; command and critical services are alerted and readiness actions begin without full reconfiguration.
Full activation	Formal implementation of the MCI plan, incident command, mass-casualty triage, designated zones, tracking and surge actions.
Hospital incident command	A scalable management structure that assigns command, operations, planning, logistics, safety, liaison, communication and finance / administration functions.
MC-IITT	Mass Casualty - Interagency Integrated Triage Tool: a facility-based five-colour system for initial prioritization during MCI conditions.
Red / Yellow / Green	Immediate high-acuity non-walking / delayed non-walking without red criteria / walking casualty categories, subject to reassessment.
Blue	A subset of red patients who meet locally agreed criteria for medical futility, need palliative services, or require curative treatment beyond current capacity; assignment requires senior clinical decision and reassessment.
Grey	Deceased: not breathing after basic airway manoeuvres and no pulse, confirmed according to local policy.
CBRN	Chemical, biological, radiological or nuclear hazard, including contaminated patients, environment, clothing or equipment.
Hot / warm / cold zones	Contaminated or immediately hazardous area / controlled decontamination transition / clean clinical area.
Recovery	The phase in which routine function, delayed care, staffing, supplies, infrastructure, records, family support and organizational learning are restored.

4. Governance and baseline preparedness

- The hospital emergency management committee must maintain an all-hazards plan based on a current hazard vulnerability assessment, realistic casualty estimates, facility limitations and seasonal / event-specific risks.
- A 24-hour activation authority and backup must be named. Staff must know how to raise an alert when information is incomplete, communications fail or senior leaders are not yet present.
- Pre-designate the incident command post, alternative command site, triage points, red, yellow, green, blue and grey areas, staff pool, family area, media area, decontamination area, ambulance route and overflow locations.
- Maintain action cards, high-visibility role identifiers, maps, signage, radios, paper documentation, unique incident identifiers, patient trackers, clinical kits and reliable access to keys / stores.
- Validate maximum clinical teams and treatment positions that can be supported by staff, oxygen, suction, monitoring, power, water, blood, medicines, equipment, waste handling and evacuation routes.
- Establish mutual-aid arrangements with ambulance, police, fire / HAZMAT, public health, other hospitals, private services, air / sea transport, funeral / mortuary services and national emergency management.
- Call-out and credentialing processes must distinguish employed staff, approved reserve staff, external professionals and spontaneous volunteers. No person provides unsupervised clinical care without verified identity, competence, role and indemnity arrangements.
- Conduct notification tests and tabletop exercises at least annually, a functional or full-scale exercise at intervals set by the emergency committee, and targeted drills for decontamination, communications downtime and family reunification.
- Review plans after exercises, activations, new construction, major service changes and changes in national hazards or referral routes. Corrective actions require an owner, deadline and executive oversight.

5. Recognition, notification and activation

ACTIVATION PRINCIPLE: The threshold depends on patient number, acuity, arrival rate, special hazard and resources available at that moment. The same event may require full activation at night but only heightened readiness during a fully staffed day.

Phase	Typical triggers	Minimum response
Heightened readiness	Credible report of incident; uncertain casualty number; severe weather warning; large public event concern; escalating violence; possible contamination; external hospital failure; transport disruption.	Verify report; notify command and ED leads; establish external liaison; assess beds, staff, blood, oxygen, theatre, ICU, paediatrics and transport; prepare zones and kits; protect communications; maintain routine care.
Phase 1 - Full activation	Actual or expected casualty load exceeds routine process; multiple red patients; rapid unannounced arrivals; need for MCI triage / zones; CBRN event; facility damage; national / regional request.	Announce activation; establish incident command; secure perimeter; open triage and zones; deploy tracking; mobilize staff and supplies; create hospital capacity; notify partners; issue situation reports.
Phase 2 - De-escalation	Last major casualty wave believed to have arrived; arrival rate declining; definitive destinations available; no uncontrolled hazard; command judges surge can be reduced safely.	Continue tracking and reassessment; close zones sequentially; reconcile patients / deaths / transfers; maintain residual staffing; communicate status; do not stand down solely because arrivals pause.
Phase 3 - Recovery	Immediate surge has ended but delayed care, inpatient burden, family needs, staff fatigue, supply depletion, infrastructure damage or data reconciliation continue.	Restore routine services safely; review all blue patients; replenish; complete records; support staff / families; investigate incidents; debrief; produce after-action report and improvement plan.

- **Critical immediate escalation triggers:** uncontrolled contamination; active violence or weapon threat; structural instability, fire or smoke; loss of oxygen, power, water or communications affecting care; no secure patient route; multiple untriaged critically ill arrivals; inability to identify or locate patients; or any situation threatening facility continuity.
- **Notification message:** state that this is an alert or activation, incident type and location, estimated patient numbers / acuity, contamination or security risk, expected arrival time and route, receiving entrance, command location, staff reporting instructions and next update time.
- **Authentication:** verify extraordinary messages through a known callback, radio channel or emergency-management contact when possible, but do not delay protective action when the threat is credible and imminent.

6. Hospital incident command and role allocation

Role	Initial responsibilities
Incident commander	Assume authority; confirm activation level and objectives; establish command post; approve safety controls and public messages; coordinate hospital and external system; authorize de-escalation and recovery.
Clinical lead	Set clinical priorities; supervise red / yellow / blue care; coordinate surgery, anaesthesia, ICU, paediatrics, obstetrics and specialty disposition; arbitrate scarce clinical resources with senior colleagues.
Triage lead	Establish and remain at triage point until formally relieved; apply approved MCI triage; ensure identifiers; direct patient flow; monitor re-triage and report category counts.
Operations / flow lead	Clear and expand clinical areas; move existing patients safely; coordinate wards, theatre, ICU, imaging and transfers; maintain one-way flow and protected routine-emergency capacity.
Resource / logistics lead	Mobilize trained staff, transporters, kits, medicines, oxygen, blood, equipment, food, water, waste, lighting, charging and maintenance; forecast depletion and request mutual aid.
Safety / IPC / CBRN lead	Assess hazards; define PPE, zones, decontamination and exposure controls; monitor staff safety, fire routes and environmental conditions; stop unsafe activity.
Security lead	Control perimeter, entrances, traffic, weapons, crowds, restricted areas, evidence and staff safety; support family / media separation and missing-person procedures.
Planning / tracking lead	Maintain incident log, patient tracker, bed and resource status, forecasts, maps, action plan, situation reports and documentation continuity.
Liaison officer	Maintain closed-loop contact with scene command, ambulance, police, fire / HAZMAT, public health, emergency management, other facilities and transport providers.
Communications / public information lead	Issue one verified internal and external message; coordinate media and social-media response; protect confidentiality; counter harmful misinformation.
Family / psychosocial lead	Operate family reception and reunification; manage identification enquiries, interpreters, safeguarding, spiritual care, bereavement and psychological first aid.
Scribe / finance-administration	Time-stamp decisions, staff deployments, requests, costs, supplies, injuries and legal / regulatory notifications; support later reconciliation and review.

Roles may be combined in a small hospital, but essential functions must not disappear. Every role handover should state the incident picture, current objectives, unresolved risks, resources, decisions, next update and location of records.

7. First 15 minutes after full activation

1. Give the alert using the approved channel and wording. Confirm who is incident commander, clinical lead, triage lead, nurse lead, safety lead and scribe; issue high-visibility role identifiers.
2. Obtain a METHANE-style incident report where possible: major incident declared, exact location, type of incident, hazards, access / egress, number and severity of casualties, and emergency services present / required.
3. Secure the perimeter and create a single controlled casualty entrance with one-way vehicle and patient flow. Keep public, media, family and staff reporting away from ambulance and clinical routes.
4. Check for contamination, active violence, fire, smoke or structural risk before patients enter. Establish decontamination and security controls outside the clean clinical area when indicated.

5. Move suitable existing ED patients to pre-approved buffer, ward, observation or discharge pathways with documented handover. Preserve at least one resuscitation position for unrelated critical emergencies.
6. Open the triage point and red, yellow, green, blue and grey pathways according to actual need. Deploy signs, barriers, lighting, identifiers, patient folders and trackers.
7. Open MCI, triage, red and green kits; mobilize stretchers, wheelchairs and transport teams. Confirm oxygen, suction, power, blood, medicines, laboratory, imaging and operating-theatre capability.
8. Call in and pool staff through approved channels. Assign teams by role and zone; do not allow self-deployment into clinical areas. Record arrival, competence, assignment and relief time.
9. Notify surgery, anaesthesia, ICU, paediatrics, obstetrics, blood bank, laboratory, imaging, pharmacy, facilities, security, IPC, mortuary and hospital administration. Identify immediate constraints.
10. Establish paper or electronic patient tracking from first contact. Assign a unique incident identifier before movement whenever possible; unidentified patients receive a temporary identity, never a guessed name.
11. Send the first situation report to external partners: capability, hazards, receiving entrance, categories / numbers, beds, blood / oxygen status, transfer needs and next update time.
12. Set the first operational objectives and review time. Repeat a structured command huddle at least every 15-30 minutes during rapid change, then at an interval appropriate to incident tempo.

8. Facility layout, zones and patient flow

Area	Minimum function and controls
Perimeter / vehicle route	Controlled access; one-way casualty drop-off; ambulance staging; no blocked fire route; lighting; signage; separation from staff, public and media traffic.
Contamination screen / decontamination	Outside clean zone and upstream of clinical entry; trained team; PPE; privacy; water / runoff control; dry decontamination capability; contaminated-property control; warm-zone medical support.
Initial triage point	Preferably at a single entrance outside the building; rapid walking / non-walking sort, basic airway / catastrophic haemorrhage action, identifier and direction; no prolonged treatment.
Secondary triage point	Near but outside the main ED when feasible; separates non-walking red from yellow and identifies grey according to local policy; direct route to zones.
Red zone	Highest concentration of experienced staff, monitoring, airway, haemorrhage-control and resuscitation resources; rapid ABCDE care and immediate disposition to theatre, ICU, ward or transfer.
Yellow zone	Non-walking patients without red criteria; assessment, treatment, monitoring and re-triage; sufficiently close to red zone for rapid escalation.
Green zone	Separate from the ED; rapid clinical assessment of all walking casualties, first aid, analgesia, wound care, psychological first aid, re-triage, discharge or admission.
Blue zone	Quiet, dignified, supervised area preferably adjacent to red zone; symptom relief, communication, psychosocial / spiritual care and repeated senior review as resources change.
Grey / temporary mortuary	Secure, private, cool and separate; legal confirmation, identification, property and evidence control, family support and capacity expansion under mass-fatality plan.
Staff pool / logistics	Credentialling, briefing, assignment, rest, PPE, food, hydration, equipment issue and return; spontaneous volunteers wait outside clinical zones until approved.
Family / reunification	Separate secure reception with verified information, registration, interpreters, psychosocial and safeguarding support; no access to clinical or mortuary areas without authorization.
Command / media	Command post protected from noise and public traffic; media area outside clinical operations; only authorized spokesperson releases information.

FLOW RULE: All casualty movement should be unidirectional from controlled entry to triage, clinical zone and definitive destination. Do not allow patients, families, equipment or contaminated waste to move against the clean flow without explicit control.

9. Facility-based mass-casualty triage

Category	MC-IITT working criteria	Immediate destination / action
RED	Non-walking with airway compromise, respiratory distress, major / catastrophic haemorrhage, absent radial pulse or capillary refill greater than 3 seconds, altered mental state / unresponsiveness, massive burn greater than 40% TBSA, high-risk vital signs, or clinician concern.	Red zone. Immediate ABCDE / catastrophic haemorrhage care, rapid senior assessment and definitive disposition.
YELLOW	Non-walking without red signs or high-risk vital signs.	Yellow zone. Prompt assessment, treatment, monitoring and repeated triage; upgrade immediately if red criteria emerge.
GREEN	Walking patient at initial sort. Walking does not prove minor injury.	Green zone. Rapid assessment, identify hidden red criteria, treat, observe, admit or discharge with documentation.
BLUE	Subset of red: meets criteria for medical futility, requires palliative services, or requires curative treatment beyond current capacity. Senior clinical decision only.	Blue zone. Active comfort care, communication and dignity. Reassess if condition or resources change; category may be revised.
GREY	Not breathing after basic airway manoeuvres and no pulse, confirmed by a locally authorized clinician.	Grey / temporary mortuary route. Preserve identification, property, evidence and dignity; follow legal and mass-fatality procedure.

- All arrivals during activation, including unrelated emergencies and self-presenters, enter the approved triage pathway unless a separate safe route has been formally maintained.
- Initial triage should be rapid. At the triage point, perform only immediately necessary actions such as airway opening, catastrophic external haemorrhage control and direction to the correct zone.

- Step 1 separates walking from non-walking. Step 2 assesses non-walking casualties for red criteria. A patient who can walk may still require red care after assessment.
- Document time, category, identifier, key findings and destination. The receiving zone must acknowledge the patient; no patient is sent to an undefined space.
- Re-triage on arrival to a zone, after intervention, before transfer, with deterioration, after prolonged delay and whenever resources materially change. Avoid down-triage before definitive treatment solely because a temporary intervention improved observations.
- Blue assignment is not made by a lone junior clinician and is never abandonment. Use pre-agreed ethical criteria, senior review, symptom relief, family communication and repeated reassessment.

10. Clinical care and definitive disposition

- **Red zone priorities:** catastrophic haemorrhage control, airway and ventilation, oxygenation, chest decompression when indicated, shock treatment, pelvic stabilization, analgesia, burn care, antidote where appropriate, rapid ultrasound / tests only when they change immediate action, and early surgery / ICU / transfer decision.
- **Damage-control approach:** prioritize interventions that rapidly prevent death or irreversible disability. Avoid prolonged low-yield diagnostics, repeated full histories and non-essential procedures that block resuscitation positions.
- **Definitive flow:** move patients out of red and yellow zones promptly to operating theatre, ICU / HDU, inpatient ward, specialist area, regional transfer or discharge. The emergency unit should not become a holding ward.
- **Blood and haemorrhage:** activate Protocol 49 when required; use locally approved emergency-release blood, major-haemorrhage packs, tranexamic acid, warming, calcium and laboratory / viscoelastic guidance. Forecast depletion and communicate restrictions early.
- **Imaging and laboratory:** use priority criteria and a single request / result tracking system. Consider point-of-care testing and bedside imaging. Reserve CT and specialist tests for decisions that change immediate disposition.
- **Surgery and critical care:** maintain a live priority list agreed by clinical lead, surgery, anaesthesia and ICU. Reassess priorities as physiology, operative benefit and resource availability change.
- **Analgesia and palliative care:** pain and distress treatment remain essential. Blue-zone care should include positioning, oxygen when beneficial, analgesia, management of breathlessness / agitation / secretions, family communication and spiritual / psychosocial support.
- **Routine emergencies:** maintain a clearly identified pathway and minimum resources for unrelated resuscitation, paediatric, obstetric, stroke, cardiac, sepsis and mental-health emergencies.

11. Surge capacity and scarce-resource stewardship

Domain	Escalation actions
Space	Clear pre-designated areas; discharge or transfer suitable existing patients; open staffed surge zones; protect ED, theatre, ICU, paediatric, obstetric and isolation capacity; assess fire, oxygen and evacuation safety before use.
Staff	Mobilize approved call-in roster; form teams with defined leader and tasks; redeploy trained staff; use action cards; schedule relief, hydration and rest; record exposure and injury; prohibit unsupervised spontaneous practice.
Stuff / supplies	Open sealed kits; establish runners; centralize high-use items; monitor oxygen, blood, airway equipment, dressings, analgesics, antibiotics, antidotes, PPE, power and water; request mutual aid before critical depletion.
Systems	Use incident command, radio / runner backup, paper downtime packs, patient tracker, situation reports, diagnostic prioritization, theatre / ICU priority lists and transfer coordination.
Regional capacity	Notify receiving hospitals early; share patient category, intervention needs and contamination status; distribute casualties according to capability; reserve scarce transport for patients most likely to benefit.
Resource-allocation decisions	Use senior multidisciplinary decisions, objective clinical information, consistent criteria, documentation and frequent reassessment. Avoid social worth, wealth, nationality, disability label or ability to advocate as allocation criteria.
Conservation / adaptation	Use approved conservation strategies only; clearly communicate substitutions, altered staffing ratios or reduced monitoring. Stop any adaptation when harm exceeds likely benefit.
Recovery reserve	Retain capacity for a second wave, staff relief, delayed complications and unrelated emergencies. Do not exhaust all blood, oxygen, medicines, staff or transport in the first hour without command review.

12. CBRN, contamination and infectious-hazard response

- Assume contamination when suggested by scene information, odour, powder, liquid, multiple similar symptoms, unexplained collapse, responder PPE, radiation warning, pesticide / industrial incident or patient report.
- Stop entry into the clean clinical zone. Notify fire / HAZMAT, public health, IPC, security and incident command. Establish hot, warm and cold zones with controlled access and a documented PPE level.
- Remove contaminated clothing and personal effects using trained procedure; this may substantially reduce contamination. Bag, label and secure property. Protect patient privacy and prevent hypothermia.
- Use dry or wet decontamination according to agent, urgency and local CBRN guidance. Prevent contaminated runoff, towels, equipment and staff from crossing into the cold zone.
- Perform only immediately life-saving actions before or during decontamination when the team has appropriate PPE and training. Do not sacrifice multiple staff to an uncontrolled exposure.
- Contaminated ambulatory and non-ambulatory patients require separate lanes. Children, infants, people with disability and those unable to self-decontaminate need assisted pathways and safeguarding.
- For biological events, apply source control, isolation and Protocol 54; decontamination is not automatically required. Coordinate testing, notification, exposure management and prophylaxis with public health.

- For radiation events, distinguish irradiation from contamination; use time, distance and shielding, contamination monitoring where available, dosimetry / exposure records, and specialist advice. Stabilization of life threats remains a priority once staff are protected.
- Antidotes, chelators, decorporation agents and specialist countermeasures must follow approved toxicology / public-health advice and stock-control procedures.

13. Identification, tracking and documentation

NO-LOST-PATIENT RULE: Every movement requires an identifier, origin, destination, time and receiving acknowledgment. The tracker is a clinical safety tool, not merely an administrative record.

Record	Minimum content
Unique incident identity	Pre-assigned number / barcode, temporary name if unidentified, age estimate, sex recorded as clinically relevant, photograph only under approved policy, distinguishing features and linked wristband / folder.
Triage record	Arrival time / route, category, red criteria or high-risk observations, contamination status, immediate intervention, triage clinician and first destination.
Clinical record	ABCDE findings, allergies / medicines when obtainable, interventions, medicines / blood, procedures, reassessments, category changes, senior decisions and handovers.
Patient tracker	Identifier, current zone / bed, responsible team, triage category, operative / ICU priority, destination, transfer / discharge / death time and outstanding action.
Property / evidence	Sealed and labelled property, clothing, valuables, samples and chain of custody; record who received each item and when.
Transfer / discharge	Identity, category, diagnosis / concern, treatment, contamination / infection status, destination, accepting clinician, transport, departure time and copies of records.
Incident log	Activation / deactivation, commands, objectives, resource requests, safety events, external messages, staffing, supply status, decisions and rationale.
Reconciliation	Final count by category and outcome, unidentified / missing patients, duplicate records, deaths, transfers, admissions, discharges, outstanding results and family notifications.

Use paper documentation immediately when electronic systems are slow, inaccessible or unsuitable for surge. Later electronic reconciliation must preserve the original time-stamped record; do not destroy or overwrite incident identifiers.

14. Communication, security, families and media

- Use plain language and closed-loop communication. Maintain primary and backup methods: radio, telephone, secure messaging, public-address system, runners and written boards. Avoid unapproved abbreviations or conflicting terminology.
- Issue regular situation reports with incident status, hazards, patient counts by category, hospital capacity, critical shortages, transfers, deaths, unmet needs, next operational period and next update time.
- Security controls all entrances, traffic, restricted zones, weapons, crowd movement and staff identification. Armed persons follow local police and hospital policy; active violence triggers Protocol 58 and police command.
- Family reception must be physically separate, staffed and linked to the tracker through an authorized information process. Do not publish casualty lists or confirm identity before verification and permitted notification.
- Use interpreters, communication aids and culturally appropriate support. Protect children and vulnerable adults from unauthorized collection; confirm identity and legal authority before reunification.
- Only the designated spokesperson communicates with media. Provide verified aggregate information, preserve patient confidentiality, correct misinformation and avoid speculation about cause, responsibility or unidentified casualties.
- Offer psychological first aid, bereavement support and spiritual care. Avoid compulsory single-session emotional debriefing; provide practical support, peer contact, confidential referral and follow-up for staff and responders.

15. Special populations and safeguarding

Population	Required adaptations
Children and infants	Paediatric triage thresholds, length-based equipment / dosing, family-centred care, thermal protection, identification with caregiver linkage, safeguarding and paediatric-capable destination.
Pregnancy / postpartum	Left lateral positioning when appropriate, maternal resuscitation first, fetal assessment when it does not delay maternal life-saving care, obstetric / neonatal team, haemorrhage preparedness and pregnancy-safe decontamination.
Older adults / frailty	Medication and anticoagulant history, atypical shock, delirium, hearing / vision aids, pressure / falls prevention, careful transfer and caregiver information.
Disability / communication need	Accessible route, mobility and communication aids, interpreter / sign support, allow essential support person when safe, do not infer prognosis from disability alone.
Mental-health / behavioural crisis	Low-stimulation area where possible, trauma-informed communication, suicide / violence assessment, medication continuity and proportionate security support.
Unaccompanied / unidentified	Temporary identifier, photograph only if approved, property documentation, safeguarding lead, family tracing and no release without verified authority.
Staff / responder casualty	Receive the same triage process; record occupational exposure; do not permit rank or professional status to override acuity priority.
Visitors / tourists / migrants	Provide clinically necessary emergency care, interpreter and consular / travel coordination as appropriate; identity or payment difficulty must not delay urgent treatment.

16. Deaths, body parts, forensic issues and mass fatalities

- Confirm death according to local law and hospital policy. Do not send an apparently deceased patient or body part through active clinical zones when a safe direct route is available.
- Treat deceased persons and body parts with dignity. Use unique identifiers, body / part labels, tamper-evident property control, location records and reconciliation with police / Coroner / mortuary systems.
- Preserve clothing, projectiles, fragments, swabs, photographs and other evidence only under approved clinical and chain-of-custody procedures. Life-saving care takes priority over evidence preservation.
- Do not release identity or permit viewing until identification and legal requirements are satisfied. Use a controlled family process with privacy, cultural / faith sensitivity and psychosocial support.
- Expand temporary mortuary capacity only under the mass-fatality plan, with security, refrigeration / cooling where available, infection-control measures, staff PPE, documentation and controlled release.
- Deaths, expected blue-zone deaths and deaths after attempted resuscitation require clinical documentation, certification / Coroner referral and family communication under Protocol 52 and local law.

17. De-escalation, recovery and staff support

1. The incident commander, advised by clinical, operations, safety and external liaison leads, decides de-escalation. Confirm that casualty waves, contamination, violence and infrastructure risks are controlled and that residual patients have safe destinations.
2. Close zones sequentially. Re-triage and account for every patient before movement; reconcile tracker, clinical areas, theatre, ICU, wards, transfers, morgue, ambulance and family lists.
3. Reassess all blue patients when resources improve. Review delayed investigations, surgery, medicines, vaccinations, prophylaxis, safeguarding, results, discharge follow-up and routine patients affected by disruption.
4. Restore routine staffing and services gradually. Maintain enhanced cover for delayed deterioration, second-wave arrivals, staff absence, supply shortage and inpatient surge.
5. Record staff injuries, exposures, fatigue, violence and psychological needs. Provide rest, food, hydration, transport home, confidential support and follow-up; rotate staff away from repeated high-distress roles.
6. Replenish and reseal kits; clean / decontaminate spaces and equipment; reconcile controlled medicines, blood, oxygen, PPE, property and evidence; inspect power, water, communications and waste systems.
7. Conduct a hot debrief at the end of the operational period focused on immediate safety and support, followed by a multidisciplinary after-action review using records and data. Avoid blame and preserve legal / quality evidence.
8. Produce an improvement plan with actions, owners, deadlines and executive review. Share learning with emergency services and regional partners and update training, maps, call lists, stock, mutual aid and protocols.

18. Responsibilities

Role / service	Ongoing responsibilities
Hospital executive / incident command	Authorize activation and system changes; obtain external support; protect legal, financial and business continuity; maintain executive oversight through recovery.
ED medical and nursing leads	Maintain triage, zones, resuscitation, routine emergency pathway, clinical teams, safety, documentation and handover.
Specialty services	Provide senior decision-makers; accept clinical ownership; create capacity; prioritize theatre / ICU / ward care; support transfer and follow-up.
Ambulance / external emergency services	Provide pre-alerts, scene information, contamination and security status, controlled distribution, safe handover and transport coordination.
Blood bank / laboratory / imaging / pharmacy	Activate surge plan; set priorities and turnaround expectations; track requests and critical results; forecast stock and communicate limitations.
Facilities / biomedical / ICT	Protect utilities, oxygen, ventilation, lighting, equipment, communications, access and alternate systems; repair and document failures.
IPC / occupational health / CBRN advisers	Set precautions and PPE; manage decontamination, exposures, staff fitness, surveillance, prophylaxis and public-health coordination.
Security / police liaison	Perimeter, traffic, weapons, crowd, restricted areas, missing persons, evidence, staff safety and dignified mortuary security.
Administration / records / finance	Registration, temporary identities, patient tracker, staffing and cost records, supplies, family enquiry support and regulatory records.
All staff	Report to assigned location; wear identification; follow command and safety instructions; document; escalate hazards; remain within competence; hand over before leaving.

19. Quality indicators and review

Measure	Suggested review
Activation	Time from verified alert to command established, triage point operational, first internal alert and first external situation report.
Triage	Proportion with unique identifier and category before zone entry; time to triage; re-triage completion; inappropriate under- or over-triage; red patients delayed.
Clinical flow	Time from arrival to red intervention, theatre, ICU, ward or transfer; red / yellow zone occupancy; patients without responsible team or destination.
Tracking	Unlocated, duplicate or misidentified patients; transfers without receiving acknowledgment; unmatched property / evidence; time to final reconciliation.
Safety	Staff injuries / exposures; contamination breaches; security events; blocked exits; oxygen / power events; medication or transfusion errors; delayed routine emergencies.

Measure	Suggested review
Resources	Time to staff mobilization; blood, oxygen, medicine, equipment and PPE depletion; mutual-aid requests; unused or misdirected resources.
Communication	Message delivery and acknowledgment; conflicting instructions; family complaints; privacy breaches; misinformation requiring correction.
Equity / dignity	Access to analgesia, palliative care, interpretation, disability adaptation, family support and safeguarding; review of blue-zone decisions.
Outcome	Deaths, preventable harm, admissions, surgery, ICU, transfers, discharge and return; compare with incident type and resource constraints.
Learning	Debrief completion; after-action report; action closure rate; exercise performance; plan / call-list / kit updates and staff training coverage.

20. Evidence base and source framework

Source	Key use in this protocol
World Health Organization. Mass Casualty Management resources and WHO Academy MCM course materials. Current online resource set.	Facility-based preparedness, activation, incident roles, zones, kits, tracking, operational flow and recovery.
WHO, ICRC and MSF. Mass Casualty - Interagency Integrated Triage Tool (MC-IITT) and Facility-Based Mass Casualty Triage Guidance Note.	Five-colour facility triage, walking / non-walking flow, red criteria, high-risk vital signs, dynamic reassessment and zone design.
World Health Organization. Mass Casualty Management in Hospital Emergency Units: Guidance on Palliative Care.	Senior blue-category decisions, dedicated blue zone, symptom relief, dignity, communication and reassessment as resources change.
World Health Organization. Hospital Emergency Response Checklist: An All-Hazards Tool for Hospital Administrators and Emergency Managers.	Command and control, communication, safety, triage, surge, continuity, logistics, human resources and recovery.
Pan American Health Organization / WHO. Mass Casualty Management and Hospital Incident Command training resources; Emergency Medical Teams framework.	Regional all-hazards coordination, hospital incident command, multidisciplinary training, inter-facility support and Caribbean applicability.
Pan American Health Organization / WHO. Mass Fatality Plan Checklist and management-of-dead-bodies resources.	Mass-fatality planning, respectful identification, mortuary expansion, family needs and interagency coordination.
Hospital and national emergency, CBRN, public-health, security, legal and disaster-management policies.	Binding local activation authority, role titles, command relationships, reportable events, decontamination, Coroner / police procedures and regional transfer arrangements.

This protocol should be reviewed against the current versions of cited sources and locally approved plans at each formal review. Incident-specific treatment remains governed by the relevant clinical protocols and current formulary.

Annex A. MCI activation and monitoring checklist

Priority	Action / record
Alert	Time _____ Source _____ Incident / hazard _____ Location _____ Expected casualties / categories _____ ETA _____
Command	Incident commander _____ Clinical lead _____ Triage lead _____ Nurse lead _____ Safety / CBRN _____ Scribe _____ Command post _____
Security / safety	<input type="checkbox"/> Perimeter <input type="checkbox"/> Single entry <input type="checkbox"/> One-way traffic <input type="checkbox"/> Threat / weapon check <input type="checkbox"/> Contamination screen <input type="checkbox"/> Fire / structure safe <input type="checkbox"/> PPE defined
Triage / zones	<input type="checkbox"/> Triage point <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Blue <input type="checkbox"/> Grey <input type="checkbox"/> Staff pool <input type="checkbox"/> Family <input type="checkbox"/> Media <input type="checkbox"/> Decontamination
ED / hospital capacity	Existing ED patients moved / discharged _____ Resus positions _____ Theatre _____ ICU _____ Ward beds _____ Isolation _____
Resources	Staff teams _____ Blood _____ Oxygen _____ Airway kits _____ Medicines / antidotes _____ PPE _____ Stretchers _____ Power / water _____
Communications	Primary _____ Backup _____ External liaison _____ First situation report _____ Next update _____
Tracking	Identifier series _____ Tracker location / owner _____ Paper / electronic _____ Checkpoints _____ Family information interface _____
External partners	<input type="checkbox"/> Ambulance <input type="checkbox"/> Police <input type="checkbox"/> Fire / HAZMAT <input type="checkbox"/> Public health <input type="checkbox"/> Emergency management <input type="checkbox"/> Referral hospitals <input type="checkbox"/> Air / sea transport <input type="checkbox"/> Mortuary
Operational objectives	1. _____ 2. _____ 3. _____ Review time _____
Current counts	Red _____ Yellow _____ Green _____ Blue _____ Grey _____ Untriaged _____ Transferred _____ Admitted _____ Discharged _____
Critical constraints	_____
De-escalation / recovery	Last expected wave _____ Reconciliation complete <input type="checkbox"/> Blue review <input type="checkbox"/> Supplies / cleaning <input type="checkbox"/> Staff support <input type="checkbox"/> Debrief _____ Stand-down time _____

Annex B. MC-IITT quick guide and high-risk vital signs

Step	Decision
1. Walking?	Yes -> GREEN zone for rapid clinical assessment and re-triage. No -> Step 2.
2. Any red criterion?	Airway compromise; respiratory distress; catastrophic haemorrhage / no radial pulse / capillary refill >3 seconds; altered mental state / unresponsive; burn >40% TBSA; high-risk vital sign; clinician concern. Yes -> RED. No -> YELLOW.
3. Senior red-zone review	If red patient meets locally agreed medical-futility criteria, needs palliative services, or needs curative treatment beyond current capacity -> consider BLUE with senior decision and reassessment.

Step	Decision
4. Grey criteria	Not breathing after basic airway manoeuvres AND no pulse, confirmed under local policy -> GREY.
5. Repeat	Re-triage after treatment, deterioration, prolonged delay, movement, before definitive disposition and when capacity changes.

Age	High-risk respiratory rate	High-risk heart rate	All ages
Older than 12 years	<10 or >30 / min	<60 or >130 / min	SpO2 <92%; any evidence of poor perfusion; AVPU other than Alert.
5-12 years	<10 or >30 / min	<70 or >140 / min	Use clinician concern and age-appropriate interpretation.
1-4 years	<20 or >40 / min	<80 or >160 / min	Use clinician concern and age-appropriate interpretation.
Younger than 1 year	<25 or >50 / min	<90 or >180 / min	Use clinician concern and age-appropriate interpretation.

These thresholds reproduce the WHO MC-IITT quick tool and must be used with the full clinical criteria. Validate the locally displayed poster and paediatric equipment before approval.

Annex C. Immediate role action cards

Role	First actions
Incident commander	Wear identifier; meet core command team; announce objectives; authorize zones / capacity; link with executive and external command; schedule updates; keep decision log.
Triage lead	Take triage kit and identifier; establish point; remain until relieved; apply MC-IITT; ensure ID and direction; report counts and hazards; prevent treatment congestion at triage.
Clinical lead	Clear ED with operations; supervise red / yellow / blue priorities; create theatre / ICU / transfer priority lists; resolve clinical-resource conflict; reassess blue decisions.
Resource lead	Open kits; mobilize staff and transporters; assemble teams; confirm beds / oxygen / blood / medicines / equipment; forecast and request support; arrange relief.
Green-zone lead	Open separate area; receive all walking casualties; rapidly assess / re-triage; provide first aid and psychological support; identify deterioration; discharge / admit safely.
Safety / CBRN lead	Assess hazard; define zones and PPE; stop contaminated entry; coordinate decontamination; monitor exposures and environment; report any unsafe condition immediately.
Tracking lead	Start unique identifier sequence; place trackers at checkpoints; record every location / destination; reconcile transfers, deaths and unidentified patients; support family information.
Security lead	Control gates and traffic; keep ambulance route clear; restrict zones; manage weapons, crowd, public and media; support family / mortuary security; record incidents.

Annex D. Zone-readiness checklist

Check	Red	Yellow	Green	Blue / Grey
Location, access, signs and one-way route confirmed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Named lead and adequate trained staff assigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unique IDs, folders, tracker and communications available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxygen / suction / monitoring appropriate to function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airway, haemorrhage, IV / IO, medicines and dressings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paediatric, obstetric and disability adaptations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE, hand hygiene, waste, sharps and cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting, power, water, toilets, temperature and privacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire exits, evacuation route and security controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Re-triage frequency and escalation route defined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Definitive destination / discharge / mortuary pathway active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family communication and psychosocial support route	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Annex E. Situation report and patient reconciliation template

Field	Record
Incident / operational period	Incident _____ Date _____ From _____ to _____ Report time _____ Prepared by _____

Field	Record
Current phase / objectives	Phase _____ Objectives _____
Hazards / safety	_____
Patient counts	Untriaged ____ Red ____ Yellow ____ Green ____ Blue ____ Grey ____ Unidentified ____
Outcomes	Theatre ____ ICU / HDU ____ Ward ____ Transfer ____ Discharge ____ Death ____ Missing / unreconciled ____
Capacity	ED red positions ____ Theatre ____ ICU ____ Ward ____ Paediatric ____ Obstetric ____ Isolation ____
Resources	Staff teams ____ Blood status ____ Oxygen ____ Medicines / PPE Power / water / ICT ____
Critical constraints / requests	_____
External coordination	Scene / ambulance ____ Police / fire / HAZMAT ____ Public health ____ Receiving facilities ____
Next actions / owners / deadlines	1. _____ 2. _____ 3. _____
Next update / command contact	Next report ____ Incident commander ____ Contact ____

Annex F. Local configuration and approval checklist

Item	Approved local rule / contact / document location
Activation authority, wording, alarms and backup method	_____
Hospital incident-command structure, command post and alternates	_____
National emergency management, ambulance, police, fire / HAZMAT and public-health contacts	_____
Triage point, decontamination, red, yellow, green, blue, grey and overflow maps	_____
Maximum supported teams / positions by zone and operational period	_____
Oxygen, suction, power, water, blood, medicines, antidotes and PPE contingency	_____
Staff call-out, credentialling, volunteer control, relief and welfare	_____
Electronic / paper documentation, unique IDs and patient-tracker system	_____
Operating theatre, ICU, paediatric, obstetric, imaging and laboratory priority plans	_____
Regional hospital distribution, air / sea transfer and weather limitations	_____
CBRN detection, PPE, decontamination, runoff, exposure and specialist advice	_____
Security, active violence, weapons, traffic and evidence procedures	_____
Family reception, reunification, interpreters, media and public-information plan	_____
Mortuary expansion, Coroner / police notification and body / property release	_____
Exercise schedule, quality measures, debrief and corrective-action governance	_____
Final multidisciplinary approval	ED ____ Nursing ____ Surgery / Anaesthesia ____ Executive ____ Emergency Management ____ EMS ____ Police / Fire ____ Public Health ____ Date ____