



SURVIVAL IN MODERN WARFARE

A COMPREHENSIVE GUIDE TO PROTECTING YOUR LIFE, FAMILY, ASSETS, AND ENVIRONMENT AGAINST UAVs, DRONES, MISSILES & ARMED CONFLICT

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Your Free Global Resource for Health, Safety & Environmental Professionals

IMPORTANT DISCLAIMER

- This guide is prepared for educational and preparedness purposes for HSE professionals, emergency responders, and members of the public.
- Always follow instructions issued by official government authorities, civil defense agencies, and emergency services in your country.
- This document does not replace official emergency management plans or government advisories.
- The guidance herein is based on internationally recognized civil defense, emergency management, and occupational health and safety standards.



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1. Introduction: Understanding the Modern Battlefield

Modern warfare has undergone a radical transformation. What was once limited to ground troops, artillery, and conventional air power has evolved into a complex, multi-domain operational environment that directly threatens civilian populations far beyond traditional front lines. The proliferation of Unmanned Aerial Vehicles (UAVs), precision-guided missiles, loitering munitions, and cyber warfare means that today's conflicts can reach households, communities, and critical infrastructure in ways previously unimaginable.

This guide is written specifically for health, safety, and environmental (HSE) professionals, first responders, community leaders, and ordinary families who need practical, technically sound guidance on how to survive and protect what matters most during armed conflict. Whether you are a safety officer in an active conflict zone or a family living in a region experiencing escalating tensions, the principles in this guide are designed to save lives.

1.1 The New Threat Landscape

Contemporary armed conflicts are characterized by the following categories of threats that civilians must be aware of:

| Threat Category | Description & Key Characteristics |
|------------------------------------|---|
| UAVs / Combat Drones | Unmanned aerial vehicles used for reconnaissance, targeting, and direct strikes. Ranges from small quadcopters to large fixed-wing platforms. Can be guided remotely or autonomous. |
| Loitering Munitions | "Kamikaze" drones that orbit a target area and strike when a target is identified. Examples include Shahed-series drones. Low cost, highly effective against infrastructure. |
| Ballistic Missiles | High-speed projectiles launched on an arcing trajectory. May carry conventional, thermobaric, or cluster warheads. Examples: Scud, ATACMS, Iskander. |
| Cruise Missiles | Low-flying, precision-guided, jet-powered projectiles. Follow terrain-hugging flight paths to evade radar. Very high accuracy. |
| Hypersonic Missiles | Missiles traveling at Mach 5+ with maneuvering capability. Extremely difficult to intercept. Designed to defeat modern air defense systems. |
| Artillery & Rockets | Traditional but still devastating. Unguided rockets (Grad, Katyusha) and precision artillery can saturate large areas. |
| Chemical & Radiological | Rare but possible. Chlorine, phosphorus, and potentially radiological dispersal devices. Require specialized protective responses. |
| Cyber & EMP Attacks | Targeting of critical infrastructure including power grids, water systems, hospitals, and communication networks. |

2. Pre-Conflict Preparedness: The Foundation of Survival

The single most critical factor in survival during armed conflict is preparation before the conflict begins or escalates. HSE professionals know well that hazard prevention and mitigation planning must occur before an emergency, not during it. The same principle applies to wartime survival.

2.1 Situational Awareness and Early Warning Systems

2.1.1 Monitoring Official Channels

- Register with your national civil defense and emergency management authority
- Subscribe to government emergency alert systems (SMS, radio, apps)
- Identify your country's air raid siren patterns and what each signal means
- Follow verified military and government social media channels
- Listen to designated emergency broadcast radio stations (battery or hand-crank radio essential)

2.1.2 Understanding Alert Levels

| Alert Signal | Recommended Action |
|---|--|
| Air Raid Siren (continuous wail) | Immediately seek shelter in designated shelter, basement, or innermost room of a hardened building |
| Intermittent/pulsing siren | All-clear or standby — remain alert and await further instructions |
| Government emergency broadcast | Tune in immediately; follow all instructions verbatim |
| Explosion sounds in distance | Do not go outside to investigate. Move to shelter immediately. |
| Loss of power/communications | Switch to battery radio; initiate shelter-in-place protocol |

2.2 The Emergency Go-Bag (72-Hour Survival Kit)

Every household member should have a pre-packed go-bag ready at all times. This bag should allow self-sufficiency for a minimum of 72 hours. HSE professionals should prepare go-bags for both personal and workplace use.

ESSENTIAL GO-BAG CONTENTS — Per Person

- Water: Minimum 3 liters (sealed, rotated every 6 months) + water purification tablets or filter straw
- Food: High-calorie non-perishables (energy bars, canned goods, dried foods) — minimum 2,000 kcal/day for 3 days
- First Aid Kit: Trauma dressings, tourniquets (CAT or SOFTT-W), hemostatic gauze, bandages, antiseptic, gloves
- Medications: 7-day supply of all prescription medications; ibuprofen, antihistamines, oral rehydration salts
- Documents: Copies of passports, IDs, insurance cards, property documents, emergency contacts — sealed in waterproof bag
- Cash: Local currency in small denominations (ATMs fail during conflict)
- Communication: Battery/hand-crank radio, fully charged power bank (20,000+ mAh), whistle, signal mirror
- Lighting: Headlamp with spare batteries, chemical glow sticks
- PPE: N95/FFP2 respirators (minimum 10 per person), safety goggles, heavy-duty gloves, hard hat
- Warmth & Shelter: Emergency mylar blankets, rain poncho, sturdy footwear with steel toes if available
- Tools: Multi-tool, duct tape, rope (10m), fire starter, dust mask, zip-lock bags
- Sanitation: Wet wipes, hand sanitizer, toilet bags, feminine hygiene products as needed
- Navigation: Physical map of your region, compass (do not rely solely on GPS during conflict)

2.3 Household Emergency Plan

Every family must have a written, practiced emergency plan. This is analogous to a workplace emergency response plan — a core HSE requirement that must exist before the emergency, not during it.

2.3.1 Key Elements of a Family Emergency Plan

- Designated meeting point near the home and an alternative further away
- Out-of-area contact person that all family members can reach
- Shelter locations: primary (home basement/interior room), secondary (community shelter), tertiary (evacuation route)
- Roles and responsibilities for each family member (who grabs the go-bag, who grabs the children, who secures the pets)
- Code words and signals for rapid communication
- Pre-agreed evacuation routes with alternates (roads may be blocked or targeted)
- Protocol for family members who cannot be reached within 30 minutes of alert

2.3.2 Vulnerable Persons Planning

Special planning is essential for vulnerable household members:

- Elderly persons: ensure mobility aids are accessible; pre-arrange assisted evacuation if needed
- Children: teach shelter-in-place procedures to children above age 5; establish school emergency pickup protocol
- Persons with disabilities: identify assistance needs; register with local civil defense if applicable
- Pregnant women: identify nearest functioning medical facility; pack extra medical supplies
- Pets: prepare pet carrier, food, water, and records; identify pet-friendly evacuation routes

3. Shelter: Your Most Critical Defense

Shelter is the most important survival factor in any armed conflict. Understanding how different threats interact with different types of structures — and how to optimize any available space — can mean the difference between life and death.

3.1 Understanding Blast Dynamics and Structural Protection

When a munition detonates, it produces several hazard mechanisms that your shelter must mitigate:

| Hazard Mechanism | Description & Protective Measures |
|---------------------------------------|--|
| Overpressure Wave (Blast Wave) | High-pressure wave radiating outward from detonation. Can rupture lungs, ear drums, and internal organs. Mitigated by distance, solid walls, and blast-proof construction. |
| Fragmentation / Shrapnel | High-velocity metal fragments from munition casing. Primary cause of casualties. Mitigated by walls, sandbags, ballistic barriers. |
| Thermal Effect | Heat and fire from detonation and subsequent fires. Mitigated by fire-resistant materials and distance. |
| Secondary Collapse | Structural collapse of buildings struck by blast. Mitigated by sheltering in basements or against load-bearing interior walls. |
| Dust & Particulates | Fine particles from destroyed concrete and building materials. Mitigated by N95/FFP2 respirators. |
| Incendiary Effects | Some munitions (thermobaric, white phosphorus) produce sustained fire. Requires immediate egress and fire suppression. |

3.2 Shelter Selection Hierarchy

Select your shelter based on the following hierarchy, from best to acceptable:

1. **PURPOSE-BUILT BLAST SHELTER or BUNKER** — Reinforced concrete, below ground, with blast doors, ventilation, and stored supplies. Highest protection against all threat categories.
2. **BASEMENT** of a multi-story reinforced concrete building — Multiple floors above provide significant fragmentation and blast protection.
3. **STAIRWELL** of a reinforced concrete building (interior, no windows) — Vertical structural elements provide multiple layers of protection.
4. **INTERIOR ROOM** on the **LOWEST FLOOR** of a building — Put as many walls between yourself and the exterior as possible.
5. **CONCRETE BRIDGE UNDERPASS or CULVERT** — Useful during vehicle movement; limited stay only.
6. **NATURAL TERRAIN** (ditch, ravine, earthen bank) — Earth absorbs blast and fragments effectively. Lie flat, face down.

WHAT NOT TO USE AS SHELTER

- **Vehicles:** Thin metal provides minimal protection against blast/fragmentation; vehicles may be targeted
- **Glass structures or near windows:** Glass becomes lethal projectile in blast wave
- **Open fields:** No overhead or lateral protection from fragmentation
- **Upper floors of buildings:** Highest risk of direct strike; secondary collapse risk
- **Lightweight construction (wood-frame):** Provides negligible ballistic or blast protection

3.3 Hardening Your Home Shelter Space

If access to a dedicated shelter is unavailable, you can significantly improve protection in your home's most protected room:

- Reinforce chosen room with sandbags against exterior walls (minimum 30cm / 12 inches depth)
- Place heavy furniture (bookshelves filled with books, filing cabinets) against exterior walls as additional fragmentation barrier
- Tape or remove all glass from windows; board up windows with plywood + sandbags
- Pre-position go-bags, water (minimum 10 liters), and supplies in shelter room
- Ensure two exit paths in case of structural compromise
- Install a battery-operated carbon monoxide detector (fires and generator use create CO risk)
- Mark shelter room clearly so emergency services can locate occupants

3.4 Sheltering from Drone and UAV Attacks

UAV and loitering munition attacks present unique characteristics that affect shelter behavior:

| UAV Type | Shelter Guidance |
|---|---|
| Small commercial drones (reconnaissance) | Used for target acquisition; seek immediate cover inside buildings; do not observe from windows or rooftops |
| Loitering munitions (Shahed-type) | Move indoors immediately; basements preferred; stay away from parked vehicles and equipment which are primary targets |
| Strike drones with guided munitions | Treat as missile threat; deep basement or reinforced shelter required; stay low and away from exterior walls |
| FPV (First Person View) attack drones | Very small, very fast; used against individuals and small vehicles; ground-level cover (ditch, wall) can defeat these |

3.4.1 Drone Awareness Indicators

- Unusual buzzing or humming sound at elevation — stop, take cover
- Multiple overflights of the same area — indicates reconnaissance; seek shelter
- Loss of cellular/GPS signal in combination with siren alerts — electronic warfare may accompany drone operations
- Smoke, fire, or explosion sounds nearby — immediately move to shelter and stay there for minimum 30 minutes after last explosion

4. Immediate Response Protocols: What To Do When Attacks Begin

4.1 Upon Hearing Air Raid Sirens

7. Stop all activity immediately — do not delay to collect belongings
8. Move calmly but quickly to your designated shelter — avoid running in crowds (panic and trampling risk)
9. Do not use elevators — use stairs only
10. If outdoors: do not run along open roads; seek nearest hardened structure or lie flat in a ditch/depression, face down, hands over ears and neck
11. Notify others nearby verbally — alert neighbors, colleagues, bystanders
12. Once in shelter: stay low, move away from windows, account for all family members
13. Do not exit shelter until official all-clear is issued — secondary attacks are common

4.2 If Caught Outdoors During Attack

If you are caught in the open when an attack begins, follow this survival protocol:

OUTDOOR SURVIVAL PROTOCOL — The 3-Second Rule

- **STOP:** Immediately stop moving. Do not run in open — movement attracts targeting systems.
- **ASSESS:** Look for the nearest hardened structure (concrete building, tunnel, underpass, thick earthen bank) within 10-15 seconds of movement.
- **DECIDE:** Move to structure if within safe running distance, OR go to ground immediately in the nearest depression, ditch, or beside a solid wall.
- **DOWN:** Lie flat, face down, arms over the back of your neck, mouth slightly open (reduces ear drum damage from blast), feet toward the direction of threat if known.
- **WAIT:** Do not move until explosions have ceased for minimum 5 minutes and official all-clear is communicated.

4.3 Missile and Rocket Attack Response

- Warning time: Ballistic missiles may provide 3-7 minutes warning via air defense alerts. Cruise missiles: 1-3 minutes. Act immediately.
- The further from windows and exterior walls, the better your survival odds
- If no shelter is available: lie flat on the ground behind any solid object; a curb, a car tire, earth — anything adds fragmentation protection
- After impact: do not immediately approach blast site — secondary devices, unstable structures, and unexploded ordnance are all serious risks
- Report any unexploded ordnance (UXO) to authorities immediately — NEVER touch or move it

4.4 Post-Attack Immediate Actions

Immediately after an attack ends or a safe interval passes:

14. Account for all family/team members — establish communication
15. Check for injuries — apply Stop the Bleed protocols (tourniquet, pressure dressing) before moving casualties
16. Check for structural damage — if building is compromised (cracked load-bearing walls, roof sagging), evacuate to alternate shelter
17. Check for gas leaks — smell of gas = open all windows and leave immediately; do not use electrical switches or flames
18. Check for fire — small fires can be fought with extinguisher if safe; for significant fire, evacuate immediately
19. Check utilities — if electrical systems are damaged, switch off main circuit breaker
20. Do not use mobile phones excessively — conserve battery; keep lines open for emergency calls
21. Photograph and document damage for insurance and official records where safe to do so

5. Medical Preparedness and Combat First Aid

In armed conflict, medical infrastructure is frequently disrupted or overwhelmed. HSE professionals and families must be prepared to provide immediate life-saving first aid. The Stop the Bleed campaign, developed by the American College of Surgeons and adopted globally, forms the core of this guidance.

5.1 Life-Threatening Injuries in Armed Conflict

| Injury Type | Immediate Action |
|--|--|
| Severe Hemorrhage (major bleeding) | Apply tourniquet to limb bleeding immediately; 2-3 inches above wound; tighten until bleeding stops; note time applied; do not remove |
| Wound Packing (junctional bleed) | Pack wound tightly with hemostatic gauze (QuikClot/Celox); apply firm pressure for minimum 3 minutes; do not remove packing |
| Tension Pneumothorax (collapsed lung) | Signs: difficulty breathing, unequal chest rise, tracheal deviation; requires needle decompression by trained personnel |
| Burns (thermal, chemical, incendiary) | Cool with clean running water for 20 minutes; do not use ice, butter, or toothpaste; cover with clean non-adhesive dressing; seek medical care |
| Blast Injury (TBI/concussion) | Signs: confusion, dizziness, memory loss, unconsciousness; lay casualty flat; monitor airway; do not give fluids; seek immediate medical care |
| Crush Injury (structural collapse) | Do not rapidly release compression if trapped >15 minutes (crush syndrome risk); establish airway and control accessible bleeding; call for emergency services |

5.2 Essential Medical Skills for All Adults

- Tourniquet application: Apply Commercial tourniquet (CAT, SOFTT-W) to limb proximal to bleed; tighten until bleeding stops; write time on tourniquet with marker
- Wound packing: Use hemostatic gauze; pack into wound with firm pressure; maintain pressure for 3+ minutes; apply pressure bandage to hold packing
- Recovery position: Unconscious but breathing casualty — lay on side, upper knee bent, arm supporting head, mouth facing down for airway drainage
- CPR: 30 chest compressions at 5-6cm depth, 100-120/min; 2 rescue breaths (if trained and comfortable); continue until help arrives or casualty recovers
- Hypothermia prevention: Wrap casualty in mylar emergency blanket; cover head; insulate from ground; critical for blast casualties

5.3 Medication and Health Management During Conflict

- Maintain minimum 30-day supply of all essential prescription medications
- Insulin and other temperature-sensitive medications: store in cool packs; rotation plan essential
- Mental health: recognize and acknowledge acute stress reactions (trembling, dissociation, panic attacks) — normal responses to abnormal events
- Prevent waterborne disease: boil or chemically treat all water if supply safety is uncertain
- Wound infection prevention: clean all wounds thoroughly with clean water and antiseptic; change dressings daily; monitor for signs of infection (redness, swelling, pus, fever)

6. Evacuation Planning and Execution

6.1 When to Evacuate vs. Shelter-in-Place

The decision to evacuate versus shelter-in-place is one of the most consequential decisions you will make. Neither option is universally superior — context determines the correct choice.

| Factor | Shelter-in-Place vs. Evacuate |
|---|---|
| Active artillery/missile bombardment | SHELTER-IN-PLACE — moving on roads during active bombardment is extremely dangerous |
| Official evacuation order issued | EVACUATE — follow government instructions immediately |
| Home/building structurally compromised | EVACUATE to alternate shelter — do not remain in unsafe structure |
| Gas leak or fire in building | EVACUATE immediately via safest route |
| Medical emergency requiring hospital | EVACUATE using the safest available route; notify emergency services |
| Sustained siege of urban area | EVACUATE via humanitarian corridor if available; await official guidance |

6.2 Evacuation Route Planning

- Identify and physically drive minimum 3 different evacuation routes from your home
- Note road conditions, bridge locations (bridges are primary military targets), and chokepoints on each route
- Pre-identify fuel stops: fill vehicle to full capacity before a crisis; carry approved fuel containers with 20-40 liters reserve
- Plan for foot evacuation: routes should also be walkable if vehicle travel becomes impossible

- Identify shelter points every 20km along each route for rest and reassessment
- Know the location of border crossings if international evacuation may be necessary

6.3 Vehicle Evacuation Safety

- Travel in daylight hours whenever possible — vehicles moving at night may appear threatening to military forces
- Display white flag or white cloth visibly on vehicle if moving through conflict zones — international sign of civilian/non-combatant status
- Do not stop at or near military checkpoints without clear authorization — follow instructions slowly and calmly
- Keep windows partially down to equalize pressure near blasts; hear warning signals
- Turn off lights at night only if military units specifically direct this
- If caught under fire while in vehicle: exit and seek cover behind engine block (provides best ballistic protection); do not shelter behind doors

6.4 Evacuation with Vulnerable Persons and Children

- Practice evacuation drills with children: teach them to move quickly and quietly to designated rally point
- Attach ID tag to young children (sewn into clothing or waterproof wristband) with name, parent/guardian name, and contact number
- Carry wheelchair or mobility aids in vehicle; plan for accessible routes
- Pre-identify medical facilities along evacuation routes for persons requiring ongoing care

7. Protecting Critical Assets and Property

7.1 Securing Financial and Legal Assets

Financial infrastructure is frequently disrupted in conflict. Banks may close, ATMs may fail, and digital payment systems may go offline. Preparation is essential.

- Maintain sufficient cash reserves (minimum 2-4 weeks of essential expenses) in small denominations at home in a fireproof container
- Photograph and digitally store all critical documents: passports, property deeds, insurance policies, vehicle registration, wills, medical records
- Store digital document copies in at least two locations: encrypted cloud storage and offline USB drive
- Notify your bank of possible relocation; understand your access options if branches close
- Know your insurance policy terms for conflict-related losses — review war exclusion clauses
- Register valuables with police or notary; photograph and document for insurance purposes

7.2 Securing Physical Property

- Shut off gas supply at the main valve before evacuating
- Switch off electricity at the main circuit breaker before evacuating
- Shut off water at the main stop valve; fill bathtubs and all available containers with water before shutting off
- Lock and where possible reinforce all entry points if evacuating
- Do not leave fuel stores (propane, gasoline) exposed — secure or disperse to reduce fire risk
- Photograph property condition before evacuation for insurance claims

7.3 Protecting Digital Assets and Communications

- Enable full encryption on all smartphones, tablets, and laptops
- Use a VPN on all devices — communications infrastructure may be monitored or disrupted
- Backup all critical files to encrypted offline storage before potential evacuation
- Establish alternative communication methods: satellite messenger (Garmin inReach, SPOT), amateur (ham) radio, mesh network apps (Meshtastic)
- Memorize critical phone numbers — do not rely solely on device memory
- Remove or encrypt sensitive personal, financial, and professional data if device may be seized at checkpoints

8. Environmental Protection and Contamination Hazards

Armed conflict creates severe environmental hazards that persist long after active hostilities cease. HSE professionals must be particularly attentive to these risks, as they affect community health for years or decades.

8.1 Water Supply Contamination

- Municipal water systems are primary targets in modern conflict — do not assume tap water is safe
- Boil all drinking water for minimum 1 minute (3 minutes at altitude) if infrastructure integrity is uncertain
- Use water purification tablets (iodine or chlorine) as backup: 2 tablets per liter, wait 30 minutes before drinking
- Life straw or ceramic filter (Sawyer, Berkey) can remove biological contaminants — will not remove chemical contaminants
- Store minimum 4 liters per person per day (2 liters for drinking, 2 liters for sanitation)
- Avoid water from streams, wells, or rivers near industrial sites, military positions, or destroyed infrastructure — chemical contamination risk is high

8.2 Air Quality and Respiratory Hazards

| Contamination Source | Health Risk & Protective Action |
|--|--|
| Destroyed buildings (concrete, asbestos, silica dust) | Severe respiratory disease; wear FFP3/N100 respirator; avoid dust clouds; stay upwind |
| Vehicle fires, burning tires | Toxic fumes including dioxins, benzene, heavy metals; wear respirator; stay upwind; evacuate if sustained |
| Munitions residue (lead, heavy metals) | Soil and dust contamination; wear gloves and respirator near blast sites; do not allow children to play in affected areas |
| Burning industrial facilities (chemical plants, refineries) | Extremely toxic; potential for immediate lethal exposure; evacuate area immediately; stay upwind; monitor government advisory |
| White phosphorus munitions | Spontaneous ignition on skin contact with air; if contact occurs: submerge affected area in water; cover with wet cloth; seek emergency care immediately |

8.3 Unexploded Ordnance (UXO) and Landmines

UXO and landmines remain one of the greatest post-conflict environmental and public health hazards, causing casualties for decades after conflicts end.

UXO SAFETY — Non-Negotiable Rules

- NEVER approach, touch, kick, or move any unknown object that may be ordnance
- Mark the location with visible markers (stick, cloth) and maintain a minimum 300-meter exclusion zone
- Report immediately to authorities: civil defense, police, or military demining teams
- Do not allow children or animals into areas where UXO may be present
- After conflict: assume all abandoned military areas, fields, and roadsides may contain landmines or UXO until professionally cleared
- Recognizing UXO: metal objects partially buried, items with fins or nose cones, tripwires, disturbed soil, dead livestock (potential trigger indicators)

8.4 Radiation Hazards

While full nuclear detonations represent an extreme scenario, radiological dispersal devices ("dirty bombs") and attacks on nuclear facilities are credible threats in modern conflict.

8.4.1 If a Nuclear Facility is Struck

- Move immediately indoors — structure provides significant shielding from initial radiation exposure
- Shelter-in-place is recommended for most radiological events — movement outdoors increases exposure
- Seal windows and doors with tape and plastic sheeting — reduce airborne radioactive particle ingestion
- Take potassium iodide (KI) tablets ONLY if directed by official health authorities — protects thyroid from radioactive iodine only; does not protect against all radiation
- Monitor official radio broadcasts for shelter duration and evacuation instructions
- Do not consume food or water from affected area until declared safe by authorities

9. Psychological Survival and Mental Health

Psychological resilience is as critical as physical preparation. The mental health impacts of armed conflict are profound and affect performance, decision-making, and long-term wellbeing.

9.1 Acute Stress Response — Normal Reactions to Extreme Situations

- Trembling, shaking, heart racing, nausea — normal acute stress responses; do not interpret as weakness
- Hypervigilance (being constantly "on guard") — adaptive short-term; becomes problematic if persistent
- Emotional numbness or detachment — protective psychological mechanism; allow it without judgment
- Intrusive memories or flashbacks — acknowledge without struggling against them; ground yourself in the present
- Anger, irritability, difficulty concentrating — stress responses; maintain routines to anchor yourself

9.2 Maintaining Psychological Functioning During Conflict

- Maintain predictable routines where possible — meals, sleep, hygiene — structure reduces psychological chaos
- Limit exposure to graphic news and social media — maintain situational awareness without saturation
- Children: maintain normal activities (games, stories, school if safe) to provide psychological anchoring; honest, age-appropriate explanations are more protective than silence
- Social connection: talk with family, friends, community — social support is the most powerful resilience factor
- Physical activity: even brief exercise (stretching, walking in shelter) reduces stress hormone levels
- Spiritual or cultural practices: prayer, meditation, cultural rituals provide psychological anchoring for many people

9.3 Recognizing and Responding to Crisis

- Acute crisis signs requiring intervention: inability to function, thoughts of self-harm, complete dissociation from reality
- Grief: loss of home, community, or loved ones is profound; grief responses are normal and must not be suppressed
- Post-Traumatic Stress Disorder (PTSD): persistent nightmares, flashbacks, severe avoidance months after event — seek professional support
- Children who experience conflict may show behavioral regression (bedwetting, clingy behavior), increased aggression, nightmares — all are trauma responses requiring patient, supportive response

10. Communication and Information Management

10.1 Communication Hierarchy During Conflict

| Method | Reliability & Notes |
|--|--|
| Battery/hand-crank AM/FM/shortwave radio | Most reliable — functions without internet or cellular network; government broadcasts on dedicated emergency frequencies |
| Satellite communicator (Garmin inReach, SPOT) | High reliability; functions independently of terrestrial infrastructure; limited to short messages but enables SOS |
| Amateur (Ham) radio | Highly reliable; requires license in most countries; provides community communication network even when infrastructure fails |
| Mobile/cellular phone | First to become congested or fail; use for text/SMS preferentially over voice calls (lower bandwidth requirement) |
| Mesh network apps (Meshtastic, Briar) | Functions without internet using Bluetooth/LoRa radio; limited range but viable for local community communication |
| Social media / internet | Least reliable during conflict; valuable when operational; misinformation risk is high |

10.2 Managing Information and Avoiding Misinformation

- Verify all information from minimum 2 independent, official sources before acting on it
- Government civil defense and emergency management authorities are the primary authoritative source
- Social media posts — including from friends — can be inaccurate, emotionally amplified, or deliberately false (disinformation campaigns are common in modern conflict)
- Do not forward unverified information — panic-spreading false information can cause casualties

- Record and date all important communications and official instructions you receive

11. Community and Workplace Emergency Response

11.1 Role of HSE Professionals in Armed Conflict Response

HSE professionals are uniquely positioned to lead community preparedness and emergency response. Your training in hazard identification, risk assessment, and emergency management is directly applicable to conflict survival.

- Conduct community-level emergency preparedness workshops — share this knowledge
- Assess workplace/community shelter quality and capacity; recommend improvements
- Establish first aid teams and ensure supply of trauma equipment (tourniquets, hemostatic gauze, defibrillators)
- Develop workplace-specific emergency response plans incorporating air raid, evacuation, and shelter-in-place protocols
- Coordinate with local civil defense authorities; register your organization as a potential emergency resource
- Establish a community communication tree — systematic check-in for all members during emergency

11.2 Critical Infrastructure Protection

- Hospitals and medical facilities: establish backup power (generators, UPS); pre-position medical consumables; register with civil defense for protection status
- Water treatment: identify manual operation procedures; stockpile chemicals for minimum 30 days; train staff on emergency procedures
- Energy: identify and secure critical spare parts; establish emergency fuel reserves; develop load-shedding protocols
- Food storage: community-level bulk food procurement before escalation; secure storage against theft and environmental damage

12. Post-Conflict Recovery and Reconstruction

12.1 Returning Home Safely

Returning to your home after conflict requires systematic safety assessment before full re-occupation.

22. Wait for official clearance from civil defense and emergency authorities before returning
23. Approach property carefully — assess structural integrity visually before entering
24. Check for UXO, tripwires, or suspicious objects around property perimeter

25. Do not enter structurally compromised buildings — consult structural engineer first
26. Check gas supply valve is closed before entering; ventilate building before turning on any electrical equipment
27. Check water supply safety before consumption — request water quality testing from authorities
28. Document all damage systematically with photographs before cleaning or repair for insurance and government compensation schemes

12.2 Environmental Remediation

- Heavy metal soil contamination (lead, tungsten from munitions) may require professional remediation — test soil before growing food
- Water well contamination: test all wells before use; consult environmental health authorities
- Asbestos from destroyed buildings: do not disturb — engage licensed asbestos removal contractors
- UXO remediation: support and cooperate with professional demining operations; follow all exclusion zone guidance

12.3 Community Resilience and Reconstruction

- Document and report all environmental damage to national and international environmental authorities
- Engage with international organizations (UNHCR, WHO, ICRC, UNEP) for technical and material support
- Prioritize restoration of safe water supply, sanitation, and food security — public health priorities in post-conflict settings
- Mental health: establish community support networks; engage mental health professionals; destigmatize trauma responses

13. Quick Reference Summary Tables

13.1 Action by Threat Type — Summary

| Threat | Immediate Action |
|-----------------------------------|--|
| Air raid siren sounds | Move immediately to shelter — basement or interior room; do not use elevators |
| Explosion heard nearby | Drop, cover, hold; shelter-in-place; do not exit until 30 min after last explosion |
| Drone/UAV spotted overhead | Move indoors immediately; basement preferred; away from windows |

| | |
|--------------------------------------|--|
| Fire in building | Alert others; use nearest safe exit; do not use elevator; account for family |
| Gas leak detected | Open windows; do not operate electrical switches; evacuate immediately |
| Structural collapse (trapped) | Tap on pipes/walls to signal location; protect airway from dust; conserve oxygen |
| Severe bleeding | Apply tourniquet (limb) or pack wound with hemostatic gauze; maintain pressure |
| Chemical smell / irritant | Move upwind; put on respirator; evacuate area; report to authorities |
| Loss of power and comms | Switch to battery radio; initiate shelter protocol; conserve phone battery |
| Evacuation order issued | Take go-bag; follow designated route; travel in daylight; display white flag |

13.2 Minimum Preparedness Checklist

| Category | Minimum Requirements |
|------------------------|--|
| Water | 4 liters per person per day; 7-day minimum stored supply |
| Food | 7-day non-perishable supply; 2,000+ kcal/person/day |
| First Aid | Commercial tourniquet; hemostatic gauze; trauma dressings; prescription meds (30 days) |
| Communication | Battery radio; power bank; written list of emergency contacts and frequencies |
| Documents | Sealed waterproof copies of all critical documents in go-bag |
| Cash | 2-4 weeks of essential expenses in small denominations |
| PPE | N95/FFP2 respirators (10+ per person); safety goggles; gloves |
| Shelter plan | Identified primary, secondary, tertiary shelter locations; practiced family plan |
| Evacuation plan | 3 alternate routes mapped; vehicle fueled; go-bag packed and accessible |
| Knowledge | First aid trained; air raid signal recognition; family emergency plan rehearsed |

14. Conclusion

Survival in modern armed conflict is not a matter of chance — it is largely a product of preparation, knowledge, and disciplined response. The threats posed by UAVs, drones, missiles, and conventional munitions are real and devastating, but they are not unsurvivable. History has repeatedly shown that prepared, informed civilian populations suffer significantly fewer casualties than unprepared ones.

As HSE professionals, we are trained to anticipate hazards, assess risks, and implement controls. There is no more important application of this discipline than the protection of human life in the most extreme of circumstances. Share this knowledge with your families, your colleagues, and your communities. A community that prepares together survives together.

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KEY EMERGENCY RESOURCES — Know These Before You Need Them

- Your national civil defense / emergency management agency
- Your local fire service, police, and emergency medical services emergency number
- Your national poison control center
- International Committee of the Red Cross (ICRC): icrc.org — humanitarian law and civilian protection
- UNHCR (UN Refugee Agency): unhcr.org — refugee and displacement assistance
- World Health Organization (WHO) emergency contacts: who.int/emergencies
- UN Office for the Coordination of Humanitarian Affairs: unocha.org
- Stop the Bleed program: stopthebleed.org — free bleeding control training

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