# **Emergency WASH Response Protocols**

# **Rapid Deployment for Community-Controlled Crisis Response**



# Overview

Emergency WASH Response Protocols provide systematic frameworks for rapidly deploying water, sanitation, and hygiene services during crises while maintaining community leadership, cultural sensitivity, and building toward long-term resilience. These protocols prioritize community agency, trauma-informed approaches, and build-back-better principles that strengthen rather than undermine community capacity.

Core Innovation: Combines rapid emergency response with community empowerment, ensuring immediate needs are met while building community capacity for long-term water governance and resilience.

# **Key Principles:**

- Community Leadership: Local communities lead response with external support, not external control
- Trauma-Informed Approach: Recognition of crisis impacts on mental health and community wellbeing
- Cultural Sensitivity: Respect for cultural practices, spiritual needs, and traditional knowledge
- Build-Back-Better: Recovery that creates more resilient and equitable systems
- Dignified Response: Maintaining human dignity and agency throughout crisis response



# **Mobile WASH Response Units**

# **Community-Scale Treatment Systems:**

# Mobile Water Treatment Units:

- Capacity: 5,000-50,000 L/day
- Technology: Multi-stage filtration + UV/chlorine disinfection
- Power: Solar panels + battery backup + manual operation capability
- Transport: Trailer-mounted or truck-mounted systems
- Setup time: 2-6 hours with community support
- Operation: Community-managed with technical support

# Components and Specifications:

- Pre-filtration: Sand and gravel filters for turbidity removal
- Primary treatment: Ceramic or membrane filtration
- Disinfection: UV sterilization + chlorine backup
- Storage: Collapsible tanks (5,000-20,000L capacity)
- Distribution: Gravity-fed with multiple tap points
- Monitoring: Water quality testing kit and training

# **Rapid Sanitation Deployment**:

# Emergency Latrine Systems:

- Type: Composting or pit latrines with cultural adaptations
- Capacity: 1 facility per 20 people (emergency standard)
- Privacy: Gender-segregated with lockable doors and lighting
- Accessibility: Ramps and handrails for disabled access
- Cultural adaptation: Orientation, squatting plates, water for cleans
- Waste management: Safe containment and eventual treatment/disposal

# Handwashing and Hygiene Stations:

- Handwashing: Foot-operated or touchless systems
- Soap provision: Community-managed distribution
- Menstrual hygiene: Private facilities with disposal options
- Baby/child care: Diaper changing and child-safe facilities
- Community education: Hygiene promotion with cultural sensitivity

# **Emergency Supply Packages:**

# Household Emergency WASH Kits:

- Water storage: 2× 20L containers per household
- Water treatment: Ceramic filters or purification tablets
- Sanitation: Portable toilets or emergency latrine supplies
- Hygiene: Soap, toothbrushes, menstrual products, baby care items
- Tools: Basic repair tools and construction materials
- Education: Hygiene promotion materials in local languages

# Community Infrastructure Kits:

- Piping and fittings: PVC pipes, joints, valves for temporary systems
- Pumps: Hand pumps and solar pumps for water access
- Storage: Large bladders or tanks for community water storage
- Tools: Excavation, construction, and repair equipment
- Materials: Timber, plastic sheeting, concrete for facility construct
- Testing: Water quality testing equipment and supplies

# **Pre-Positioned Resource Networks**

# Regional Emergency Stockpiles:

# Stockpile Locations and Coverage:

- Regional hubs: 500km radius coverage areas
- Sub-regional depots: 100km radius coverage
- Community caches: 25km radius for immediate response
- Mobile reserves: Truck/helicopter deployable anywhere
- International reserves: Cross-border assistance capability

# **Inventory Management:**

- Real-time inventory tracking and automated reordering
- Expiration date management and rotation protocols
- Quality assurance and equipment testing schedules
- Deployment tracking and post-use equipment recovery
- Community feedback integration for equipment improvement

# **Community Preparedness Infrastructure**:

# Community Emergency Capacity:

- Trained community responders: 10-20 people per 1000 population

- Emergency equipment storage: Secure, accessible community facilities
- Communication systems: Radio networks and emergency communication p
- Transportation: Community vehicles and equipment for rapid deployment
- Coordination: Emergency operation centers with community leadership

# Pre-Positioned Community Equipment:

- Water treatment: Portable filtration and disinfection systems
- Storage and distribution: Tanks, containers, and distribution equip
- Sanitation: Emergency latrine materials and hygiene stations
- Tools and materials: Construction and repair equipment
- Communication: Radios, phones, and emergency communication equipment

# **Technology and Innovation Systems**

# **Smart Emergency Response Systems:**

# Real-Time Monitoring and Communication:

- Sensor networks: Water quality, flow, and system performance monito
- Communication: Satellite communication and mesh networks for coordinate
- Data management: Real-time data collection and emergency decision si
- Community engagement: Mobile apps and SMS for community communication
- Coordination: Digital platforms for multi-agency and community coordination

# AI-Enhanced Response Planning:

- Predictive modeling: Early warning and impact prediction systems
- Resource optimization: Equipment deployment and logistics optimization
- Needs assessment: Rapid community needs assessment and priority idea
- Performance monitoring: Real-time response effectiveness and adapta
- Learning systems: Continuous improvement based on response experience

# Community-Controlled Technology:

# Local Innovation and Adaptation:

- Community manufacturing: 3D printing and local production of spare |
- Traditional knowledge integration: Local knowledge with modern technical
- Cultural adaptation: Technology modification for cultural appropriat
- Community ownership: Local control over technology and intellectual
- Innovation sharing: Open-source sharing between communities

# Appropriate Technology Systems:

- Simple operation: Technology requiring minimal training and maintena
- Local materials: Using locally available materials for repairs and :
- Cultural fit: Technology compatible with local practices and values
- Economic accessibility: Affordable technology for community ownersh:
- Environmental sustainability: Technology that enhances rather than I



# **Assessment and Coordination Protocols**

# **Rapid Needs Assessment Framework**

# **Community-Led Assessment Protocol:**

Phase 1: Community Mobilization (Hours 0-6)
□ Identify and engage existing community leaders and organizations
$\hfill \square$ Establish community assessment teams with diverse representation
□ Conduct initial safety and security assessment
$\hfill \square$ Map community assets, resources, and existing infrastructure
$\hfill\Box$ Identify vulnerable populations and priority needs
Phase 2: Technical Assessment (Hours 6-24)
□ Water source assessment: quality, quantity, accessibility, safety
□ Sanitation needs: existing facilities, cultural requirements, urgen
$\ \square$ Health status: disease outbreaks, vulnerable populations, health se
$\ \square$ Infrastructure damage: assessment of existing systems and repair negligible.
$\ \square$ Community capacity: local skills, leadership, and organizational cap
Phase 3: Participatory Planning (Hours 24-72)
□ Community priority setting through inclusive consultation
□ Resource mapping: available resources, external assistance needs
□ Action planning: immediate, short-term, and long-term response
□ Coordination planning: roles, responsibilities, and communication
□ Monitoring and evaluation: community-controlled assessment and adap

# **Cultural and Social Assessment:**

Cultural Considerations:
$\hfill\Box$ Religious and spiritual practices related to water and sanitation
$\hfill\Box$ Gender roles and responsibilities in water collection and management
$\hfill\Box$ Traditional water management practices and knowledge systems
$\hfill\Box$ Cultural taboos and requirements for sanitation and hygiene
□ Community decision-making processes and leadership structures
Social Dynamics Assessment:
$\hfill\Box$ Pre-existing conflicts and tensions that may affect response
$\hfill\Box$ Social networks and support systems within the community
□ Economic relationships and dependencies
□ Education levels and communication preferences
$\hfill\Box$ Special needs populations: children, elderly, disabled, chronically

# **Multi-Agency Coordination Framework**

Community-Centered Coordination Model:		
	Coordination Structure:  - Community Emergency Committee: Local leadership with decision-making - Technical Support Network: External experts providing advice and research coordination Hub: Logistics and supply chain management - Communication Center: Information sharing and external communication - Monitoring and Evaluation: Community-controlled assessment and learn	
	Roles and Responsibilities:  Community Leadership:  Overall coordination and decision-making authority  Community needs assessment and priority setting  Resource allocation and distribution oversight  Community mobilization and volunteer coordination  Cultural guidance and community protection	
	External Support Agencies:  □ Technical assistance and expert advice  □ Resource provision and logistics support  □ Funding and financial management support	

- □ Coordination with other response agencies
  □ Advocacy and policy support
- **Information Management and Communication**:

Community Information Systems:      Community-controlled data collection and management
□ Regular community meetings and information sharing
□ Transparent decision-making and public accountability
□ Feedback mechanisms and complaint resolution
$\ \square$ Documentation and learning for future preparedness
External Communication:
$\ \square$ Regular updates to supporting agencies and funders
$\ \square$ Media engagement with community approval and participation
□ Advocacy and policy communication
□ Resource mobilization and fundraising communication
□ Network sharing and peer learning with other communities

# **Quality Assurance and Standards**

# **Community-Defined Quality Standards:**

Water Quality and Safety:
□ Water quality: WHO guidelines with cultural and religious considera
□ Access distance: Maximum 500m from households to water source
□ Water availability: Minimum 12 hours/day access with 24-hour goal
□ Water affordability: Free during emergency, sliding scale in recove
Sanitation and Hygiene Standards:
$\hfill\Box$ Latrine ratio: Maximum 20 people per latrine (emergency), 10 people
□ Gender segregation: Separate facilities for men and women
$\hfill\Box$ Privacy and dignity: Lockable doors, adequate lighting, cultural approximation $\hfill\Box$
$\hfill\Box$ Accessibility: Facilities usable by children, elderly, and disabled
$\hfill\square$ Hygiene supplies: Soap, menstrual products, and culturally appropria

# **Community Monitoring and Evaluation:**

# Participatory Monitoring Framework: Community scorecards: Regular community assessment of response qual: Focus groups: Structured discussions with different community groups: Individual feedback: Confidential feedback mechanisms for sensitive Technical monitoring: Water quality testing and infrastructure perform Health monitoring: Disease surveillance and health outcome tracking Adaptive Management: Weekly review meetings: Community assessment and response adjustment Monthly strategic review: Overall response effectiveness and strategic Quarterly evaluation: Comprehensive assessment and learning document Annual preparedness review: Community preparedness and capacity association of the provided of the provi

# Trauma-Informed and Healing-Centered Response

# **Trauma-Informed WASH Programming**

# **Understanding Trauma in Crisis:**

Types of Trauma Affecting Communities:
□ Acute trauma: Immediate crisis impacts and life-threatening experie
□ Complex trauma: Multiple, repeated traumatic experiences
$\hfill\square$ Historical trauma: Intergenerational trauma from historical oppress:
$\hfill\Box$ Collective trauma: Shared community experiences of trauma and loss
□ Secondary trauma: Trauma experienced by caregivers and responders
Trauma-Informed Principles:
□ Safety: Physical and emotional safety for all community members
□ Trustworthiness: Transparent communication and reliable follow-through
□ Peer support: Mutual self-help and community support systems
□ Collaboration: Shared decision-making and community empowerment

```
□ Empowerment: Community agency and self-determination in response □ Cultural humility: Respect for cultural healing practices and tradi
```

# **Healing-Centered Programming Design:**

```
Individual Healing Support:
    Basic needs security: Reliable access to water, sanitation, and hyg:
    Privacy and dignity: Facilities that protect personal dignity and processed control: Options and agency in accessing services
    Cultural appropriateness: Services aligned with cultural values and    Psychosocial support: Mental health and emotional support services

Community Healing Activities:
    Community gatherings: Opportunities for community connection and support cultural practices: Space and support for traditional healing and concollective action: Community organizing and empowerment activities
    Storytelling and testimony: Opportunities to share experiences and a creative expression: Art, music, and other creative healing activities
```

# **Community Resilience Building**

# **Social Cohesion and Support Systems:**

```
Community Network Strengthening:

Neighborhood support groups: Mutual aid and support networks

Community leadership development: Training and support for local lease Conflict resolution: Peaceful resolution of community conflicts and Collective efficacy: Community confidence in collective problem-solution Social capital building: Strengthening relationships and trust with:

Vulnerable Population Support:

Children and youth: Age-appropriate services and protection from hale Women and girls: Gender-specific needs and protection from violence Elderly: Health support and respect for wisdom and experience

Disabled: Accessibility and inclusion in all response activities

Marginalized groups: Specific attention to most vulnerable community
```

# **Cultural and Spiritual Healing:**

```
Traditional Healing Integration:

Traditional healers: Engagement and support for traditional healing
Spiritual practices: Space and support for spiritual healing and cell
Cultural preservation: Protection and continuation of cultural practices: Language preservation: Communication in native languages and cultural Sacred sites: Protection and access to culturally important location

Community Ritual and Ceremony:
Grief and loss: Community ceremonies for processing loss and trauma Healing ceremonies: Traditional and adapted ceremonies for community
Celebration and joy: Opportunities for community celebration and coll Seasonal observances: Continuation of important cultural and seasonal Life transitions: Support for births, deaths, and other life transitions.
```

# **Mental Health and Psychosocial Support**

# **Community Mental Health Approach:**

```
Community-Based Support Systems:

Peer support networks: Training and support for community peer support Community health workers: Training in basic mental health and psychologists: Training for families dealing with training Group support: Resources and training for families dealing with training Group support: Facilitated support groups for different populations.

Crisis intervention: Emergency mental health response and suicide professional Mental Health Integration:

Mental health professionals: Access to trained mental health professional healers: Integration of traditional and modern mental health professional support for severe trauma and PTSD.

Child psychologists: Specialized support for children and adolescent Family therapists: Support for families and relationships affected in
```

# Stress Reduction and Coping:

```
Daily Stress Management:

□ Relaxation techniques: Teaching breathing, meditation, and relaxation
□ Physical activity: Opportunities for exercise and physical movement
□ Creative expression: Art, music, writing, and other creative outlets
```

```
□ Nature connection: Access to natural spaces and outdoor activities
□ Social connection: Regular opportunities for social interaction and
Long-term Coping and Resilience:
□ Skill building: Life skills, coping skills, and resilience training
Economic support: Livelihood restoration and economic empowerment
□ Education and training: Opportunities for learning and personal deve
□ Community engagement: Meaningful roles in community recovery and dev
□ Future planning: Hope and vision for community and individual future
```



# Implementation and Training Protocols

# **Community Emergency Response Team Development**

# **Community Responder Training Program:**

```
Basic Emergency Response Training (40 hours):
Module 1: Emergency assessment and rapid needs identification (8 hours
Module 2: Water system emergency repair and temporary treatment (8 holes
Module 3: Emergency sanitation and hygiene facility construction (8 ho
Module 4: Community coordination and leadership in emergencies (8 hour
Module 5: Trauma-informed response and community support (8 hours)
Advanced Responder Training (80 additional hours):
Module 6: Technical water treatment and quality testing (16 hours)
Module 7: Emergency infrastructure design and construction (16 hours)
Module 8: Multi-agency coordination and resource management (16 hours
Module 9: Training and capacity building for other community members
Module 10: Recovery planning and build-back-better approaches (16 hour
```

# **Community Training and Preparedness:**

```
Household Emergency Preparedness (4-hour workshop):
□ Emergency supply kit preparation and maintenance
□ Family emergency communication and reunification planning
```

□ Basic water treatment and sanitation in emergencies
 □ First aid and basic health care in crisis situations
 □ Community mutual aid and neighborhood support systems
 Community-Wide Preparedness (8-hour training):
 □ Community emergency response plan development and practice
 □ Emergency communication systems and protocols
 □ Community resource inventory and mutual aid planning
 □ Evacuation planning and safe shelter identification
 □ Recovery planning and build-back-better principles

# **Response Deployment and Coordination**

# **Emergency Activation Protocol:**

```
Level 1 Activation (Local Emergency):
Time: 0-2 hours
□ Community emergency team activation and initial assessment
□ Local resource mobilization and community volunteer coordination
□ Basic emergency services deployment (water, sanitation, first aid)
□ Communication with regional support networks
□ Initial damage assessment and resource needs identification
Level 2 Activation (Regional Emergency):
Time: 2-24 hours
□ Regional emergency resource deployment and coordination
Technical expert mobilization and community support
□ Equipment and supply deployment from regional stockpiles
□ Multi-agency coordination and resource sharing
□ Media and external communication coordination
Level 3 Activation (Major Emergency):
Time: 24-72 hours
□ National and international resource mobilization
Large-scale infrastructure deployment and expert support
□ Comprehensive assessment and long-term planning initiation
□ Policy and advocacy coordination for recovery support
□ Documentation and learning for future preparedness improvement
```

# **Quality Assurance and Continuous Improvement**:

Response Quality Monitoring:
□ Real-time performance monitoring and community feedback
□ Technical quality assurance and safety monitoring
$\hfill\Box$ Community satisfaction and cultural appropriateness assessment
$\hfill\Box$ Response effectiveness and efficiency evaluation
$\hfill\Box$ Learning documentation and best practice identification
Post-Emergency Evaluation:
□ Comprehensive community-led evaluation of response effectiveness
$\hfill\Box$ Technical assessment of infrastructure and service quality
□ Financial and resource utilization evaluation
□ Coordination and collaboration effectiveness assessment
□ Preparedness and capacity improvement planning

# **Implementation Checklist and Resources**

# **Emergency Preparedness Checklist**

# **Community Preparedness Development:**

•	☐ Community emergency response team formation and training
•	☐ Emergency equipment stockpile establishment and maintenance
•	☐ Community emergency communication systems and protocols
•	☐ Emergency response plan development with community participation
•	$\hfill \square$ Coordination agreements with regional and external support organizations
•	☐ Regular emergency drills and preparedness exercises
•	☐ Community education and household preparedness programs
•	☐ Vulnerable population identification and special needs planning
•	Cultural and spiritual leader engagement in preparedness planning
•	Recovery and build-back-better planning integration

# **Response Capability Assessment:**

<ul> <li>Community technical capacity and skill assessment</li> </ul>
• Equipment and resource inventory and gap analysis
• Communication system functionality and reliability testing
$\bullet  \square$ Coordination and decision-making process effectiveness evaluation
Cultural and trauma-informed response capacity assessment
Regional and external support network relationship development
• Financial resources and funding mechanism preparation
ullet Legal and regulatory compliance and authorization preparation
• Environmental and safety risk assessment and mitigation planning
• Continuous improvement and learning system establishment
Response Implementation Checklist
Immediate Response (0-72 hours):
<ul> <li>Community safety and security assessment and protection</li> </ul>
• Community leadership activation and emergency coordination
Basic needs assessment and priority identification
• Emergency water, sanitation, and hygiene service deployment
Community communication and information sharing
<ul> <li>Vulnerable population identification and priority support</li> </ul>
• External assistance coordination and resource mobilization
ullet Health and safety monitoring and protection measures
<ul> <li>Cultural and spiritual support and accommodation</li> </ul>
Initial documentation and learning capture
Short-term Stabilization (3 days - 4 weeks):
• Comprehensive needs assessment and response planning
ullet Improved emergency services and infrastructure deployment
Community organization and volunteer coordination
External partnership and resource coordination
ullet Health and psychosocial support service establishment
Economic support and livelihood protection measures

Education and child protection service continuation		
Cultural and social activity restoration and support		
Recovery planning and build-back-better preparation		
Ongoing monitoring and adaptive management		
Recovery and Reconstruction (1 month - 2+ years):		
<ul> <li>Community-controlled recovery planning and implementation</li> </ul>		
• Infrastructure reconstruction with resilience and improvement		
Economic recovery and livelihood restoration		
Social service restoration and improvement		
Community empowerment and capacity building		
Regional cooperation and mutual aid development		
Policy and advocacy for systemic change and support		
Preparedness improvement and future resilience building		
Knowledge sharing and solidarity with other communities		
Long-term monitoring and impact assessment		

**Call to Emergency Preparedness**: Every community faces potential crises, and the communities that are prepared with community-controlled emergency response capabilities are those that recover faster and stronger. These Emergency WASH Response Protocols provide comprehensive guidance for building community resilience while ensuring dignified, effective response when crisis strikes.

# **Start Your Community Preparedness Today:**

- Assess Community Readiness: Use the assessment tools to understand your community's current preparedness and capacity
- 2. **Build Community Response Teams**: Train community members in emergency response skills and coordination
- 3. **Develop Emergency Plans**: Create community-controlled emergency response plans with broad participation
- 4. Build Networks: Establish relationships with regional partners and support organizations
- 5. **Practice and Improve**: Regular drills and exercises to test and improve emergency response capacity

# **Contact for Emergency Preparedness Support:**

- **Email**: globalgovernanceframework@gmail.com
- Subject: "Emergency WASH Response Implementation"
- Include: Community location, hazard risks, current preparedness level, and training needs

**Community Resilience Saves Lives**: When communities control their own emergency response, they respond faster, more effectively, and with greater cultural sensitivity than external emergency response. Community preparedness is community empowerment, ensuring that crisis becomes an opportunity for building stronger, more resilient, and more just communities.

The Emergency WASH Response Protocols are part of the Global Framework for Water & Sanitation (WASH) Governance. For complete framework access and crisis response tools, visit globalgovernanceframework.org