

Fire Safety and Prevention Guidelines for IDP Hosting Sites

CCCM in Yemen utilizes three main modalities for Fire Safety and Prevention in IDP Hosting Sites:

- **Infrastructural Support** through humanitarian provision of fire safety kits and improvement of infrastructure (i.e. firebreaks)
- **Community Committee Mobilization** to safeguard kits, monitor threats, sensitize the community and provide first-aid response
 - **Fire Wardens:**
Community Committees offer partners an auspicious ability of appointing fire wardens for respective sites. Through conducting fire prevention trainings, partners should identify what committee members are vigorously engaged in the material and have the capacity of becoming fire wardens for their respective site. Based on the size of the site and fire risks, partners can appoint 1-5 individuals as fire wardens. Fire wardens will take on great responsibilities and must be supported frequently by partners ensuring that these individuals have all the tools, contact information and plans for reporting and responding to fire in a timely manner. Fire wardens are responsible for reporting fires to civil defense or fire brigades, local authorities and other stakeholders in the area. They are also responsible for safeguarding the fire safety kits and making sure the kits are always accessible and used correctly.
- **Community Messaging** through IEC material and volunteers/committees

CCCM Minimum Fire Safety Standards at IDP Hosting Sites

1. In site planning, include a 30-meter firebreak every 300 meters
2. If space allows, the distance between structures should be a minimum of twice the overall height of any structure. If building materials are highly inflammable (straw, thatch, etc.) the distance should be increased to 3–4 times the overall height
3. The distance between a **fire point** and a tent/living space should not exceed 50 meters, and should ideally include all the following¹:
 - a. One **fire blanket** for ground-based fires such as a fire that is sparked by a cooker or kitchen appliance²
 - b. Four **fire buckets** to be used for carrying water or sand to extinguish fires
 - c. A **first-aid kit** with directions on how to provide first aid to burns and injuries
 - d. **Optionally:**

¹ In collective centers, there should ideally be one fire point per floor

² Fire blankets are not effective in large fires such as when a shelter ignites

- i. One 1.5kg **fire extinguisher**;
 - Fire extinguishers should be inspected for refilling or replacement every time they are damaged or used, and every 12 months if: 1) the extinguisher has not been used; 2) the site supervision organization has not received a complaint from fire wardens; and, 3) the extinguisher has been stored away from direct sunlight
- ii. Two **fire beaters**
- iii. Two **fire hooks** to dismantle burning structures and prevent the spread of fire

CCCM partners should encourage and support IDPs to adapt safe cooking practices, such as the use of **mud guards, windscreens, safe clay ovens, and proper spacing from flammable material.**



Fire buckets



Stove placed safely on a mudguard



Prevention

Fire Prevention Sensitization

CCCM community committees should be provided with trainings tailored for the setting of the site. Such trainings should include fire risk mitigation, safe cooking practices, extinguishing of fires, firebreaks, first aid, and evacuation. Furthermore, the CCCM partner with the community should identify the local resources available in the area which can be mobilized in case of fire, such as fire brigades or civil defense. Ideally, the knowledge from trainings of committee members shall be transferred to individuals living in their respective blocks within the site.

Gender and age variations should be considered during community messaging. For example:

- **Male focused:** firebreaks, evacuation drills, and how to use the fire kits
- **Female focused:** household level hazards & risks (cooking oil fires, responding to burns and scolds, fire extinguishing...)
- **Child-Friendly:** incorporates all key messaging but catered to suit children, as well as messaging on playing with and near fire

Burn and Injury Prevention

The Haddon Matrix below shows the key factors that should be considered to prevent fire injuries.

Phases	Factors			
	Host	Agent	Physical Environment	Socioeconomic Environment
Before	<ul style="list-style-type: none"> • Use of fireworks • Smoking in the home or in bed • Lack of knowledge about risks of fire in the home • Children playing with matches/lighters • Children playing near fire • Lack of information about fire risk and cooking (loose clothing, long hair, etc., may catch on fire) 	<ul style="list-style-type: none"> • Storage of flammable substances in the house • Combustibles, matches or lighters accessible to children • Unsafe stoves or lamps • Extinguishing of cigarettes • <i>Would regular inspection work to address fire risks in an IDP hosting site? Who would do it?</i> 	<ul style="list-style-type: none"> • Congested sites • Overcrowded households • No separation between cooking area and other areas • Cooking areas are unprotected from wind • Unsafe electrical wiring • Flammability of structures • Lack of adequate emergency escape exits in congested sites 	<ul style="list-style-type: none"> • Poverty, unemployment, illiteracy • Lack of fire-related codes and their enforcement • <i>How can we improve the safety of the way people cook and store fuels... to avoid fires in the site?</i>

	<ul style="list-style-type: none"> • <i>What sort of opportunities are there for behavioral change interventions in the site?</i> 		<ul style="list-style-type: none"> • <i>How can the flammability of shelter materials be reduced in the site?</i> • <i>How can emergency exits be created in spatially constrained collective centers?</i> 	
During	<ul style="list-style-type: none"> • Absence of sprinkler systems • Poor knowledge about evacuation procedures • Lack of knowledge among children stop, drop, and roll technique • Probability of children hiding during a fire • Disability hinders individuals to escape • <i>How can escape strategies be planned in site?</i> 	<ul style="list-style-type: none"> • Absence of sprinkler systems • Lack of fire hydrants or other access to water supply • Furniture materials are flammable and/or toxic when burned • <i>How can we ensure that materials used in the sites are flame resistant and less toxic when burned?</i> 	<ul style="list-style-type: none"> • Lack of smoke alarms and sprinklers • Lack of clear and easily accessible escape routes • Lack of access to telephone to call for help • <i>What alternative warning strategies are possible in the site?</i> 	<ul style="list-style-type: none"> • Inadequate communications infrastructure for calling emergency services • Inadequate road infrastructure for fire brigades or civil defense emergency service access • Fire brigades are unable to responded to inadequate resources (not enough personnel and equipment for rapid response...) • <i>Who has the responsibility as emergency responders in the site?</i>
After	<ul style="list-style-type: none"> • Lack of knowledge of first aid • <i>Who would provide first aid training in the site?</i> 	<ul style="list-style-type: none"> • Flammability of household materials and clothing • Toxicity of smoke and burning household materials • <i>Who would provide medical care and replacement HH materials for the victims?</i> 	<ul style="list-style-type: none"> • Low access to first aid, emergency medical services, and hospital burn care • High toxicity of shelter materials • <i>Where is the nearest medical facility?</i> • <i>To what extent does the site have toxic building materials and what alternatives are available?</i> 	<ul style="list-style-type: none"> • Inadequate access to burn centers and rehabilitation services • Insufficient community support for those who have suffered burns • <i>What role do non-governmental organizations /charities play in providing such facilities in the site?</i>



Misuse of Firefighting Kits

The fire wardens, members of the community committee, are assigned the role of safeguarding fire kits at the site. To prevent the misuse of fire kits, the Cluster suggests spot checks by the CCCM teams to ensure that fire kits are still in place, easy to reach but away from children, and ready for use in case of fire.

Preparedness

Layout of Fire Points

The distance between fire points³ should be measured according to the following scenarios:

Scenario	Distance
Good distance between tents (Above 1.5 meters between tents)	minimum of 30 - 50 meters
Congested site (between 0.5 - 1.5 meter spacing between tents)	minimum of 20 - 30 meters
Very congested site (less than 0.5 meters between tents)	15 – 20 meters

Inspection of Kits

Inspection of kits for replacement of damaged or used kit items should take place every 12 months upon distribution.

Evacuation Plans

Through fire prevention trainings and committee meetings, CCCM teams can discuss with community committees and stakeholders the evacuation routes in case of fire. The following considerations should inform those plans:

1. Evacuation routes should be accessible for all populations living in the site
 - For collective centers, the CCCM partner, with the support of fire wardens, needs to ensure that all hallways and exit routes remain cleared and unrestricted
2. Once evacuation routes are identified for all sections of the site, committee members should go back to their geographic area of the site and work on relaying to residents what the evacuation routes are, and why it is important for residents to know this information

³ The distance between fire points in any site layout should not exceed 50 meters



- Additionally, partners can articulate routes through constructing signs and posting routes on information boards or in community centers (if available in the site). Evacuation routes signs and posts should comprise simple maps and images and should include as little writing as possible
3. If feasible, assembly point should be created and marked clearly
 4. Evacuation plans should consider accessibility for the elderly, persons with disabilities, and other specific populations that may require help during evacuation
 5. Evacuation plans should be reviewed periodically and as required (in case of change in site layout, population... etc.)

Rearrangement of Shelters for Firebreaks

A firebreak is a strip of land that is cleared of all trees, shrubs, grass and other combustible material, providing a 'fuel free' area. Firebreaks are intended to allow access for firefighting efforts and can provide a barrier to slow or stop the spreading of fire to surrounding shelters. The cluster suggests a 30-meter firebreak every 300 meters, and a minimum distance between structures equal to twice the overall height of any structure. If building materials are highly inflammable (straw, thatch, etc.) the distance should be increased to 3–4 times the overall height.

Fire wardens and other community committee members, that have been trained in fire safety, should also be trained on firebreaks for built-up areas and identifying problem areas within the site. While the relocation of shelters from overly dense areas of the site to locations where more spacing is available can be challenging or sometimes impossible, CCCM partners and the community committees can facilitate conversations between residents, site administrators, landowners and other stakeholders about possible spacing of shelters in areas of the site that have the highest risk of fire breakout.

The fire wardens should actively engage with newly arriving residents on mounting their shelters with suitable shelter spacing considerations. Committees can mobilize within their respective area of the site discussing the benefits of small-scale shelter relocation and further advocating for improved site layouts which can diminish the threat of widespread fire.

Response

Evacuation

Beneficiaries must exit the shelter as soon as a fire breaks out. If feasible, important documentation (registration documents, etc.) as well as valuable possessions (money, gold, etc.) must be stored in a 'grab bag' that can be easily retrieved upon exiting the shelter.

- **Children & vulnerable first, firefighting later:** it is imperative that parents and caregivers evacuate children, from the shelter, before attempting to fight the fire. Children should also be very aware never to return to the shelter once evacuated.



- **Avoiding Carbon Monoxide poisoning:** all household members must be made very aware of the dangers and fatalities caused by carbon monoxide poisoning. In the case of smoke spread throughout the household, members must be trained on 'getting low' (as to avoid severe smoke inhalation) and stay low until they have exited the shelter.
- **Creation of assembly points (safe zones):** once children and household members have evacuated the shelter, assembly points must be created for safe zones.

Spontaneous Firebreak Technique

To create a spontaneous firebreak, fire wardens must be aware to disassemble the third shelter/structure to a shelter/structure afire, taking into consideration wind direction. The risk of the adjacent tent/structure catching fire in a short period of time (less than 2 minutes) is high, and therefore to remove fuel to the fire as well as create the ability to tackle the fire at ground level in time, firebreaks can serve as a life-saving technique. This technique is mostly used when a large fire erupts, and much focus should be given to educate on it in the site.

Stop, Drop and Roll

IDPs and host communities in the site must understand the dangers and long-term impacts of improper response to a person catching fire. The correct response is to teach beneficiaries how to 'stop, drop and roll'. Once the victim is on ground level, gentle pats onto the body completely extinguish the heat and flames. It is also important that the target audience understand never to remove the clothing off a fire victim, due to the risk of peeling off burnt skin in the process.

First Aid for Burns

There are several traditional burn remedies that can be counterproductive and harmful. Therefore, and in addition to training, the first aid kits should be accompanied with a printout of the below directions in Arabic:

What to do	What NOT to do
<ul style="list-style-type: none"> • Ensure your own safety before commencing first aid • In flame injuries, extinguish the flames by allowing the patient to roll on the ground, or by applying a blanket, or using water or other fire extinguishing liquids • Stop the burning process by removing clothing and irrigating (rinsing or washing) the wounds • Apply cool water or allow the burned area to remain in contact with cool water for some time • In chemical burns, remove or dilute the chemical agent by irrigating the wound with copious amounts of water • Obtain medical care 	<ul style="list-style-type: none"> • Do not apply toothpaste, oil, turmeric paste or raw cotton to the burned area • Do not apply ice • Do not open the blisters with a needle or pin • Do not apply any material directly to the wound as it might become infected • Avoid application of topical medication (medication applied directly to the skin) until the patient has been placed under appropriate medical care • Avoid applying cold water to large areas of the body, especially in the very young or very old, to minimize the risk of hypothermia

Humanitarian Assistance

- Provision of ESKs/tents/maintenance and NFI support must be coordinated with the Shelter actor
- Injured persons must be referred to the nearest health facility in coordination with the Health actor, and the conditions of the injured should be monitored by the CCCM team
- Similarly, any emerging needs and damage of sectoral assets must be reported to the concerned Cluster/sectoral actor for support, repair and/or replacement
- Documentation of the incident is required and must include as much as possible of the following information (*see annexed template*):
 - Source of fire and cause of spread of fire
 - Condition of shelter before and after fire
 - Status of land agreement
 - A list of damaged assets
 - Disaggregated numbers of people injured and degree of injury
 - Specific needs per sector; action taken; support needed
 - Lessons learned



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Annex: Incident Report Template

Governorate:		District:		Sub-District:		Site:	
Date and Time of Fire:		Source of Fire:		Type of shelter:			
Did the fire spread to other shelter? If so, why?							
Number of People Affected:				Men	Women	Boys	Girls
Number of Fatalities:				Men	Women	Boys	Girls
Number of Injuries (<i>per severity</i>):			Minor	Men	Women	Boys	Girls
			Moderate	Men	Women	Boys	Girls
			Serious – severe	Men	Women	Boys	Girls
			Critical – maximal	Men	Women	Boys	Girls
Condition of shelter before fire		Status of land agreement					
Number of shelters destroyed				Number shelters partially destroyed			
Number of fire wardens in the site:				Have the wardens received previous fire safety training?			
Number of fire extinguishers distributed:				Was the fire extinguisher used? If not, why?			
Were you able to extinguish the fire? If yes, how?							
Action taken:							
Support needed:							
<p>Please enclose:</p> <ol style="list-style-type: none"> 1. A list of damaged assets 2. Specified unmet needs per sector (resulting from the fire) 3. Lessons learned 							