

HOW CAN WE IMPROVE FIRE SAFETY FOR INFORMAL SETTLEMENTS AND BACKYARD DWELLINGS?

TOWARDS INTEGRATED FIRE SAFETY

Informal dwellings are at great risk from fires and once they start, they can spread quickly. There is no quick fix and we need a combination of interventions, strategies and the involvement and ongoing support of all stakeholders to reduce the impacts of fires.



We need **ACTIVE PROTECTION** (response to fires), **PASSIVE PROTECTION** (reduce the chance of fires spreading) and **FIRE PREVENTION** (stop fires from starting).

Each settlement and community is different and will need a unique combination of solutions.

To access fire safety training material: videos and brochures (bit.ly/3ENVYUn) and guide book (<http://hdl.handle.net/10019.1/108926>)

ACTIVE PROTECTION (RESPONSE)

- A1 PROMOTE THE LOCAL FIRE DEPARTMENT NUMBER**
Know the local fire department number. DON'T dial 10111!
- A2 FIRE DEPARTMENT INTERVENTION**
Work with your local fire department. Keep roads clear, guide fire trucks to fires and protect firefighters.
- A3 FIRE HYDRANTS**
Report vandalism and do not build homes over hydrants.
- A4 COMMUNITY WATER SUPPLY**
Community water supply is essential for fighting fires.
- A5 SMOKE OR FIRE ALARMS**
Detectors can help fight fires. Smoke alarms detect fire quickly, but can have many false alarms. Fire alarms have few false alarms but don't detect small fires with lots of smoke.
- A6 WATER, FIRE EXTINGUISHERS AND OTHER PRODUCTS**
Buckets of water are good for putting out fires. Fire extinguishers are effective but expensive and need maintenance. Household items like thick blankets, pot lids and baking soda can be used to put out small fires. Fancy suppression products (balls, canisters, etc.) normally don't work for big fires.
- A7 COMMUNITY-WIDE FIRE WARNING SYSTEMS**
Community social media groups can warn people.
- A8 COMMUNITY RESPONSE TEAMS**
Train local team members. They will require ongoing support.

PASSIVE PROTECTION (PREVENT SPREAD)

- B1 FIRE RESISTANT CONSTRUCTION PRODUCTS**
Non-combustible construction systems slow fire spread. Poor installation and openings (including doors, windows and roof joints) reduce effectiveness.
- B2 REDUCE COMBUSTIBLE ITEMS AROUND HOMES**
Remove any wood, old tyres, boxes, equipment, etc. around homes. Paper, cardboard and plastic on homes ignite easily.
- B3 SAFETY DISTANCES BETWEEN HOMES**
Keep roads, paths and paved areas open to slow fires and for access.
- B4 ESCAPE FROM HOMES**
Have an evacuation/escape plan. Everyone should know where the front door keys are.
- B5 REBLOCKING**
Reblocking can create better community layouts but requires pre-planning and much effort.
- B6 REFUSE REMOVAL**
Rubbish around homes causes fires to spread.

FIRE PREVENTION (PREPAREDNESS)

- C1 EDUCATION CAMPAIGNS**
Educational efforts help improve fire safety.
- C2 ELECTRIFICATION**
Electrification reduces fire risk. Low hanging cables make fire truck access difficult.
- C3 GOOD WIRING AND NOT OVERLOADING PLUGS**
Electrical faults, bad wiring and overloaded plugs cause fires.
- C4 FIRE SAFETY KITS**
A good fire safety kit can provide many important items.
- C5 BETTER LIGHTING, COOKING AND HEATING**
Make sure any device is tested by the community first.
- C6 SAFE STORAGE OF FUELS**
Keep fuels in child-proof containers and away from heat.
- C7 MAPPING AREAS TO PLAN AND IDENTIFY RISKS**
Have maps with safety, medical and firefighting items shown.
- C8 EVACUATION DRILLS**
Practice evacuation drills with the community.
- C9 MEDICAL FACILITIES**
Know the contact number of the local clinics and hospitals.
- C10 MEDICAL TRAINING FOR COMMUNITY MEMBERS**
Trained community members can be first responders.
- C11 POST-FIRE DISASTER RECOVERY**
Disaster relief kits and insurance help with rebuilding.

DISPELLING SOME FIRE SAFETY MYTHS

- 1 Galvanised steel sheets (zinc / corrugated iron) are NOT fire resistant.
- 2 Fire resistant (intumescent) paints are not effective for homes.
- 3 Small, throwable products (balls, canisters, etc.) are not effective in big fires.
- 4 Fires are not unstoppable. Much can be done to reduce their impact.

FIRE SAFETY FOR INFORMAL HOMES



ACTIVE FIRE PROTECTION / RESPONSE

- A1 Know the local fire department number (NOT 10111!)
- A2 Fire department intervention
- A3 Fire hydrants
- A4 Water provision inside or near homes
- A5 Smoke or fire alarms
- A6 Water buckets/fire extinguishers/suppression products
- A7 Community-wide fire warning system
- A8 Community response teams

PASSIVE FIRE PROTECTION / PREVENT SPREAD

- B1 Fire resistant construction products
- B2 Reduce combustible items around homes
- B3 Safety distances (roads, paths) between homes
- B4 Escape from homes
- B5 Reblocking
- B6 Refuse removal

FIRE PREVENTION / RISK OF IGNITION / PREPAREDNESS

- C1 Education campaigns
- C2 Electrification

- C3 Good wiring and not overloading plugs
- C4 Fire safety kits
- C5 Better lighting, cooking and heating
- C6 Safe storage of fuels
- C7 Map area to identify risks and plan for incidents
- C8 Evacuation drills
- C9 Medical facilities
- C10 Medical training for community members
- C11 Post-fire recovery (disaster kits and insurance)