

This guideline provides North Zone Agencies procedures for the immediate assistance of emergency response personnel who become lost, trapped, or injured during emergency incidents. This guideline designates and assigns a Rapid Intervention Crew (RIC) at fires and other types of incidents where operations take place in Immediately Dangerous to Life and Health (IDLH) conditions.

In addition, this guideline establishes procedures to assure there are adequate reserve personnel on all incidents where IDLH conditions exist. -The goal of this guideline is to have properly equipped and trained personnel available to take immediate action to rescue injured, lost, or trapped personnel.

DEFINITIONS:

Accountability Officer:

Person(s) with responsibility for personnel accountability as defined in EOM 601.01 (Fireground Accountability System).

Immediately Dangerous to Life and Health (IDLH):

An atmospheric concentration of any toxic, corrosive or asphyxiant substance that, to an unprotected person, poses an immediate threat to life, or would cause irreversible or delayed adverse health effects, or would interfere with an individual's ability to escape from the hazardous area.

- Interior atmospheric conditions present at structure fires that have gone beyond the incipient stage are generally considered IDLH conditions.
- An IDLH condition requires operations be conducted with at least two personnel working as a team within the IDLH condition and that at least two other personnel be present outside the Hazard Area (IDLH condition) designated and prepared to provide immediate rescue to personnel inside.

Personnel Accountability:

Personnel accountability is an accountability system established at every emergency, based on strict adherence to Unity of Command, which provides tracking/recording of on-scene personnel. A written personnel accountability system, such as the ICS Form 201 for Incident Commanders, and the Accountability Status Boards for Division/Group Supervisors, Company Officers, and Engineers will be maintained whenever companies are operating in an IDLH condition.

Rapid Intervention Crew (RIC):

At least one Initial Rapid Intervention Crew (IRIC) or Rapid Intervention Crew (RIC) shall be assigned during all incidents where personnel are operating in IDLH conditions. The purpose of the Rapid Intervention Crew (RIC) is to ensure firefighter safety during hazardous conditions and is not intended to rescue occupants/victims. The crew is identified and equipped to perform immediate rescue of personnel operating within the Hazard Area. This could include interior structure fires, confined space rescues, building collapses, trench collapses, high rise fires, hazardous materials, and other potential IDLH conditions.

“Two-In/Two-Out” Rule:

This will be considered I-RIC in North Zone.

The basis for the “two-in/two-out” rule is found in [29CFR 1910.134(g)(3)(i) through (vi)] and [CCR, Title 8, Section 5144(g)(3)(A) through (F)]. At a minimum, one person must be outside the IDLH condition. There must be visual, voice, or signal line communication between the personnel in the IDLH condition and the personnel outside the IDLH condition. [29CFR 1910.134(g)(4)(i)(ii)(iii)] and [CCR, Title 8, Section 5144(g)(4)(A)(B)(C)]. For interior structural fire fighting, at least two personnel shall enter the IDLH condition and remain in visual or voice contact at all times. At Least two personnel shall be located outside the IDLH condition. All personnel in an IDLH condition shall wear an SCBA.

Note: One of the two personnel located outside the IDLH condition may be assigned to an additional role, such as Incident Commander, Safety Officer, etc. as long as this person is able to perform assistance or rescue activities without jeopardizing the safety or health of any of the personnel working on the incident.

Note: Nothing in this rule is meant to preclude personnel from performing emergency rescue activities before an entire team has assembled.

PROCEDURES/RESPONSIBILITIES:

Incident Commander/Operations Section Chief:

Ensure compliance with the “Two-In, Two-Out” rule (IRIC).

- Establish a Hazard Area at all emergency incidents where an IDLH condition exists.
- Establish at least one Rapid Intervention Crew (RIC) consisting of at least two persons whenever personnel are committed to operations in IDLH conditions at fires and at other high-risk emergency incidents. (Note: more than one RIC may be required to adequately ensure personnel safety.)
- Ensure implementation of the Department’s Personnel Accountability System (**EOM 601.01**) at every incident where interior structural fire fighting operations are being performed or any other incident where applicable due to IDLH conditions.

- Monitor conditions from the outside by visual observation, communication with working crews, radio traffic, or assignment of observers.
- Implement rescue operations without delay whenever incident personnel are reported lost, trapped, or missing.

Branch Directors, Division/Group Supervisors:

- Ensure compliance with the “Two-In, Two-Out” rule, within geographic areas or functional groups.
- Maintain personnel accountability and communications within assigned Branches, Divisions, Groups, and Units.
- Ensure that rapid intervention capabilities are appropriate for the level of IDLH conditions.
- Monitor conditions by visual observation, communication with working crews, radio traffic, or assignment of observers.
- Notify the Incident Commander/Operation Section Chief of any reported personnel lost, missing, or trapped within their area of responsibility, and coordinate rescue operations to resolve the situation.

Company Officers:

- Ensure compliance with the “Two-In/Two-Out” rule (IRIC).
- Ensure personnel accountability. This includes keeping the Incident Commander, Operations Section Chief and/or assigned Division/Group Supervisor, informed of the location and status of personnel.
- Monitor conditions by visual observation, communication with other crews, radio traffic, or assignment of observers.
- Notify the Incident Commander, Operations Section Chief, or Division/Group Supervisor of any personnel reported lost, missing, or trapped. Perform a timely head count of personnel when ordered, and be prepared to assist with a rescue operation.

All Personnel:

- Maintain Unity of Command and keep supervisors informed of location and status while on emergency scenes.
- Ensure compliance with the “Two-In/Two-Out” rule. Personnel shall operate as directed, and will immediately advise their supervising officer of any change in their operational activities or status.
- Notify supervisor of any personnel reported lost, missing, or trapped, and be prepared to assist with rescue operations.

IRIC PROCEDURE (TWO-IN/TWO OUT):

At every incident, the Incident Commander and Company Officers must determine whether IDLH conditions exist. If IDLH conditions are found to exist, the Incident Commander and Company Officers must ensure that at least one two-person Initial Attack Rapid Intervention Crew (RIC) is in place before committing personnel into the IDLH condition. The Incident Commander will designate the IRIC to stand-by outside the IDLH to provide immediate assistance to entry crews in case of an emergency.

Entry into the Hazard Area will require at least four (4) personnel on the scene (“Two-In/Two-Out”). Two personnel will be assigned to the entry crew, and two to the Initial Attack Rapid Intervention Crew (RIC). (Refer to Attachment A, “Two-In/Two-Out” Flow Chart.)

- The only exception to the “Two-In, Two-Out” Rule will be when the first arriving personnel determine that their immediate entry into the Hazard Area is necessary to save a life or prevent serious injury. Unless this exceptional situation is encountered, entry into the Hazard Area will require at least four personnel on the scene (“Two-In, Two-Out”). No exception will be permitted when there is no possibility to save lives.
- In imminent life-threatening situations where immediate action is required to prevent the loss of life or serious injury, a Rapid Intervention Crew (RIC) will be established immediately upon the arrival of sufficient resources. When the “life-saving emergency rescue” exception is invoked, the circumstances must be investigated and documented on a Department “*Rescue Exception Report*” (Form #E026) and submitted to the Department Emergency Services Chief within three (3) days. (Refer to Attachment B)
- Entry crews will check-in upon entering the Hazard Area and will periodically update their status and location via the incident resource status process.
- Entry crews will ensure that appropriate Personnel Protective Equipment (PPE), including Personal Alert Devices (PAL), are worn and used inside the Hazard Area.
- Entry crews will not rely strictly on the use of a radio for communication due to the potential for radio failure. Entry crewmembers shall remain close to each other to provide assistance in case of a firefighter down situation.
- Entry crewmembers will communicate with each other through visual; voice, radio, or safety guide rope/hose line methods.
- Personnel operating within the Hazard Area will identify secondary escape routes and communicate them to other entry crewmembers.

INITIAL RAPID INTERVENTION CREW (IRIC) / “FORMAL” RAPID INTERVENTION CREW (RIC) PROCEDURES:

The Incident Commander will **be responsible for assuring that personnel are assigned to perform the** duties of a Rapid Intervention Crew (RIC) during first alarm incidents and other hazardous incidents where personnel are operating in IDLH conditions. The composition and outfitting of Rapid Intervention Crew (RIC) will be permitted to be flexible based on the type of incident and the size and complexity of operations. The Incident Commander shall evaluate the situation and the risks to operating crews, and will provide one or more appropriately equipped Rapid Intervention Crew(s) (RIC) commensurate with the needs of the situation.

- During the initial stages of an incident (one or two companies on-scene), regulations require at least two personnel be located outside the IDLH condition fully equipped, in a ready state to immediately react and respond to rescue firefighters. One member on the outside must be dedicated to tracking and monitoring the interior personnel. This member's function is to account for location of interior crew members. This monitoring can be accomplished by direct voice, visual, or radio contact with those firefighters operating in the IDLH atmosphere. The second member outside the IDLH may be assigned to additional duties such as Incident Commander, pump operator, Safety Officer, etc. as long as this person is able to perform assistance or rescue activities without jeopardizing the safety or health of any of the personnel working on the incident. The two members assigned to monitor outside the IDLH will be designated as IRIC. They should be considered a temporary rescue team during the initial stage of an emergency incident and not a full Rapid Intervention Crew.
- Some examples of hazardous conditions are fire, smoke, potential structural collapse, unconfined hazardous materials or falling debris.
- Personnel assigned to a Rapid Intervention Crew (RIC) are responsible for remaining in a constant state of readiness and as such able to conduct Rapid Intervention Operations (rescue) whenever fire fighting personnel are reported lost, missing or trapped.
- The Rapid Intervention Crew(s) (RIC) will communicate with Entry Crews through visual, voice, radio or safety guide rope/hose line methods.
- The Rapid Intervention Crew (RIC) will be equipped with rescue tools and equipment, including all Personal Protective Equipment appropriate to the type of incident.
- The Rapid Intervention Crew (RIC) will be located at a safe position outside the IDLH condition and still be able to monitor conditions by visual observation, communication with assigned personnel, monitoring radio traffic, or assignment of observers.
- Multiple Rapid Intervention Crews (RICs) may be established if a single RIC cannot provide timely intervention to all parts of the incident.

- When several Rapid Intervention Crews (RICs) are assigned, the Incident Commander (or Operations Section Chief if established) should consider assigning a Rapid Intervention Crew Group Supervisor to coordinate.
- IRIC or RIC will dedicate a member at the entry point to track and monitor those firefighters entering the IDLH atmosphere.

TRAPPED, INJURED, OR MISSING PERSONNEL:

In the event of personnel becoming trapped, injured, or missing (**EOM 601 and 601.01**) shall be followed.

The Incident Commander or Operations Section Chief should initiate the following actions:

- Change incident plan to a high priority rescue. A rapid, well thought out plan must be developed and the ICP expanded for effectiveness. Request overhead.
- **IMMEDIATE** request multiple alarms with ALS function, anticipate more than one victim. These additional victims may be un-reported victims and RIC members that become a downed victim. Build the RIC component to meet potential needs.
- Fireground Accountability - Immediate request for a PAR from all companies operating on the fireground. Initiate a status report of crews operating in the Division or area through the appropriate Accountability Officer(s), Company Officers assigned and/or Division/Group Supervisor(s). Request a command channel if one has not already been requested. Utilize the "fire" tactical channel so this communications will not hamper or confuse the rescue operations. This is especially important in situations of structural collapse. IC cannot develop an effective rescue plan until accurate information is available on the number of missing firefighters, their identity, last reported location and which companies are affected.
- Assure RIC / Rescue efforts have deployed. If a RIC Group Supervisor has not been assigned, then it should be immediately by considered. The RIC Group Supervisor will coordinate activities at this entry location. Commit additional resources to this location. Assure "Soften the Building" Operations are or have taken place.
- Continuously monitor the dispatch, command, tactical(s) and **Emergency (EMG)** (16) channels, and for contact with missing or trapped crews during the entire operation. North Comm. will be advised of the situation by the IC and requested to provide additional continuous monitoring.
- Advise victim(s) to activate the EMG Channel. If victim cannot activate, keep them on the channel that has been activated and prepare to move all "fire" tactical operations to another tactical channel. Be aware that there may be members on the fireground that may become confused or unfamiliar with the portable radio. Advise North Comm. to initiate a running clock and advise IC at every 15 minute interval.
- Do not abandon fire fighting positions, provide reinforcements. The IC and crews should take aggressive measures to protect trapped or missing firefighters from the

effects of fire. Efforts should be concentrated on reinforcing existing positions and keeping the fire out of the rescue area and providing appropriate ventilation and lighting. Ventilation should be aggressively employed to create an improved environment for rescue operations. In some situations it may be appropriate to write off some areas of the building in order to relocate companies and crews to better protect the rescue effort.

- Coordinate and control the search efforts. Close coordination of all search efforts is a must in order to eliminate duplicate searches that waste time. Identify and assign responsibility for specific areas or grid blocks in the building to assure a thorough search.
- Deploy safety officers to assess structural stability of the entire building throughout the rescue event. Where a structural collapse has occurred, or the fire or other event has compromised the structural integrity of the building, a structural specialist should evaluate the structure.
- Assess resource needs, including the need for specialized equipment, or technical specialists such as a USAR or HazMat Response Team.
- The IC will need to control the media early and throughout the incident. Information on the identities/conditions of the victims must be restricted until after family members are notified. Media crews should be restricted to areas that are safe and at a distance that will prevent visual/facial identification of any victims.
- If a collapse or other hostile event indicates an immediate evacuation of the structure/area, the IC must announce to the designated apparatus operator(s) on the fireground to “sound” their air horn(s) to signal the immediate evacuation. This procedure will follow the procedure outlined in **EOM 601.01**. Understand that this procedure will abort the RIC deployment or cause RIC members to create alternate evacuation priorities. **PERSONNEL ACCOUNTABILITY REPORT (PAR)** and company cohesion is imperative.
- Ensure that the Officer closest to the event initiates an evacuation of the affected area and establishes a safe perimeter.
- Initiate a status report of crews operating in the Division or area through the appropriate Accountability Officer(s) and/or Division/Group Supervisor(s).
- Obtain information about last known location and assignment.
- Stop activity to listen carefully for voices and sounds from trapped personnel including SCBA low-air warning or PAL devices.
- Continuously monitor the command, tactical, and **Add EMERG if it's going to be included elsewhere.** dispatch radio channels for contact with missing or trapped crews during the entire operation. The Communication Center will be advised of the situation by the Incident Commander and requested to provide additional continuous monitoring.
- Assess resource needs, including the need for specialized equipment, or technical specialists such as a Technical Rescue Unit or Hazardous Materials Response Team.

- Identify and assign responsibility for specific areas or grid blocks in the building to assure a thorough search.
- Assure a thorough check for clues such as turnouts, hose lines, flashlight beams or other equipment.
- Direct the incident's Rapid Intervention Crew(s) (RIC), and other designated rescue personnel.
- Adjust the incident plan to prioritize a search, rescue, and protection effort.
- In cases where rescue operations are completed, update all tactical and strategic plans. Relay updates to North Comm.

Individual firefighters must not delay reporting if they become lost, trapped or in need of ANY assistance. Company Officers must also not delay the report of lost firefighters or inability to complete accountability reports. Command, Division/Group officers, Crew Supervisors must always assume that the missing firefighters is lost in the building until the firefighter can be accounted for. The IC must also restructure the strategy and action plan to include a high priority rescue effort.

The **Division, Group or Crew Supervisor** involved or near the rescue event will initiate the following actions, if established:

- Account for personnel (**PAR**), scene assessment and initiate any assistance necessary to evacuate personnel and/or provide aid to down firefighter(s). However, **DO NOT** vacate location or tactical objectives prior to advising ICP. Tactical discipline is a high priority.
- Stop activity to listen carefully for voices and sounds from trapped personnel including SCBA low-air warning or PAL devices.
- Establish a safe perimeter (if possible, deploy hoselines to create a defensible space/area and monitor air management of all personnel in the rescue area).
- Initiate RIC deployment and aid in search efforts by using the **E.S.C.A.P.E.** acronym.
- Provide down Firefighter with portable radio. If they have one, activate the EMER Channel for them so they have immediate contact with the ICP in case you and other members need to leave due to low air.
- Provide RIC with constant updates PPPN's.
- Be prepared to vacate the area due to air management considerations

Personnel who are lost, trapped, missing, or disoriented to a level where assistances will be needed should take the following actions:

- If equipped with a radio, immediately announce "MAYDAY, MAYDAY, FIREFIGHTER DOWN" and transmit their situation, location, and number of personnel involved.

- *(IAFC Board Approves Recommendation to Designate “MAYDAY” as Terminology for Firefighter in Trouble/ November, 2007. IAFC also recommended that the term “Emergency Traffic remain the term to be used for all other fireground emergencies (such as power lines down).*
- **DO NOT PANIC....** Establish an immediate orientation of your surroundings. Communicate a description of the area, sounds of nearby activity, or any other information that might direct rescue crews to their location. Be prepared to give your E.S.C.A.P.E. report. Control use of air through breathing techniques. **Activate your PASS**, however when transmitting updates on your portable, shut off the PASS for a more clear transmission, then reactivate.
- Utilize the **E.S.C.A.P.E.** acronym. If used this will provide the IC with consistent and relevant survival information.

*EXAMPLE: IC – **MAYDAY, MAYDAY, MAYDAY:** Engine 2411, Firefighter Jones, I’m lost in heavy smoke and high heat. I’m unable to get a reading from my SCBA. I was on an attack line next to the stair case on the second floor. I’m staying in place for now, activating my PASS.....*

- If personnel believe they are about to become incapacitated, they should manually activate their PASS devices and take protective measures necessary to increase survivability. For example, flashlights should be turned on and placed in a position that will aid rescue crews.
- If you are about to become incapacitated, activate PASS device and take protective measures necessary to increase survivability. If trapped or disoriented as a crew, stay together. Focus on your breathing by using “skip” breathing techniques or other means of air conservation. Position your body so that it maximizes the audible affects of the PASS device and protect your face from heat. **Upon new FLEET map~SWITCH RADIO TO EMG TG, or PUSH ORANGE BUTTON** Maintain contact with the ICP on the **EMG **next map** Channel or Tactical Channel, attempt to make noise with any small tools or solid objects and turn on flashlights.

- Continually assess air (use “Buddy Breathing” or EBSS as a last resort), provide basic treatment and assist with entrapments. **IF** area is unstable do not create more problems. Create or find a defensible space or room.
- If you are able to move, search for walls, windows, exits and/or look for light. Where means of egress are not available, firefighters should next attempt to reach an exterior wall. Once at the wall, search for doorways, windows, and hallways, which generally lead outside. Rescuers should first search hallways, around walls, and around windows and doors, before sweeping large interior areas due to prior training and standardized firefighter actions. Getting to these areas increases the chances of being rescued early. For this reason, lost or trapped firefighters should avoid large open spaces.
- Attempt to follow a hose line (reading couplings) or life line to safety. However, control your pace and physical exertion since your air will be limited. Update the IC with any information to assist in the rescue efforts.
- Retreat to an area of safety. If you cannot find a way out, but there is a safe refuge (protective room or floor) away from the fire that you can retreat to, take advantage of this location. You may have to breach an interior wall, closing doors to isolate yourself from potentially being overrun by the fire.

Lost or trapped personnel must stay in constant communication with the IC or their designated point of contact throughout the rescue. Frequent use of the **E.S.C.A.P.E.** acronym will provide critical information to the IC and RIC. Firefighter survival while lost or trapped will be greatly enhanced by following these established guidelines. All personnel should make it a priority to understand these guidelines and to frequently train on these procedures.

This is an example of a department-specific form.

(ATTACHMENT B)

<i>Northzone Rescue Exception Report</i>
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Incident Number # _____ Date: _____

Incident Name: _____ Time: _____

Incident Location: _____

Company Involved: _____ Personnel Involved: _____

Action Taken:

Justification:

Prepared By: _____

Date: _____

Chief Officer: _____

Date: _____