



# Snohomish County Fire Chiefs Association

"Progressive Fire Protection Through Cooperation"

Established 1970

## General Membership

September 9, 2024

11:30 am

### Officers

#### President

DC Dave Kraski

#### Vice-President

AC Shaughn Maxwell

#### Secretary/Treasurer

Chief Jim Haverfield

#### Immediate Past President

### Directors

#### Large Agencies

Chief Kevin O'Brien

#### Medium Agencies

Chief Eric Andrews

#### Small Agencies

Chief Keith Strotz

### Liaisons

#### Legislative

AC Shaughn Maxwell

#### Fire Commissioners

Chief Don Waller

#### Training/Safety Officers

DC Colby Titland

#### Special Operations

BC Dave Ruddell

#### EMS Council

DC Joe Hughes

#### Fire Prevention

Shawneri Guzman

#### Washington Fire Chiefs

DC Michael McConnell

#### Policy/Procedure Committee Chair

Chief Eric Andrews

#### SNO911 Fire Tac

Chief Eric Andrews

## Call Meeting to Order

## Additions to Agenda

## Approval of Minutes

Please see minutes from the June meeting attached.

## Treasurer's Report

## Old Business:

- SCEMS Taskforce Discussion; Vote postponed by Executive Board
  - SCEMS Staffing 2025
  - Contract- Executive Director
- Update County Sales Tax Proposal
- Brief recap Women in Fire Workshop – Nicole Picknell/Jessica Hanna

## New Business:

- PFAS-Free Clothing Manufacturer, Zenkai Apparel – Kevin O'Brien  
[Zenkai Apparel: Powered by Sweat \(zenkaisports.com\)](https://zenkaisports.com)
- Discussion Regarding the Role of Immediate Past President

## Agency Updates:

DEM - Lucia Schmitt

Sno911 – Terry Peterson

Fire Commissioners – Don Waller

Fire Resources Coordinator – Travis Hots

Fire Marshal – Lori Burke

## Liaison Updates:

Fire TAC – Eric Andrews

EMS – Shaughn Maxwell

SnoCo MPD – Ryan Keay

SCEMS Director – Scott Dorsey

Policy/Procedure Review Committee – Eric Andrews

Fire Prevention – Shawneri Guzman

Training Consortium – Shaughn Rice

Training Officers/Safety Officers – Colby Titland

Special Operations – Dave Ruddell

Washington Fire Chiefs – Michael McConnell

Legislative – Shaughn Maxwell

**Announcements**

Lunch provided courtesy of WHA Insurance – Les Griffin

[Comprehensive Insurance Solutions | WHA Insurance](#)

**Good of the Order**

**Adjourn**

---



**Snohomish County Chiefs' Association**  
**General Membership**  
**11:30 a.m.**  
**June 3, 2024**

**PRESENT:**

Dave Kraski  
Shaughn Maxwell  
Jim Haverfield

Kevin O'Brien  
Eric Andrews  
Keith Strotz

Chad Schmidt  
Joel Johnson  
Mike Calvert  
Dave DeMarco  
Paul Gagnon  
Grady Persons  
Travis Hots  
Jenett Nielson  
Ned Vander Pol  
John Cermak  
Josh Cole  
Scott Dorsey  
Eric Andrews  
Ernie Walters  
Ryan Keay  
Greg Osborne  
Don Waller  
Chad Crandall  
Bill Dane  
Terry Peterson  
James Curtis  
Bob Eastman  
Shawneri Guzman  
Mike Hudson  
Jason Isotalo  
Dave Ruddell  
David Wells  
Ryan Lundquist  
Michael McConnell  
Colby Titland  
Leah Schoof  
Dr. Ryan Keay  
Val Manuel  
Dan Schwartz  
Emmy Duros  
Lori Burke

**President** North County Fire  
**Vice President** South County Fire  
**Secretary/Treasurer** Snohomish County FPD 17  
**Immediate Past President**  
**Large Agency Director** Snohomish Regional Fire & Rescue  
**Medium Agency Director** Snohomish County FPD 19  
**Small Agency Director** Snohomish County FPD 19

Arlington Fire  
Darrington Fire  
Everett Fire  
Everett Fire  
Everett Fire  
Everett Fire  
Everett Fire  
Getchell Fire  
Marysville Fire  
Marysville Fire  
North County Fire  
Paine Field Fire  
SCEMS  
Sky Valley Fire  
Sky Valley Fire  
Snohomish County Medical Program Director  
Snohomish County FPD 4  
Snohomish County FPD 4  
Snohomish County FPD 17  
Snohomish County FPD 17  
Sno911  
South County Fire  
South County Fire  
South County Fire  
South County Fire  
South County Fire  
South County Fire  
South County Fire  
Snohomish Regional Fire & Rescue  
Snohomish Regional Fire & Rescue  
Snohomish Regional Fire & Rescue  
Snohomish Regional Fire & Rescue  
SCEMS  
SCEMS  
SCEMS  
SCEMS  
Snohomish County Fire Marshal

**A. Call to Order** Meeting called to order at **1134** hours.

**B. Adopt / Adjust Agenda**

PSTrax provided a brief overview of their services. Please see the attached PowerPoint presentation.

Jeff Griffin with the Washington and Western Fire Chiefs Association would like to make a short presentation.

**C. Minutes**

- **Discussion:** No discussion.
- **Action: Motion** by Chief Strotz to approve the minutes of the May 2024 meeting. **Seconded** by Chief Eastman. **Approved** unanimously.

**D. Treasurer's Report**

**Discussion:** There was no activity for the month of May 2024, per Chief Haverfield. No revenue, no expenditures.

Chief Johnson made a motion to approve the Treasurer's report. Chief Strotz seconded the motion.

The motion passed unanimously.

**E. Old Business**

**IMS POLICY REVISIONS - Colby Titland**

Colby expressed his gratitude to the folks who've worked on the project.

The proposed revisions have been approved by Fire TAC. The committee recommends that SCFCA approve the policy, as well.

They'd also like to open and update the accountability policy and present it as an appendix on a later date.

Chief Cermak made a **motion** to approve the IMS Policy revisions, Vander Pol seconded the **motion**.

**The motion passed unanimously.**

The accountability policy will be examined more closely in the fall.

**SCEMS TASKFORCE UPDATE**

The work of the group is wrapping up and they're prepared to present an update on Monday, July 15<sup>th</sup> from 10 am- noon.

A vote could be taken in September to allow people time to plan for their budget cycles.

North county chiefs have had their presentation and discussions are being held. The feedback through small group meetings has been positive.

A **motion** was made by Chief Maxwell to hold a special meeting. It was **seconded** by Chief Vander Pol. **Motion passed unanimously.**

## **F. New Business**

Jeff Griffin spoke about a new federal registry. Washington has a state plan and contracts back with federal OSHA. The contract requires that within 6 months more impactful rules must be in place after a federal registry is published.

Proposed federal registry adopts 29 sections. It will involve more work for all agencies. Compliance could be a challenge. Revenue and staff are creating issues. It is currently unfunded.

IAFF has signed on and are in support of this registry.

The IAFC has remained neutral.  
National volunteers are opposed to it.

The response period ends June 21st.

There has been some pushback, and a few state OSHAs have come out to register complaints.

Rewrites are expected.

Some good news from federal fire:

AFP grants have begun to be administered.

A key piece of important information regarding public safety legislation is that there is a push to cover cancer and volunteers. On April 30th two House Representatives (Kilmer, DelBene) picked this up and they will be proposing that Washington State adopt it.

## **G. Agency Updates:**

**DEM** - Lucia Schmit (In Lucia's absence a brief report was provided by Chief Andrews)

The county wildfire plan is being developed.

DEM has received a 250k grant and the projected timeline for implementation is 2025.

**Sno911** - Terry Peterson

Please update your RAVE profiles. There is a drill planned and it's important to have accurate information.

**Fire Commissioners** - Don Waller

Meeting at SCFD4 next Wednesday at 7 pm. A meal will be provided before the meeting.

#### **Fire Resources Coordinator** - Travis Hots

Northwest Fire Defense Board meeting held on May 23

NW Fire Defense plan is up for revision. Updates will be submitted to the Board.

They will have 9 engines on duty during day shift beginning next Monday.

Two hand crews will be on duty June 10<sup>th</sup>. Helicopter will be stored at Big Lake fire station.

DNR will run requests through the NW Fire Defense Board. This will provide maximum opportunity for people to participate in callouts.

Regionally, they are working on deploying resources most efficiently.

Updates will be sent to agency coordinators.

#### **Fire Marshal - Lori Burke**

Planning on burn ban for July & August. Will be monitoring June and beyond August. A conference call will be scheduled if conditions dictate the ban should begin earlier or be extended.

#### **Liaison Updates:**

##### **Fire TAC** - Eric Andrews

Light rail and train responses have been up for discussion. Type codes and response lists need to be updated.

Resiliency drill planned for June 5<sup>th</sup>. RAVE alerts being updated is important.

Chief Andrews has been reelected to serve another term as Fire TAC chair.

##### **EMS** - VP Shaughn Maxwell

SCEMS, to this point, has only received half of their annual payments. Chief Maxwell requested that agencies process those payments as soon as possible.

Chief Andrews shared that once SCFCA has authorized funding for anything having to do with SCEMS they should not have to seek further approval unless they are asking for an increase in funding.

Chief Cermak made a **motion** to empower Director Dorsey to utilize the SCEMS budget as authorized by the SCFCA.

Chief Vander Pol seconded the **motion**.

Chief Waller asked if the group is approving the "total amount" budgeted or an "actual, itemized" approved budget. Are we approving a total budget or individual expenditures?

Chief Andrews is of the mindset that SCFCA shouldn't have to approve line-item budget requests. Chief Waller shared that he wonders if it's necessary for SCFCA to go through the line-item budget process each year.

Chief DeMarco shared that the work of the task force will clear this issue up, at least partially. He reminded the group that SCEMS has their own Board and, if the Director needs to check in on every line-item budget issue it's going to be very tedious.

Chief Cermak reiterated his **motion** to grant Interim Executive Director Dorsey the authority to work within his budget with SCEMS Board oversight. Chief Andrews seconded the **motion**.  
**The motion passed unanimously.**

#### **SnoCo MPD** - Ryan Keay

Please see the attached SCEMS presentation for detailed information.

Modified PIP is the current focus for June. It will be a stratified PIP addressing lateral vs new medics.

CAM went very well. Dr. Keay expressed gratitude to the instructors. She is looking forward to providing more countywide training.

Countywide run review will be held in July. There will be a pediatric case presentation.

MCC second quarter meeting went well. More physicians are becoming involved. Work is being done around building a delegate pool. People may be invited to facilitate run reviews.

North County started their buprenorphine pilot. SCEMS is working on data collection with the Health Department. One in two patients who receive buprenorphine are helped. They'd like to see this program worked out and adopted to help decrease overdoses.

#### **SCEMS Director** - Scott Dorsey

SCEMS is heavily involved in project management and their road map. They've had IT challenges and issues are being worked out. The hope is that stakeholders will be able to easily access the system and collaborate with SCEMS, informing the work within the county. He appreciates the agency engagement to this point and hopes for more in the future.

Val Manuel with Everett Fire was introduced as the SCEMS administrator. Her attitude and experience are greatly appreciated. Assessments will be run through her and future accounting questions can be directed to her, as well. Val shared that she'd love to have updated contact information for everyone who might need to be involved in SCEMS committees.

Jennifer Darling is leaving SCEMS at the end of June. Dan Schwartz will be filling her role. His experience includes having been a provider in the fire service for 32.5 years in Snohomish County. After his retirement he began looking for a way to contribute. He is looking forward to meeting with various stake holders. He wants to work toward equity in care across the county from larger to smaller agencies. Chief Andrews welcomed him to the "failed-at-retirement" club.

Emmy Duros has stepped into the recertification role. She began working at District 5 in 2005. She worked on the East Coast for 10 years and has experience with Hoquiam, as well. She has been very happy to work on bringing ALS to Sultan. She has experience with agencies, both large and small. Please contact her for any credentialing questions or concerns.

The three main goals of SCEMS are to build trust, develop systems, support providers. 1,800 providers across the county are being supported through SCEMS.

**Policy/Procedure Review Committee** - Eric Andrews

**Fire Prevention** - Shawneri Guzman

South County Fire was successful in getting a unanimous decision to ban both the sale and discharge of fireworks in the Southwest UGA.

SCFPA meeting is on Thursday, June 11. The educational topic will be Lithium-Ion Battery Fires.

The Women in Fire conference is on June 22 & 23rd. Registration is closed and all seats have been filled. Hosted by SCF and SRFR.

**Training Consortium** - Shaughn Rice

**Training Officers/Safety Officers** - Colby Titland

The group is currently on hiatus. They've been busy prepping for the next academy. Graduation went very well. The fall academy will be comprised of 56 recruits.

Training for quarter 3 will be available soon. 1403 live fire class should be held in September. They're looking for trained live fire instructors.

Fire-Rescue International Conference is in August in Dallas.

Paine Field is doing their biannual in-person MCI in September. They'd appreciate any assistance offered.

Chief Crandall and Granite are hosting a blue card train-the-trainer session. Please reach out to him for more information.

**Special Operations** - Dave Ruddell

**Washington Fire Chiefs** - Michael McConnell

The conference went well in Kennewick. It provided great networking and educational opportunities. There is a new President. Kristin Maurer is the first female to hold the role. There will be updates to the training officers' section on the website.

One of the biggest developments is that a study covering the feasibility of coverage for volunteer firefighters has been commissioned. The results are expected next June.

All fire stations that have "Safe Infant Dropoff" boxes should be aware that the phone number has been changed by the State. Please ensure your signage is updated.

The group will continue their work legislatively.

**Legislative** - Michael McConnell

See above.

**H. Announcements/Good of the Order**



Albright - Troy Elmore retired. Steve Potts will be promoted to BC, once confirmed by the Civil Service Commission.

Cermak - Safety upgrades will be made to the training center on July 15th. The second part of phase II with special ops props will also begin on the 15<sup>th</sup>. The joint grant work on the CO2 cleaning system will be complete in the middle of July. Chris Dickison retired May 31<sup>st</sup>. Please watch for details on a gathering recognizing his contributions.

Maxwell - SCF is working with the City of Edmonds on forging a path forward regarding continuing to provide services under a contract or annexation.

Andrews - A training site is moving in next door. Regarding the wildland protection plan - Chief Andrews is respectfully requesting that everyone update Mappers, please. It's the best inventory system.

Vander Pol - Station 63 project is moving along. It will be a completely new building. They've have been hiring. New ladder truck on the way.

Lundquist- SRFR is doing well. Chief O'Brien had a small medical emergency but is now resting comfortably at home.

Johnson - Darrington is thankful to have a new engine, a new aid car, and a refurbished brush truck generously provided through a few grants. They will update their information in the Mappers system.

Strotz - FPD 19 has placed a brand-new electronic sign.

DeMarco - Boeing firefighters have settled their contract. Everett's Command staff had been working long hours supporting them. EPD will be putting their 15 new recruits to work soon. They will likely send one person to medic school and plan on recruiting for two laterals. They expect to put 12 new recruits through the fall academy.

- I. Adjournment Motion** to adjourn proposed by Chief Eastman. **Seconded** by Chief Cermak and **approved unanimously**. The meeting adjourned at **1301 hours**.

**Minutes prepared and submitted by:**  
**Susan Bjorling** / Executive Assistant - South County Fire

**Next Meeting:**

**Attachments:**  
PSTrax Overview  
2024 IMS Guidelines Policy Committee Draft  
2024 SCEMS Roadmap  
JTF Recommendations

PS▶▶▶TRAX

# ALL YOUR CHECKS. BUILT FOR YOU.

Vehicles | Stations | PPE | SCBA | Assets | Supplies | Controlled Substance



**Scott Bergeron**  
CEO – Co-Founder  
303-918-3169  
Scott@pstrax.com



## ALL-IN-ONE

Manage your apparatus, equipment and inventory checks in one place.



## CUSTOM BUILT

We custom build the system to your exact requirements.



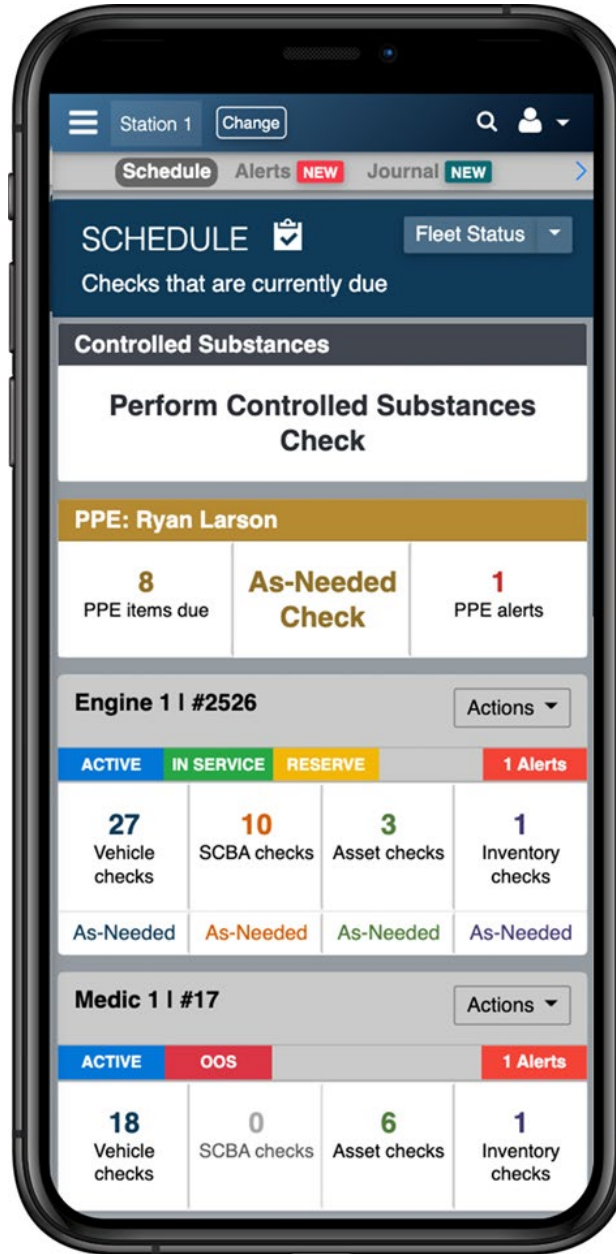
## BUILT FOR CREWS

Designed for fire and EMS crews. User friendly to ensure quick adoption.



## COMPLETE DATA

All your documentation for easy reporting and powerful dashboards.



## TRACK ISSUES

Send real-time notifications to the right people when issues arise.



## USE ANY DEVICE

Web-based system that is accessible with any device and always looks great.



## QR & BARCODES

Scan QR and barcodes and with your device or Bluetooth scanners.



## OWN YOUR DATA

Your data, is your data. We just store it safely in the cloud for you.



# CRITICAL PROJECT WITH MINIMAL ROLLOUT

## YOUR JOB

- » Send Your Current Checks & Inventories (exportable format)



**That's It!**  
Relax while we do the rest.

## OUR JOB

- » Project Management
- » Data Clean-Up & Import
- » Custom Configure
- » Unlimited Training
- » Rollout Support
- » Unlimited Ongoing Changes

**GUARANTEED  
ROLLOUT**

**NO PROJECT**

**SOLE SOURCE  
PROVIDER**



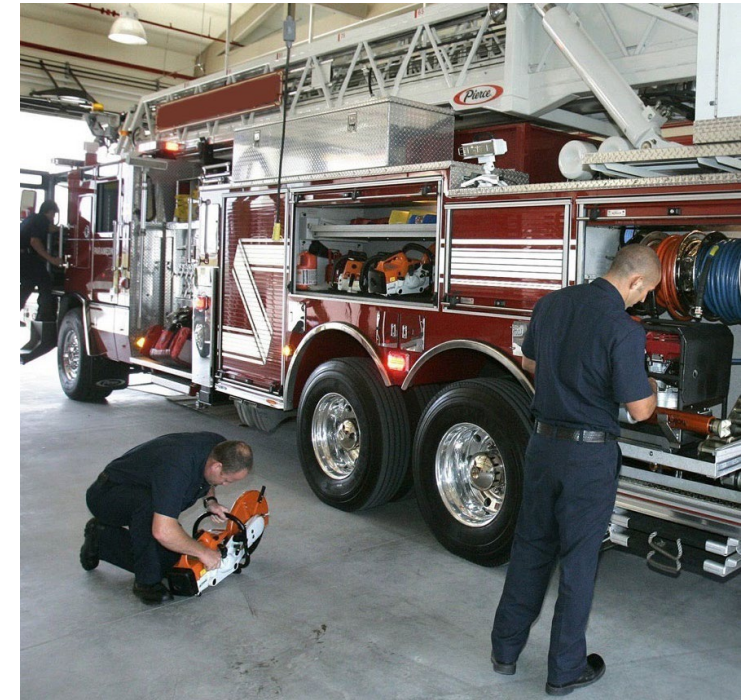
# BUILT TO SERVE PRIVATELY HELD & OPERATED FOR 15 YEARS

- » 1,200+ Agencies
- » 75,000 First Responders
- » 98% Renewal Rate
- » USA, Canada, Australia, Germany, Japan
- » Founded in 2009
- » Privately Owned
- » Littleton, Colorado



# VEHICLES MODULE

- » NFPA 1911 + DOT + agency -specific guidelines
- » Automates apparatus/vehicle checklists and inspections
- » Includes PM and maintenance checks
- » All tools and equipment carried on the vehicle
- » Unlimited checklists and scheduling options (any frequency)
- » Track any vehicle- Engines, Ladders, Ambulances/Medics, Rescue, Tenders, ARFF, Aircraft, Boats, Utilities/Trailers, Staff Cars, etc.





# STATION MODULE

- » Building maintenance inspections
- » Chore schedules
- » Safety inspections
- » Basic EMS and station supply checks
- » Seasonal checklists (hurricane, etc.)
- » Specialty equipment inspections
- » Unlimited checklists and scheduling options (any frequency)



# EQUIPMENT MODULES

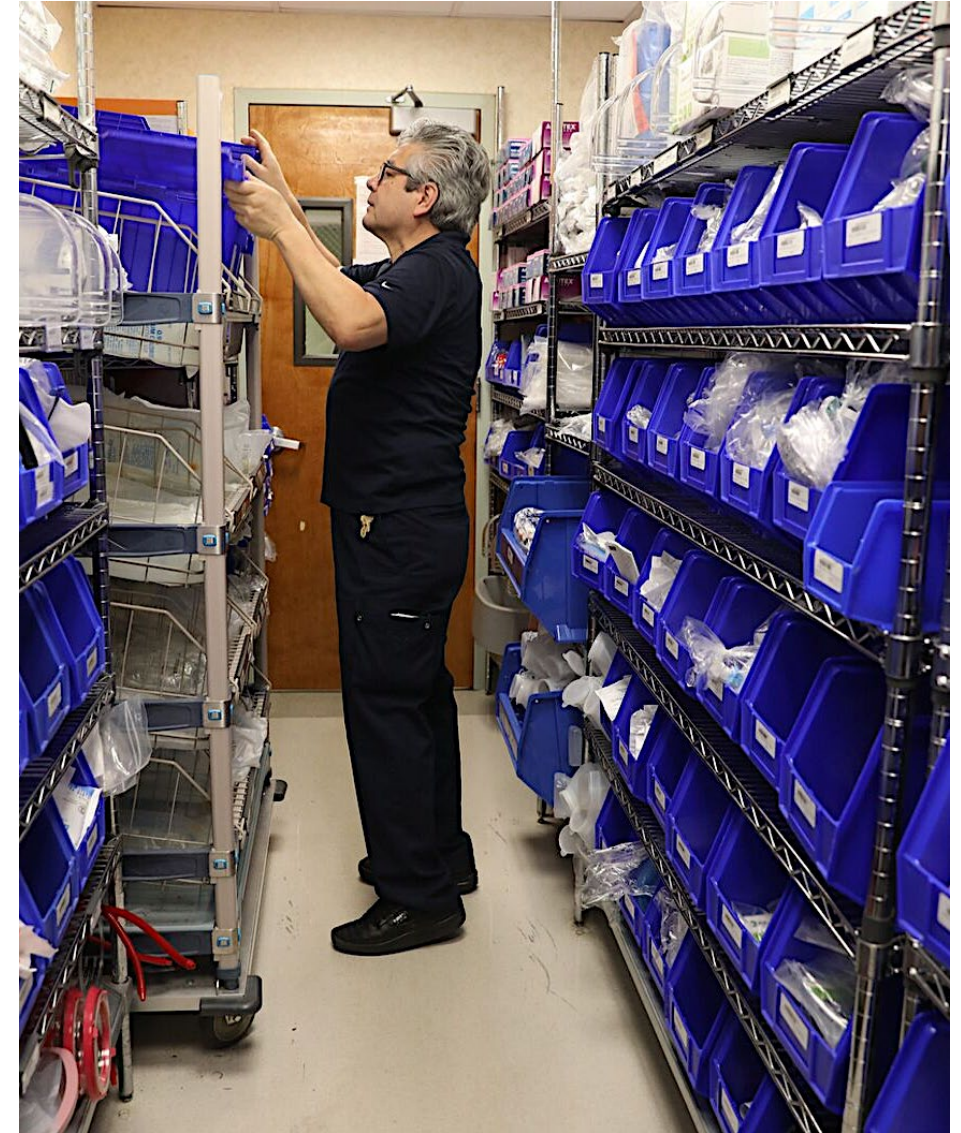
- » Manage SCBA, PPE, and Critical Assets
- » NFPA + OSHA + Agency -Specific Guidelines
- » Full History From Purchase to Retirement
- » Log Inspections, Repairs, Status, and Location
- » Track Flow/Hydro tests, Air fills, Hose / Ladder / Hydrant tests, etc.
- » Expiration Date Reports
- » Initial & Maintenance Cost Tracking
- » Grant and funding sources





# SUPPLIES MODULE

- » Manage consumable supplies and inventories
  - EMS supplies
  - Station supplies
  - Repair parts
- » Manage every inventory location (Warehouse, Supply Rooms, Containers, Bags, etc.)
- » Track quantity levels, lot numbers, expiration dates
- » Restock when supply orders are received
- » Transfer supplies to refill locations
- » Document incident supply usage
- » Automatic alerts for below min par levels



# CONTROLLED SUBSTANCES

- » DEA record compliance
- » Automates full history of handoffs
- » Reduces risk of diversions
- » View movement of vials from purchase thru usage/expiration
- » Manage inventory levels for all locations/containers
- » Track control number, lot number, expiration date
- » Electronic signature and PIN dual authentication



# PSTrax Advantages over One Stop Shops

## »» Function First & Always Evolving

- Intuitive Dashboard Design for Crews
- Built For You – Minimal Internal Time Needed to Get off the Ground
- Guaranteed Roll -out & Satisfaction
- Custom Configured for Each Client
- Drillable & Detailed Reports
- Recipient Alert Notifications Infinitely Customizable
- PDF's or videos Attachments Allowed
- Unlimited number of items and Check Schedules
- Doesn't Hand Over ALL Power to One Corporation

# PSTrax Next Steps

## »» Fill out Comment / Feedback Card

- **Client Special** – Try out a new module for Free
- **Clients** – Maximize Existing Modules Meeting
- **Non-Client** – We can get you a price quote
- **Non-Client** – Schedule a Deep Dive Demo
- **Non-Client** – Free Trial Site to try out yourself
- **Options for a County** -Wide Quote with Discounts



PS▶▶▶TRAX

THANK YOU!



**Scott Bergeron**  
CEO - Co-Founder

---

303-918-3169

Scot@pstrax.com

www.PStrax.com

# Snohomish County Fire Chiefs Association

## Document xx-xx-xx

Adopted xx/xx/xxxx

### Snohomish County Incident Management System Guideline

#### **1. Purpose and Overview**

#### **2. Dispatch**

- Standard Structural Fire Dispatch Packages
- Elapsed Time Notifications (ETN)

#### **3. Pre-Arrival Considerations**

- Critical Factors
- Strategy
- Radio Communications

#### **4. Initial Operations**

- Staging
- Initial Radio Report
- Establishing Command
- Follow-up Report
- Accountability
- Establishing Two-In\Two-Out
- Assigning Units

#### **5. Incident Organization**

- Command Transfer
- L-CANA
- Operational Levels
- Hazard Zones
- Divisions/Groups
- Tactical Radio Channel Traffic
- Three Deep Deployment Model
- On-Deck
- Recycling
- Decon
- Rehab
- Review Strategy and IAP
- Maintain and Upgrade Incident Command

#### **6. Incident Demobilization**

- Appendix A- Definitions
- Appendix B- Mayday Procedure
- Appendix C- Decontamination Procedure
- Appendix D- IMS Communications Form

# Section 1- Purpose and Overview

## Purpose

To provide a procedure for implementation of the Snohomish County Incident Management System (IMS) and define the roles and responsibilities for all personnel operating within the system.

## Overview

These guidelines should be utilized at all Type IV and V incidents, where three or more units are dispatched and/or arrived, to establish and confirm a single Incident Commander (IC) when a hazard zone exists; excluding incident types that are covered by other specific guidelines (i.e. Mid-Rise/High-Rise, MCI, etc.). **If an incident becomes a Type I, II, or III, standard NIMS structure should be considered.**

## Section 2- Dispatch

Please reference the *Snohomish County 911 (Sno911) Fire Radio Procedures Manual* for a thorough description of all dispatch procedures.

The major goals of Sno911 are to dispatch the appropriate amount and type of resources to the reported incident and assist the IC with incident and communication needs. This will include, but not be limited to:

- Radio and electronic dispatching of the incident per local jurisdiction's response plan (FRL/FRP)
- Monitoring and response for all assigned Tactical radio channels, to include the "Emer" channel.
- Ensure all incident radio communications, directed to/from Sno911, are made by/to the IC or their designee. E.G. Command Post Aide
- At the request of the IC, when incidents are upgraded to greater alarm levels (2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>):
  - Designate a separate radio channel for Level 2
  - Direct all greater alarm units to respond on the Level 2 channel.
  - Direct all greater alarm response units to report to the Level 2 location, as designated by the IC.
- Provide the IC with 10-minute elapsed time notifications (ETN); until the incident is placed under control or until the IC requests to discontinue or restructure the ETN. These notifications will be provided automatically for the following incident types:
  - FRC (Fire Residential Confirmed)
  - FCC (Fire Commercial Confirmed)
  - FWI (Fire Wildland Interface)
  - MCI (Mass Casualty Incident-All responses)
  - HZ (HAZMAT-All responses)
  - MEDX (Upgraded Medic Response)
  - MVCE (Motor Vehicle Collision – Extrication)
  - RES (Technical Rescue-All Responses)
  - CRP (Community Resource Paramedic)

The IC must verbally acknowledge each 10-minute notification by re-announcing the incident's strategy over the assigned tactical radio frequency until the incident is placed under control, or until command requests to discontinue or restructure the notifications.

## **Section 3- Pre-Arrival Considerations**

Prior to arrival, a foundational understanding of critical factors, “Red Flags”, strategy, and basic radio communications is vital to effective and efficient incident operations.

### **Critical Factors**

Virtually every incident factor has a related set of consequences ranging from minor to fatal. This is what makes critical factors *critical*. A major function of IC information management is to identify the factors with the most severe consequences and then concentrate on reducing, stabilizing, eliminating, and/or avoiding the possible outcomes of those critical factors. This requires the IC to develop a standard approach of sorting and prioritizing critical factors, which are designated as fixed factors or variable.

The 8 basic critical factor categories are:

1. Fixed Factors:
  - a. Building
  - b. Occupancy Type
  - c. Arrangement
  - d. Special Circumstances
2. Variable Factors:
  - a. Life
  - b. Fire
  - c. Resource
  - d. Action

**Managing Critical Factors** - Command manages these incident factors through a systematic management process that:

- Includes a rapid overall evaluation/size-up.
- Sorts the critical factors in order of priority.
- Seeks more information about each of the factors.
- Focuses on the major factors affecting the incident.
- Quickly and properly reacts to visual observations and L-CAN A reports.

### ***Consider Fixed Factors – Manage Variable Factors***

**Fixed factors** - pertain to the things that can't be changed, such as the way a building sits on a piece of property, the occupancy type, or the distance of an exposure. These fixed factors present certain realities that the IC must address in their incident action plan (IAP).

**Variable factors** - things the IC can change. If a building is full of smoke, the IC can order ventilation. If the building is heavily secured, a Ladder or Engine company can force entry. Engine crews manage the fire by applying water to extinguish it. When we don't (or can't) control the variable factors, we should be in safe locations, away from the factors that may harm us.

**Quickly Identify & React to Safety “Red Flags”** – these will not necessarily change the overall incident strategy or incident action plan but must be identified and addressed by the IC and the rest of the hazard zone team. This is a big part of how the IC ensures everyone goes home when the event is over. Some examples of red flags include:

- Fire in the attic space.
- Fire in a basement.
- Operating above a fire (basements, floor above the fire).



- Zero visibility.
- Encountering high heat.
- Reports of, “We can’t find the fire” beyond the normal discovery time.
- More than one (1) request to back-up an attack position.
- Reports that state “fire control” but you can still see active fire conditions from the command post.
- Victim(s) located.
- Wind-driven fires.
- Smoke/fire showing from cracks in walls.

## **Strategy**

Following the Risk Management Plan (RMP) an initial determination can be made as to the incident strategy of Offensive or Defensive. Each strategy has its own Tactical Priorities.

### **Risk Management Plan (RMP)**

The following Risk Management Plan (RMP) will always be used whenever a hazard zone exists:

- We will risk our lives a lot to save savable lives.
- We will risk our lives a little to save savable property.
- We will NOT risk our lives at all for lives or property that are already lost.

### **Offensive Tactical Priorities**

When an incident’s critical factors and the risk-management plan indicate the offensive strategy, firefighting forces will enter the structure/hazard zone to attempt to control the incident hazards. The Offensive Tactical Priorities and their corresponding completion benchmarks are:

- Fire Control (F/C) – “Under Control”
- Life Safety – Primary and Secondary Searches- Reporting “Nothing Found”.
  - The IC announces “All Clear(s)” only after the Secondary search reports nothing found.
- Property Conservation – “Loss Stopped” (L/S)
- Customer Stabilization – Short term

### **Offensive Loss Control**

All loss control operations start with putting the fire out. All three organizational levels must constantly remain aware that all actions are designed to protect savable lives and property, and control loss. After achieving fire control, we must direct all efforts on the incident scene toward controlling and preventing any unnecessary property damage. These efforts fall into 2 categories:

- Overhaul
- Salvage

### **Defensive Tactical Priorities**

A defensive strategy is indicated when the incident problem has evolved to the point that lives and property are no longer savable and offensive tactics are no longer effective or safe. The entire defensive strategy is based on protecting firefighters. Defensive Tactical Priorities and their corresponding completion benchmarks are:

- **Firefighter safety. No firefighter should be injured on a defensive fire.**
- Define the Hazard Zone utilizing exclusion zone tape.
- Establish Cut-offs - Forward progress stopped.
- Search exposures - Primary and Secondary Searches.
- Protect exposures - “Fire Control” - Loss Stopped

## **Strategic Shift from an Offensive Strategy to a Defensive Strategy**

A change from an Offensive to a Defensive Strategy may be determined after utilizing the Risk Management Plan to determine that the risk is no longer worth the benefit. This will be managed as Emergency Traffic by the IC.

## **Strategic Shift from a Defensive Strategy to an Offensive Strategy**

A change from a Defensive to an Offensive Strategy may occur when the incident has been stabilized. This will normally be handled as Routine Traffic.

## **Offensive and Defensive Strategies at Same Incident**

Occasionally, both the Offensive and the Defensive Strategies can be used at the same incident if part of a building, or its exposures, can clearly be defined and the risk is different.

## **Radio Communications**

### **Keep Communications Simple**

Conduct incident operations using plain text communications that are directed toward the completion of the tactical priorities and firefighter safety.

### **Mix & Match Forms of Communications**

Face-to-face communication is the most effective form of communication. It should be the preferred form of communication on the task and tactical levels of the incident site.

Radio communications are the way that the tactical and task levels connect with the IC working on the strategic level.

### **Listen Critically**

We put an IC in a strategic command post (outside the hazard zone, inside a vehicle designed to be a command post) so they have an ideal position to send and receive information. Some incidents may require the use of multiple radio frequencies to support operations outside of the hazard zone (Level 1 & 2, Rehab, Safety, Planning, Logistics, etc.). Each additional channel activated for the incident should have a dedicated person assigned to manage that channel. The IC should only be responsible for the operation of one (1) tactical radio frequency while an active hazard zone exists.

To maintain an effective span of control and supervision of specific areas of the fire ground the IC may choose to assign a tactical supervisor if there are 2 or more units working in the same geographic area. Command may designate one of the units as the geographic supervisor and all communications from that area will be from the tactical supervisor to the IC. This supervisor will normally be assigned as a Division supervisor.

Division/Group supervisors will communicate with their assigned companies over the radio or face-to-face depending on their proximity to one another, but preferably face-to-face. The Division/Group supervisor will communicate with the IC over the tactical channel.

### **Utilize the Standard Order Model to Structure Communications**

The order model standardizes how the incident's participants will exchange two-way radio communications. The Order Model's required steps are:

1. The sender calls the receiver to determine if they are ready to receive the message.

2. The receiver then acknowledges the sender.
3. When the sender receives the readiness reply, they can transmit the message.
4. The receiver then gives a brief restatement of the message to acknowledge the receipt of the message; and
5. The sender states "Affirmative" or restates the message if misunderstood.

Example:

5<sup>th</sup> Command: "E21 from 5<sup>th</sup> Command"

E21: "E21"

5<sup>th</sup> Command: "E21 on-deck side Alpha"

E21: "E21, on-deck side Alpha"

5<sup>th</sup> Command: "Affirmative"

### **The Basic Types of Strategic Radio Transmissions in a Hazard Zone:**

- Initial Radio Report
- Follow-Up Report
- Assigning Units
- Command Transfer
- L-CANA Reports
- Roof Report
- Strategic Shift

# Section 4- Initial Operations

## Staging

**Level 1** - Level 1 procedures are in effect for all units dispatched on the 1<sup>st</sup> alarm assignment and are automatically activated when the officer of the initial arriving unit hails dispatch to give their initial radio report and establishes Command.

- 1<sup>st</sup> Apparatus, 1<sup>st</sup> Ladder and/or 2<sup>nd</sup> Engine & BC respond directly to the scene.  
1<sup>st</sup> Ladder and/or 2<sup>nd</sup> Engine shall announce they are approaching, remain tactically uncommitted, and await direction from the IC.
- All remaining 1<sup>st</sup> Alarm units will report to Level 1 location(s)- 1 block away in their direction of travel while not passing their last tactical option.
- Each unit arriving to Level 1 will utilize their MDC to go On Scene, then state their unit is "Level 1" over the radio. All units should utilize standard radio etiquette, do not break into an ongoing communication loop to announce Level 1.

**Level 2** - Units dispatched as part of 2<sup>nd</sup> or greater alarms should report to Level 2 as designated by the IC.

Unless otherwise assigned, the Company Officer of the first Engine or Ladder Company to arrive at Level 2 will assume the role of Level 2 Manager, and should be prepared to:

- Notify the IC or Logistics (if/when established) upon their arrival at the staging area, on the assigned Level 2 channel.
- Verify the companies available at the Level 2 location.
- Determine from IC/Logistics the minimum complement of units to be maintained in Level 2.
- Contact IC/Logistics for additional resources when the number of companies in Level 2 falls below the established minimum.
- Maintain a current list of available companies in Level 2.
- Organize the apparatus so it can be easily deployed out of Level 2 if necessary.
- Maintain a list of companies that have been deployed to the incident site and their initial assignments from Level 2.
- Relay the assignment of units, from IC/Logistics, face-to-face to the Level 2 companies.
- Relay to companies the following information when they are assigned out of Level 2:
  1. Any tasks, the location and the objectives assigned to the unit.
  2. The area or the Division/Group Supervisor to whom they are to report to.
  3. The tactical channel on which they are to operate on.

Once dispatched, all greater alarm companies responding to a Level 2 location, should report responding and arrival using their MDC if available; and otherwise maintain radio discipline unless contacted by dispatch, Level 2, or Command. Once arriving at Level 2, the Company Officer of the Unit will report in person to the Level 2 Manager. The crew will standby with their unit, with the crew intact, with apparatus warning lights turned off until they are assigned to incident site duties or released from the scene.

When assigned, companies entering fireground operations from Level 2 will communicate directly with Command or their assigned Division/Group Supervisor for further instructions (if needed).

## **Initial Radio Report (IRR)**

The IRR must include the following reporting elements:

1. **Hail SNOCOM**
2. **Building/area description**
3. **Describe the problem**
4. **Action being taken – Initial Incident Action Plan (IAP).**
5. **Strategy declaration**
6. **Resource determination**
7. **Establish and name Command**

### **Building/area description:**

- Size (small, medium, large, mega)
- Height (number of stories)
- Occupancy type

**Occupancy type** will many times drive our IAP. Identifying it on the IRR paints a picture to all other responders of the type of situation they're responding to. Here are some basic, common occupancy types:

House	Apartments	Townhomes	Commercial
Row houses	Restaurant/Bar	Public assembly	Big Box
High rise	Institutional	Strip Mall	Mid-Rise

### **Describing the problem**

The following are the terms that are to be used when describing fire conditions:

- Nothing showing
- Light smoke showing
- Working fire
- Defensive fire conditions

The location of the problem must also be identified on the IRR. This includes reporting:

- What floor the problem is located on
- For longer buildings (apartments, strip malls, etc.) middle or which end (Bravo or Delta)
- For larger structures – What side of the structure is problem located on

**Initial Incident Action Plan (IAP):** Incident action plans describe our operational plan for completing the tactical priorities. IAPs should be short and to the point. The initial IAP should include the following:

- The tasks of the initial arriving unit
- The location of the tasks
- The objectives of the tasks

### **Declaration of the Incident's Strategy:**

Overall operational strategy is divided into only two categories: Offensive or Defensive.

**Resource determination:** The IC must match the incident's problems with the resources required to solve the identified problems. The request for the appropriate resources must happen at the beginning of the event, where our window of opportunity has the greatest chance for success. One of the following resource determinations must be made during the IRR:

- Cancel the original assignment
- Hold the alarm- continue original assignment
- Balance to correct alarm type (e.g. from a FR to FRC; FRC to FCC)
- Upgrade to greater alarms (2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, Etc.)

### **Establish and Name Command:**

Use location/occupancy to name Command. The radio designation "**COMMAND**" will be used along with the major crossroad, or the specific occupancy name of the incident site (i.e. "Main Street Command")

### **Establishing Command**

The first unit or member to arrive at the scene of a multi-unit dispatched incident will establish Command of the incident by transmitting a standard Initial Radio Report (IRR).

The confirmation of command occurs when the Dispatch Center uses the Order Model to repeat the IRR back to all responding units, confirming that the initial arriving unit is in Command of the incident.

Establishing Command causes the first-arriving unit or member (IC#1) to size up the incident, determine the incident's strategy, and formulate an Incident Action Plan (IAP).

Once Command has been established, all normal communication between the dispatch center and the incident will be directed through Command.

The initial Incident Commander shall remain in Command until it is transferred, or the incident is stabilized and Command is terminated.

A formal IC must be in place, performing the functions of Command, whenever a hazard zone exists.

### **Command Modes:**

The IC's position will greatly affect their ability to control the incident scene. Typically, the Company Officer of the first arriving Company will become the initial IC for the incident, IC #1. There are three command modes that a Company Officer can place themselves in, depending on the situation. These three command modes are:

- Investigative Mode
- Fast-Action Mode
- "Command" Mode

### **Follow-Up Report**

Follow-Up Reports should include the following information:

#### **1. Result of a 360 (if performed)**

- Complete or not complete due to \_\_\_\_\_
- Number of stories from side Charlie
- Basement type, and condition, if present. If a basement is found, the follow-up report will include verbiage like: "2 stories from Charlie with a -Walk-out basement". (This implies 3 total floors: Floor 2, Floor 1, Basement).

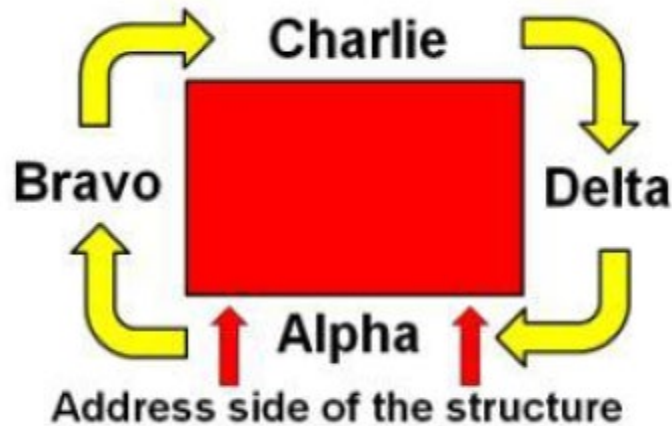
#### **2. Any changes to the initial IAP**

#### **3. Accountability location**

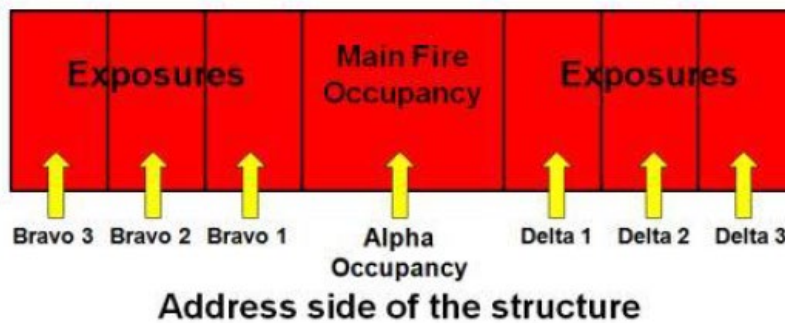
#### **4. Any immediate safety concerns**

### **Geographic Landmarks:**

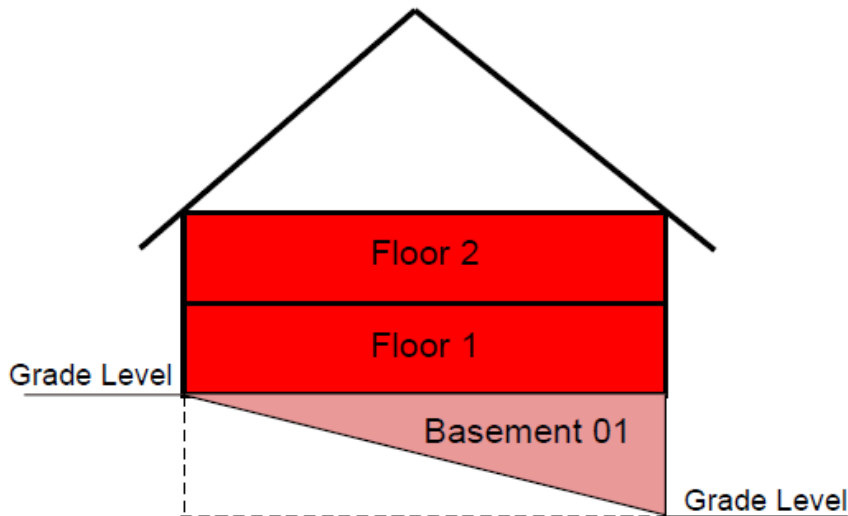
Sides of a building will be described as:



The Alpha side of the structure is "usually" the address, street side. There will be many situations where it is not clear where the Alpha side is. In situations where there is any confusion on the incident's landmarks, IC#1 must make it clear where Alpha is located.



**Exposures:** We identify exposed structures to the main fire occupancy by the side they are on starting with the closest, moving to the next exposure and so on. When the IC can provide the exposure number and the occupancy type/apartment number it greatly enhances our directional sense of awareness.



**Floors:** Are identified by stories above and below ground level. Using Divisions, the individual floor will be on the same floor number as the Division (floor 2 becomes "Division 2"). Basements or floors below grade are numbered in descending order and preceded by a zero ("Basement 02" or "Division Basement 02"). For only 1 floor below grade, the floor will be called "Basement". For greater than 1 floor below grade the term "Basement 01", "Basement 02", "Basement 03", etc. will be used. When the building numbering system differs from the

standard number of floors, the building numbering system should be utilized to clear up confusion. When parking garages are present, consider using the building numbering system. For example: "Parking 1" for a building labeled P1. When operating on a roof, consider making a "Roof Division."

## **Accountability**

Implementation of the passport accountability system will occur at any incident that requires the use of an SCBA. The use of the accountability system will commence as the first unit arrives on the scene. The first arriving company will provide an IRR and establish Command. In the follow-up report, the accountability unit identification and geographic location will be announced. Example: "E-1 will be the Alpha side accountability location".

Command will give assignments to Level 1/Level 2 units with the expectation that each assigned crew/unit will deliver their passport to the accountability location identified in the follow-up Report. Normally, it will be located at the attack engine's driver's side door.

Ladder companies will place their passport on the apparatus accountability board located on the inside of the driver's door when going to the roof to perform ventilation. When going to the interior of the structure, each ladder crew will deliver their passport to the accountability location as identified in the follow-up report.

Once a passport is delivered to the accountability location, the passport will remain on the designated accountability board until the IC or Division/Group Supervisor requires them, the incident is terminated, or the individual unit is released from the scene.

This practice ensures that in the event of a strategic shift, Mayday, or other event, all units operating in the hazard zone will have their passports on the designated accountability apparatus. Please note that large incidents may have multiple accountability locations, based on the needs of the incident.

## **Assigning Units**

Incident operations are conducted around the completion of the tactical priorities. The IC must structure unit assignments around:

- Addressing the incident's critical factors
- The completion of the tactical priorities
- Ensuring a tactical reserve (On-Deck)

When subsequent arriving units arrive to Level 1 locations, each unit arriving to Level 1 will utilize their MDC to go On Scene, then state their unit is "Level 1" over the radio. "Engine 2 is Level 1". Dispatch will not acknowledge any Level 1 units over the tactical channel. Command will then contact Level 1 units and assign them to the incident site based on their IAP.

**Note:** All units should utilize standard radio etiquette, do not break into an ongoing communication loop to announce Level 1.

- Apparatus location ("spot on the alpha side")
- Tasks
- Location of the tasks
- Objectives of the tasks

**Note:** The Incident Commander will be responsible to track 'split' companies as appropriate. Example, use appropriate radio designator for the split companies (E73, E73 Driver, E73 Mic 1 or L62 Team-A and Team-B) Similarly, if companies "attach" to each other, e.g. E11 and M11 attach during initial operations, then these attached companies will be tracked separately to ensure accountability during different assignments throughout the incident. The IC must ensure that these variations are announced over the air and relayed as part of the standard Command transfer process.



## **Establishing Two-In/Two-Out**

During the initial stages of a structure fire where only one team is operating in the hot zone, Two In-Two Out shall be established prior to making entry into an IDLH environment. The Initial Two In-Two Out can consist of the Incident Commander and the Pump Operator.

Once an incident is no longer in the initial stages, where more than one team is operating in the hot zone, a dedicated RIC should be considered. A RIC shall consist of at least two firefighters held outside the hot zone available for immediate assistance or rescue of an entry crew.

In the case of a known rescue, a minimum of One-Out shall be established prior to making entry into an IDLH environment. The Incident Commander or Pump Operator may function as the One-Out.

Members designated as initial Two In-Two Out and RIC, shall be wearing all structural PPE with their SCBA in the standby position ([WAC 296-305-05002](#)).

# **Section 5- Incident Organization**

## **Command Transfer**

The 1<sup>st</sup> arriving Battalion Chief (or agency approved officer) will respond directly to the scene to consider upgrading the Command position. If/When upgrading the Command position is deemed necessary, Command should be transferred in the following manner.

1. Size-Up - verify that all operating positions match the current incident conditions.
2. Transmit that your unit is On-Scene ("Battalion 25 On-Scene").
3. Contact IC #1; verify the position & function of all hazard zone resources with IC#1.
4. Announce that you will be transferring Command: "taking it from out here".
5. Contact and confirm the Command transfer with dispatch, announce the current strategy, and make a resource determination.

Command transfers to other arriving resources, in lieu of an arriving chief officer, can occur when appropriate.

## **L-CANA**

L-CANA reporting gives assigned units a regular, consistent way to report back to the IC on their progress and needs.

- Location
- Conditions
- Actions
- Needs
- Air Supply (reported as +50 or -50)

## **Air Management**

All members utilizing Self-Contained Breathing Apparatus (SCBA) will check their air levels before they enter any hazardous atmosphere. Members must have a minimum of 90% air in their cylinder to make initial entry into any hazardous atmosphere.

Officers and team leaders should consider notifying the IC or their Division/Group Supervisor when their first team member's 50% heads-up-display (HUD) light is activated. This allows the IMS Supervisor to be informed of the team's air situation and to pre-plan for replacing that team in the IDLH environment. Air reports shall be given as 50+ or 50-.

### **Work Periods When Using SCBA**

- After two 30-minute work periods (or one 45- or 60-minute work period) members will report to the rehab area for fluids, rest, cooling (active and/or passive) and medical evaluation.
- Company Officers should be constantly evaluating the mental status and general appearance of their crews and report to rehab for evaluation when necessary.
- A work period shall be defined as the consumption of one 30-minute bottle of air, including the time required to exit the IDLH atmosphere and clear gross decontamination. (Consumption of one 45 min. or one 60 min. bottle of air shall be considered to be 2 work periods and will require assignment to rehab). Exception: using 30 minutes or less of air from a 45 min. or 60 min. bottle shall be considered 1 work period.

## **Operational Levels**

There are 3 operational levels that function at the scene of every hazard zone. They are the:

**Strategic Level** - This organizational level is designed around the IC (and Command Team) operating in the Command position and working out of a stationary Command post. The strategic level involves coordinating the activities necessary for overall operational control, determining the incident's strategy, and developing an IAP that completes the incident's tactical objectives.

**Tactical Level** - The first management "subdivision" of the incident scene is achieved by assigning Division/Group responsibilities. Division/Group Supervisors are responsible for the tactical deployment and supervision of all assigned resources in their assigned area. These tactical assignments are made directly by the IC to specific units.

**Task Level** – This organizational level is where work is performed by assigned companies. The strategic and tactical levels are in place to support the task level. Task level activities are supervised by Company Officers working with the members of their companies directly in the hazard zone. The task level is the most important level on the incident site because it solves the incidents problems while taking place in an IDLH atmosphere that can kill the workers. All activities outside the hazard zone are in place to support units working on the task level.

An IC#1, in the Fast Action Command Mode, will be the only one who will operate on all three organizational levels.

## **Hazard Zones**

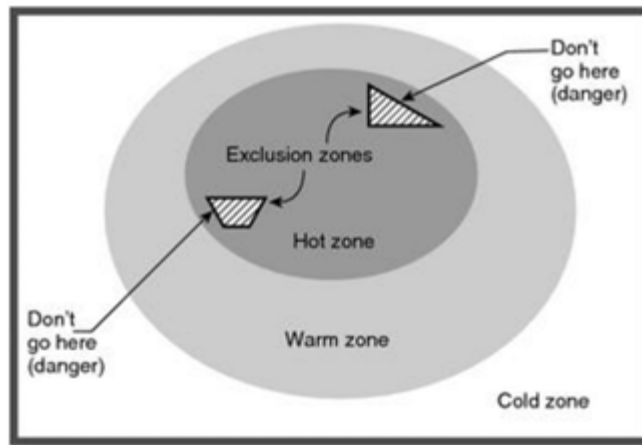
**Control Zones** allow an incident site to easily be divided into different hazard levels, of hot, warm, cold, and exclusion zones, and is a WAC requirement ([WAC 296-305-05000 \(7\)](#)).

**Exclusion zone-** The control zone designated to exclude all unauthorized personnel, responders, and equipment. Examples of exclusion zones could be holes in floors, explosive devices, wires down, or collapse hazards. There is no standard Exclusion zone.

**Hot zone-** The control zone immediately surrounding the hazard area, which extends far enough to prevent adverse effects to personnel outside the zone. The hot zone is presenting the greatest risk to members and will often be classified as an IDLH atmosphere. For residential structure fires, the standard Hot Zone is the structure.

**Warm zone-** The control zone outside the hot zone where personnel and equipment decontamination and the hot zone support takes place. The warm zone is a limited access area for members directly aiding or in support of operations in the hot zone. For residential structure fires, the warm zone is typically the yard of the structure and is where On-deck companies are typically located.

**Cold zone-** The control zone of an incident that contains the command post and such other support functions as are deemed necessary to control the incident. The cold zone establishes the public exclusion or clean zone. There are minimal risks of human injury or exposure in this zone. For structure fires, the standard cold zone is the command post and beyond.



## Divisions and Groups

An IC must have a system in place where the rate of assigning companies to the emergency scene doesn't exceed their span of control. The IC accomplishes this by forecasting and establishing geographic and functional responsibilities that divide the incident scene into smaller, more manageable tactical sub-divisions. This will typically be done by establishing:

- Divisions (preferably operating in the hazard zones)
- Groups (preferably operating in non-hazard zones)

**Company Officer Tactical Supervision** - When 2 or more units are working in the same area, the IC should designate one of the Company Officers (usually the 1<sup>st</sup> arriving unit to the location) as the Division/Group Supervisor.

This will prevent 2 companies working in the same area from reporting the same information to the IC. When assigning a unit to deploy to and/or assume initial geographic or functional responsibilities, the IC needs to transmit:

- The location or function of the subdivision
- The Division/Group appropriate name
- The tactical objectives to be addressed in the Division/Group
- Units assigned to the Division/Group.

**Command Officer Tactical Supervision** - Upgrading Division/Group supervision from a Company Officer to a Command Officer greatly facilitates the completion of the Division/Group's objectives and firefighter safety; and needs to be a well-practiced and regular occurrence on the incident site.

All subsequent arriving Chief Officers should Level 1 over the tactical radio frequency, and then prepare for a Division/Group assignment. If not immediately assigned, report to the command post. When assigning a Chief Officer to assume geographic or functional responsibilities, the IC will need to transmit:

- The location of the Division/Group
- The Division/Group's appropriate name
- The tactical objectives to be addressed in the Division/Group
- The units currently assigned to the Division/Group
- The current Division/Group Supervisor they will be replacing (if any)

Chief Officers who are assigned Division/Group responsibilities must:

- Park their response vehicle in a manner that won't block apparatus access into/out of the scene.

- Don their full protective gear
- Gather the necessary accountability equipment and portable radio.
- Report to the assigned location.
- Ensure unit/crew accountability and air management tracking within their Division/Group
- Verify tactical reserve, on-deck, and/or additional needs for the Division/Group

There are 2 main functional areas that a Division/Group Supervisor must manage in their assigned Division. They are:

- The **Tactical** level requirements to run the Division/Group
- The **Embedded Safety** requirements to run the Division/Group

One (1) Command Officer can routinely manage both the **Tactical and Embedded Safety** requirements for an assigned area. Depending on the situation, supervising 4 to 5 companies usually maxes out the span of control for 1 person managing the Division/Group and supervision should be reinforced with subsequent arriving IDLH qualified supervisors (Chief Officers, Safety Officers, Training Officers, qualified Staff Officers).

When assigning a resource to a Division/Group that has a Command Officer, the IC must include:

- The geographical location of the assignment
- Identify the Division/Group Supervisor that they will be reporting to/working under

Command must then contact the Division/Group Supervisor and inform them what additional resource has been assigned to their area. It will then be the Division/Group Supervisor's responsibility to contact the assigned unit and deliver any orders required to get the company into action in the Division/Group.

The goal of the deployment and Division/Group system is to always have enough workers **assigned performing the work**, to have enough workers **that are assigned to On-Deck positions within the Division/Group that are ready to go to work**, and then have enough of a tactical reserve in **Level 1 or Level 2 positions, waiting to be assigned to go to work**.

## Incident Communications

The IC MUST control the radio traffic on the tactical channel, or they will not be able to control the overall incident site. The following radio guidelines are to be strictly adhered to when there are units assigned into a hazard zone:

- Know exactly what you're going to say before clicking the microphone to talk.
- Only communicate information on the tactical channel that pertains to the completion of the tactical priorities and firefighter safety.
- Always let communication loops close before clicking the microphone button to talk.
- Let the IC be the one to contact you.
- Always provide a **needs** assessment with every L-CANA report, or state "No Needs".
- Avoid good news reporting (Nothing Found, Under Control, PARs) unless requested by the IC.

## **Incident Command and Division/Group Supervisor Driven Tactical Radio Traffic**

Most routine radio traffic on an incident should be initiated by the Incident Commander or Division/Group Supervisors. This includes:

- **Normal Radio Traffic** (Using the Task, Location Objective (TLO) Order Model)
- **L-CANA Reports**

Non-routine radio traffic shall ONLY be initiated by the Incident Commander. This includes:

- **Emergency Traffic** (Maydays and Offensive to Defensive Strategic Shifts)
- **General Fireground PAR Announcement**

### **Emergency Traffic**

The procedure to initiate Emergency Traffic shall be:

1. The IC will contact the dispatch center directly and ask for emergency traffic.
2. The dispatch center will sound emergency tones.
3. The IC will transmit the Emergency Traffic message on the tactical channel.
4. The dispatch center will repeat the Emergency Traffic verbatim on the tactical channel.

**Mayday- Emergency Traffic** is the single most critical radio traffic that can be initiated. It warrants its own explanations and flowchart which can be found in Appendix B.

**Offensive to Defensive Strategic Shift- Emergency Traffic** must include:

- Shifting to a Defensive Strategy
- All Units “Withdraw” or “Abandon” the structure.
- All Units report PAR upon exit\*

*\*Personnel Accountability Reports (PARs) should be given face-to face within a Division/Group and over the radio to the Incident Commander.*

### **General Fireground PAR Announcement**

Anytime the IC feels like it is necessary to confirm that all personnel are accounted for and have adequate air supply to exit the hazard zone, they can request a Personnel Accountability Report (PAR). Unlike an Emergency Traffic PAR, a General Fireground PAR Announcement shall be IC driven and each unit or Division/Group shall wait until they are contacted to give their PAR. This process shall be:

1. Incident Commander states “All units operating at \_\_\_\_\_ Command, stand-by for PAR.”
2. All individuals and units shall notify their designated supervisor of their condition and location, preferably via face-to-face communication.
3. When contacted by the IC, units and Division/Group supervisors shall report their PAR status.
4. After all companies or Division/Group have been accounted for, the IC shall transmit a PAR to the dispatch center for the entire incident.

Unless a unit DOES NOT have PAR, they should maintain radio discipline until contacted by the IC.

### **Unit Driven Tactical Radio Traffic**

Most communication will be driven by the IC or Division/Group Supervisors. However, there are specific communications that are critical enough to operations that they should be Unit driven as soon as possible. These include:

- **Status Change**
- **Roof Report**
- **Priority Traffic**
- **Mayday**

A Status Change should be given in the L-CANA format. Any needs request should be given by prefacing Command with the phrase "Status Change." For example: "144<sup>th</sup> Command from E31 with a Status Change."

A Roof Report is intended to give a complete assessment (size-up) of the roof and should include following information:

- Type of roof if not easily identified from the ground (peaked, flat, bowstring, etc.)
- Stability of the roof (stable, unstable)
- Fire or smoke conditions and their location on the roof
- Location of any firewalls
- Unusual heavy roof loads (if present)
- Conditions in the attic (if known)
- Basic blueprint of the building if unusual

Roof Reports on residential structures are primarily focused on ventilation access and preparation for coordinated ventilation. Reports from the roof containing any of the following information should be structured as **priority traffic** and should be made as soon as possible:

- Unstable roof
- Imminent collapse potential
- A locally identified hazardous roof structure (bowstring, excessive dead loads, etc.)
- Working fire in the attic space

Priority Traffic are instances when a unit **MUST** break radio silence and deliver traffic to the Incident Commander or Division/Group Supervisor as soon as the information is obtained. These instances include:

- Unable to complete a critical assigned task or tactical objective.
- Urgent need to be reinforced/backed-up to complete an assigned task or tactical objective.
- Victims encountered.
- Working fires in concealed spaces, not easily controlled by locating unit.
- A roof report that includes attic fire, unsafe roof structure, imminent collapse hazard

### **Three Deep Deployment Model**

The IC must always provide a steady, adequate stream of resources. 3 Deep is the concept where an IC always has a steady stream of workers for the required tasks based on the incident's critical factors.

The 3-Deep Deployment process starts out with the initial arriving workers who have been assigned into and are working in the hazard zone – the first layer.

After these key tactical positions have been covered, subsequent arriving units are assigned to On-Deck positions at the entry points already utilized by initial arriving units.

Once all of the critical tactical areas are adequately backed up with On-Deck Units, subsequent arriving units will be either Level 1 or 2. These Level 1 and Level 2 units now give the IC the tactical reserve needed to replace companies or to back fill any companies addressing a sudden incident problem - the third layer.

### **On-Deck**

**"On-Deck" is defined as: a forward staging position located just outside the immediate hazard zone, safely distanced from the entrance of a tactical position/Division/Group. Once a crew is assigned to an On-Deck position, they are first and foremost a Rapid Intervention Crew until they are given an assignment into the hazard zone.**

The most likely assignments for On-Deck companies are:

- Reinforce a position within an assigned Division/Group.
- Crew relief within an assigned Division/Group.
- Any other tactical position assigned by the IC.
- Deploy as a RIC unit.

A crew assigned to an On-Deck position must be intact, in a ready state with full PPE, radios monitoring the tactical channel, spare air cylinders, and at least one RIC bag. On-Deck crews must also size up the area that they are assigned to, this size up should include:

- Locating the structures entrance/exit points in their assigned area
- Interior and exterior conditions
- Unit ID of crews operating inside the structure
- Approximate location of interior crews
- Identify which crews are operating each hose line

## **Recycling**

Recycling is a timely and efficient means of gross decontamination, air replacement, and rehydration of companies while maintaining their Division/Group assignment.

## **Decontamination**

Decontamination (Decon) is an important health and safety function for every fire incident. Crews should utilize decon prior to reporting to Recycle, Rehab, and before being released from an incident scene; depending on exposure levels. The Incident Commander will have the responsibility to:

- Determine when on-scene Decon is required, and which types (Gross, Wet/Dry)
- Identifying exposure to hazardous materials and implementing additional Decon measures, as required.
- Announcing the location of Decon (typically identified and announced by the first arriving driver/operator)
- Ensuring compliance with proper Decon procedures.
- Developing a resource release schedule that limits out of service time for released units.

***A complete description of Decon Procedures can be found in Appendix C.***

## **Rehab**

Rehab is an assignment to a formal rehab location (close to the emergency scene) where units will be decontaminated (gross-decon at a minimum), medically evaluated, rehydrated, and replenished.

Division/Group Supervisors, and Company Officers, working in a hazard zone are always responsible to monitor the welfare of their personnel and determine if Division/Group recycling or a formal rehab is appropriate. Once rehabbed, units can be assigned back to the incident scene or placed back into service as directed by the IC.

Example:

*E12 from Command*

*E12*

*E12 report to Decon and then Rehab. Advise when returning to Level 1.*

*E12 received. Reporting to Decon then Rehab. Will advise when Level 1.*

## **Strategy and IAP Review**



The IC must regularly determine the effectiveness of operations. If the current IAP does not solve the incident problem(s), then the IC must do one of the following:

- Reinforce current positions.
- Establish key attack positions that are not yet covered.
- Switch from an Offensive to a Defensive strategy.

**The Elapsed Time Notifications (ETN) are logical points to review the Strategy and IAP and the Strategy shall be confirmed over the radio at each ETN. Control zones should be announced at the 1<sup>st</sup> or 2<sup>nd</sup> ETN.**

### **Maintain & Upgrade Incident Command**

IC#2 will need to assign subsequent arriving Chief Officers to either:

- Forward positions on the hazard zone site as Division/Group Supervisors.
- Command support roles to assist the IC in directly managing the incident.

As the command requirements for the incident grow, so should the command post. The tactical priorities represent the core of the IAP at any given point during incident operations. The IC should estimate how long each tactical priority will take, along with how many personnel/crews it will take to accomplish them. This estimation should give the IC a general idea of how many command officers they will need to request to the scene, to form a Command Team. A Command Team will usually operate from a larger “command van” command post or multiple smaller command vehicles.

### **Estimate the Duration of Command**

If the incident is going to last beyond the time a Command Team can reasonably manage, a schedule should be developed. This schedule should manage Command Team rotations, as well as rotations for any other staffing positions filled throughout the event. Incident Management Teams should be considered for large, complex incidents and those with multiple operating periods.

### **The Command Aide**

The first command support position is the Command Aide. The Command Aide’s roles and responsibilities include:

- Evaluate and recommend changes to the incident action plan - the IC and the Command Aide continually engage in a “challenge-and-verify” exchange.
- Provide direction relating to tactical priorities, specific critical incident factors and safety.
- Evaluate the need for additional resources.
- Assign logistics responsibilities.
- Assist with the tactical worksheet for resource control, accountability, and tracking.
- Evaluate the incident organization and span of control.
- Monitor the staging radio channel and communicate with the Level 2 Area Manager on this channel.

### **Senior Advisor**

The second member of the command team is the Senior Advisor (SA). It is normally the highest-ranking response chief that assumes the role of SA, e.g. the Shift Commander, Duty Chief, etc. Their major responsibility is to look at the entire incident and its impact from a broader perspective and to provide direction, guidance, and advice to the rest of the command team and support staff. The SA manages and oversees the command post. The SA’s roles and responsibilities include:

- Review and evaluate the incident action plan and initiate any needed changes- more challenge and verify.
- Provide ongoing review of the overall incident- looking at the big picture.
- Review the organizational structure, initiating change or expansion to meet incident needs.
- Recommend Section and Branch functions as needed/required.
- Manage appropriate Sections as needed.
- Provide management and coordination between the key radio operators in the command post (IC, Safety, Logistics).
- Serve as liaison with other city/county agencies and officials, outside agencies, property owners and tenants.
- Forecast, and react to, the effect this incident will have in tomorrow morning's newspaper- front page, above the fold.

When a Command Aide and SA are supporting the IC in the command post, you have an integrated, three-person team working together to perform the functions of Command.

The IC should use the radio designation "Command" and will generally be the only member of the command team communicating over the tactical radio frequency.

### **Implement Management Sections and Branches as Necessary**

As incident operations escalate in time, size and complexity, the strategic-level responsibilities can overwhelm the command team. To avoid this command "overload," we can expand the incident organization by assigning command, section, and branch-level positions. These positions include:

- Logistics
- Planning
- Operations
- Admin
- Safety
- PIO
- Liaison

## **Section 6- Incident Demobilization**

### **Reduce the Command Structure as Part of the Ending Stages of Incident Operations**

We use the same system to conclude incident operations that we use to expand the command structure for escalating events. The Command transfer is generally accomplished by transferring Command back to an officer of a unit who will remain on the scene until the event is complete.

### **Place Resources Back into Service with a Demobilization Plan**

The IC's demobilization plan should begin with replacing the most fatigued companies first if/when possible. If it will take some length of time to get these ready for service, they can remain unavailable until they get their rig restocked (hose loaded, fluids topped off, tools and equipment restocked, etc.).

For large-scale incidents where many units will be going back into service, the IC needs to ensure that the correct number and type of units will remain on scene until all the incident's needs have been met. This includes making sure the customer(s) have any needed after incident support (Red Cross, social services, insurance company, family support, etc.).

### **Decontamination**

Decontamination procedures will vary by incident type, exposure levels and individual fire departments. In general, an Incident Commander must ensure that a minimum level of Decon is established and that opportunities are available for all incident responders to Decon to their exposure levels and department policies prior to being released from an incident.

***A complete description of Decon Procedures can be found in Appendix C.***

# Appendix A- Definitions

**Abandon:** An emergency retreat order where all hose lines and heavy equipment will be left in place, if not needed for exit, and all members in the hazard zone will exit the structure as quickly and as safely as possible.

**Accountability Location:** As Level 1 and Level 2 units are assigned, Command will give assignments, which will include their respective accountability unit identification and geographic location. Each crew/unit will deliver their passport to the engineer of the accountability engine where they deploy a hand line from, and it will be placed on the accountability board located on the inside of the driver's door. Ladder crews will place their passport on the apparatus accountability board located on the inside of the driver's door when going to the roof to perform ventilation.

**Clearing the Alarm:** Hailing the dispatch center using your radio designator ("SNOCOM from E81"). This will ensure that you deliver your IRR on the correct channel, notify all responders you are about to deliver an IRR and establish Command, and automatically activates Level 1 staging.

**Embedded Safety:** The active safety function performed by Division/Group Supervisors where crews are operating under their supervision in a hazard zone. These functions include managing Division/Group accountability, tracking and managing interior crew work times, rotating crews out of the hazard zone, managing on-deck, recycle, rehabbing crews, and monitoring for any safety hazards.

**Emergency Traffic:** The IC is the only person who can initiate an emergency traffic report. Emergency traffic will receive the highest communications priority from the dispatch center and the IC. All other units operating at the incident site will maintain radio discipline until the emergency traffic has been cleared by the IC. Dispatch will transmit 3 alert tones when emergency traffic is requested.

**Hold the Alarm:** Resource determination where the alarm that is dispatched will continue as dispatched.

**Initial Radio Report:** The initial report given by the first arriving IC to provide dispatch and all units responding, with a size up of conditions seen from the initial command position.

**L-CANA Reports:** Crews report on Location, Conditions, Actions, Needs, and Air.

**Level 1:** An uncommitted position approximately one block from the scene. Engine companies don't pass their last hydrant or water access. Ladder/Truck companies don't pass their last access point into the incident site. All Level 1 units must wait for an assignment from the IC before proceeding out of their Level 1 location.

**Level 2:** Level 2 procedures are used for greater alarm assignments. It is a centralized staging location adjacent to the incident scene where later arriving resources will assemble. Level 2 should be close enough to the incident scene to provide timely access but is in an area that is out of the way and not exposed to the incident's hazards. Dispatched greater Alarm Units should be dispatched to a Level 2 location on a different radio frequency from the hazard zone frequency, as designated by the dispatch agency.

**Mayday:** Anytime a firefighter cannot safely exit an IDLH hazard zone.

## **NIMS Incident Types:**

- Type 5: Small incident that can usually be resolved within a few hours with onsite resources.
- Type 4: Minor incident that can be resolved within a day with onsite resources and support from other facility personnel.
- Type 3: Incident needs exceed onsite capabilities and additional resources from the local area may be brought in to support the response. The response will last longer than one or two operational periods.
- Type 2: Incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. Often requires the activation of response resources from outside the local area.

Type 1: Most complex, requiring national resources for safe and effective management and operations. Type 1 response may continue for many weeks or months.

**Recycle:** A timely and efficient means of air replacement and re-hydration of companies while maintaining their Division/Group assignment. If conditions permit, a company's work cycle could be up to 2 air cylinders.

**Rehab:** An assignment to a formal rehab location (close to the emergency scene) where units will be decontaminated, medically evaluated, rehydrated, and replenished.

**Status Change:** Normal radio traffic terminology that is crew driven and can involve moving from an assigned work location to a different geographic work location, exiting the structure to recycle or rehab, or a crew completing their assignment. Status Changes are given in the L-CANA format. Examples include crews needing salvage tarps or crews needing equipment during overhaul. The above are NOT Priority Traffic Needs. They are routine needs requests that are given as a "Status Change."

**Upgrade the alarm:** Resource determination where the IC adds additional alarms to the alarm originally dispatched.

**Withdraw:** An orderly withdrawal where interior lines and equipment will be withdrawn and repositioned when changing to a defensive strategy.

**Confirmed Working Fire:** A situation that will require at least the commitment of all responding companies. This report advises dispatch that the companies will be engaged in tactical activities and will be held at the scene for an extended period.

# **Appendix B- Mayday**

The IC must use the same critical factor-based command system to manage a Mayday that is used to manage all other IDLH hazard zone activity.

## **Mayday Prevention**

The best way to manage a Mayday incident is to operate in a manner that eliminates them from occurring in the first place. The #1 way to prevent Maydays from happening is for the IC to always operate in the correct strategy based on the current critical factors of the incident.

## **General Mayday Guidelines**

### **Declaring a Mayday**

Maydays must be declared/transmitted as soon as the person or crew(s) affected know that they cannot safely exit an IDLH hazard zone.

### **Resources**

The Mayday emergency traffic report to the dispatch center should include a resource determination (i.e. additional alarms) that can adequately address the Mayday as well as all the other critical factors that are occurring at the incident site.

### **Fire Control**

Operating interior crews that are actively addressing fire control when a Mayday occurs should continue with their fire control efforts. **Put the fire out!**

### **Communications**

All hazard zone operations and Mayday operations will remain on the same tactical channel when a Mayday has been declared. See exception noted in "EMER Button Activation" section below. This connects all hazard zone companies to the Mayday operation, and it also helps the IC and/or Division Supervisor(s) facilitate the "Help Order".

A "NO-PAR" policy will be in effect once a Mayday has been transmitted. Some types of Mayday situations (collapses, extreme fire behavior, etc.) will require the IC to perform a PAR to determine the scope of the problem and what units were affected by the conditions. The PAR process must be driven by the IC when initiated.

All operating units will maintain radio discipline once a Mayday has been transmitted. All operating units will ONLY transmit, via radio, additional Mayday announcements (you're having a Mayday), priority traffic, and critical status change reports during an active Mayday.

Mayday L-CANA reporting becomes very critical when declaring a Mayday. The sender must be very specific on the NEEDS required to help resolve the Mayday.

### **Air Supply**

Any unconscious or downed Mayday firefighter (unable to move on their own power or assist in the rescue in any way) will require extra time and resources to remove them from the hazard zone. Many times, Maydays of this nature will require the rescue to be performed in stages:

1. Locate the firefighter(s)
2. Air trans-filling
3. Packaging
4. Extrication of the firefighter(s) from the hazard zone

### **The Help Order**

Mayday studies and national statistics show that approximately 80% of Maydays are resolved by:

- The firefighter having the Mayday performs self-rescue.
- The firefighter's own crew members perform the rescue.
- Another company already working in the hazard zone performs the rescue.
- A combination of all three of the above.

The IC and the rest of the Command team will utilize the "Help Order" during a Mayday operation.

The Help Order is the order in which an IC or a Division/Group Supervisor will try to assist a firefighter who is experiencing a Mayday. This order is:

- Communicating to a lost/trapped firefighter self-rescue techniques to assist with the rescue.
- Using a Mayday firefighter's own company, or a company already located inside of the hazard zone, to assist with the rescue.
- Using an On-Deck company located outside of the hazard zone as a RIC crew.

A lost/trapped firefighter, who can talk on a portable radio, should be able to provide a standard Mayday L-CANA report. The IC should acknowledge the Mayday L-CANA report and respond back with the following to the Mayday firefighter(s):

- Verbally state to the Mayday firefighter(s): "stay calm and control your breathing".
- Maintain radio contact long enough to get enough information to implement an adequate rescue IAP.
- Have them activate their PASS unit, if possible, to aid in locating
  - Request the PASS unit to be shut off when talking on the radio.

When communicating with a Mayday firefighter's own crew, or with another crew who can assist with the rescue, the IC or Division/Group Supervisor must consider 3 things when using the Help Order:

1. The air limitations of the interior working crews.
2. The possibility of interior crews lacking the tools required to make the rescue.
3. Fire control efforts required to maintain interior tenability. Other operating interior crews that are actively addressing fire control when a Mayday occurs should continue with their fire control efforts. **Put the fire out!**

When deploying On-Deck crews as RIC crews, they must properly equip themselves, have a rescue plan, and be ordered into the hazard zone by the IC or Division/Group Supervisor before making entry. Outside On-Deck crews that are deployed to perform rescue activities should always bring the RIC Bag with trans-fill capabilities along with any other equipment needed to solve the Mayday.

# Mayday Communication Algorithm

Once a member or unit determines they cannot safely exit the hazard zone, declare a Mayday over the incident's assigned tactical channel by announcing Mayday 3 times:

Mayday, Mayday, Mayday

While still keying the microphone, the Mayday member or unit will provide a L-CANA Report that includes:

- Who: The identity of who is having the Mayday. Unit, Unit riding position, or entire name
- What: Caused the condition(s) of the Mayday
- Where: Identify your current location/surroundings or your last known location
- Provide the NEEDS that will help resolve the Mayday (critical)
- Air status report

IC will acknowledge the Mayday L-CANA report using the Order Model

IC will provide any necessary self-help information required to the Mayday firefighter or unit.

If required, quickly make any necessary unit deployment(s) to start addressing the Mayday.

Contact dispatch center and ask for Emergency Traffic Tones (critical)

After the Emergency Traffic Tones have been transmitted - transmit:

- Brief Mayday update that includes the who, what, and where of the Mayday
- Tell all units operating at the scene to maintain radio discipline.
- Request any additional resources required to completely resolve the Mayday

Dispatch center will repeat the Emergency Traffic report verbatim.

The IC will then manage the Mayday based on the NEEDS report given in the Mayday L-CANA report, or they will push the management of the Mayday down to the Division/Group Supervisor who is having the Mayday in their Division/Group



## Mayday Operational Guidelines (Task, Tactical, & Strategic Levels)

### Task/Company/Firefighter Level Mayday Responsibilities

Firefighter or interior Unit having the Mayday must:

- Call for a Mayday as soon as you realize you cannot safely exit the hazard zone.
- Declare a Mayday (x's 3) to ensure priority radio traffic, DO NOT un-key the microphone.
- Give an L-CANA report that includes: Location, Conditions, Actions, Needs, Air

- ❖ **Who:** Your identity - unit, unit riding position, or entire name
- ❖ **What:** Caused the condition(s) of the Mayday
- ❖ **Where:** Identify your current location/surroundings or your last known location
- ❖ **Needs:** The needs that will help resolve the Mayday (critical)
- ❖ **Air:** 50+ 50- status

- Calm down and begin self-help/self-rescue techniques.
- Conserve your air.
- Activate your Personal Alert Safety System (PASS) if appropriate.
- Maintain radio contact with the IC or the Division Supervisor as required.

Other Companies operating in the hazard zone during a Mayday must maintain radio discipline. If, however, other companies have pertinent information that directly relates to the Mayday, those messages should be transmitted as priority traffic. Examples include obtained fire control, crew is nearby and can assist with the mayday, etc.

### Strategic Level Mayday Responsibilities

When a Mayday is declared on the fireground, the IC must:

- Confirm the critical factors – the risk management plan – and the overall strategy.
- Take **STRONG** control of the communications process.
- Follow the Mayday communication algorithm.
- Change the IAP to high priority rescue effort.
- A NO PAR policy will take effect.
- Assign BC's/Chief Officers into Division/Groups if not already assigned.
- Coordinate and support the rescue efforts with the Divisions/Groups as required.
- Expand the command organization.
- Support the fire fight when necessary – **Put the fire out!**
- Provide the required support work.
- Establish triage, treatment, and transport if Medical Group isn't assigned.
- Consider the medical and technical requirements for the rescue.

On-Deck companies must use great discipline when there is no Division/Group Supervisor in place during a Mayday. On-Deck crews must properly equip themselves, have a rescue plan, and be ordered into the hazard zone by the IC before making entry.

The IC should assign Division/Group responsibilities as soon as possible into the event; if/when none are in place when the Mayday is declared.

### EMER Button Activation

EMER button activation should be used as a last resort, after attempting to contact the IC three times. The EMER button may also be used if you are unable to transmit over the radio to the IC. In many cases, with the use of the EMER button, the Mayday may need to be managed via the tactical channel and/or channel 16 based on needs.

## **Clearing Mayday Operations**

Once all affected firefighters have been removed from the hazard zone, the IC must ensure that they are handed over to treatment and that there are enough resources on-scene or responding to adequately treat and transport all injured firefighters.

The suitability of personnel to continue to work in IDLH atmospheres will be directly impacted by the severity of the Mayday. Company and Command Officers must evaluate the mental and physical wellness of any deployed member working on the Mayday prior to sending them back to work on the incident's problems.

Once the Mayday(s) have been controlled, all personnel are accounted for and there is adequate treatment under way, the IC should contact the dispatch center and clear the Mayday radio traffic. This announcement should include:

- A brief Mayday conclusion report.
- The strategy and IAP for the next operational period in the incident.
- Resource determination.
- Open the air for normal radio traffic.

# Appendix C- Decontamination

## Cancer Risk Reduction Decontamination Procedures

### Purpose:

1. To provide post fire decontamination procedures for personnel operating at fire/emergency scenes; and assist in minimizing exposure to potential carcinogens and byproducts of combustion.
2. All personnel exposed to toxic/hazardous environments shall go through a decontamination process of their PPE and their person. Detailed decontamination procedures will be used upon exiting any IDLH environment (including but not limited to a structure fire, vehicle fire, dumpster fire, outside trash fire) where smoke, byproducts of combustion and/or debris is possible.
3. All training that may expose members to dust, gases, smoke, viruses, molds, and/or fibers shall require decontamination of PPE.

### Definitions:

- **Gross Decontamination-** The initial phase of the decontamination process during which the amount of surface contaminant is significantly reduced.
- **Wet Decontamination-** The use of water to remove particulates and other products of combustion from firefighters prior to going off-air and removing SCBA face pieces.
  - Wet Decon should occur after dry Decon.
- **Dry Decontamination-** The use of a dry brush to remove contaminants from firefighting PPE.
  - Dry Decon should be completed before wet Decon and/or during cold weather when wet Decon is impractical.
- **Warm Zone-** The control zone outside the hot zone where personnel and equipment decontamination support take place.
- **Drop zone-** a designated area where the firefighter doffs PPE, SCBA, and equipment remote from the gross decontamination area and cleans skin with wipes.

### Responsibilities:

All uniformed personnel exposed to the products of combustion are responsible for ensuring they complete on-scene decontamination procedures as directed by the IC or his/her designee; and after completing all operational assignments. This includes the post-incident storage of PPE and returning to the station for personal decontamination.

### Incident Commander Responsibilities:

- Determining when on-scene decontamination is required.
- Identifying exposure to hazardous materials and implementing additional decontamination measures, as required.
- Announcing the location where decontamination will occur.
- Ensuring personnel are compliant with proper decontamination procedures.
- Developing a resource release schedule that limits out of service time while units return to quarters for full decontamination and showers.

### Company Officer Responsibilities:

- Monitoring their personnel for exposure to the products of combustion and ensuring decontamination of PPE and skin occurs on-scene.
- Monitoring radio traffic, to determine the need of their assigned resource, while the unit is out of service for decontamination and cleaning.

- Ensuring their unit is made available for response as soon as feasible after personal and full decontamination procedures have been completed.

### **First Arriving Driver/Operator (or as assigned by the IC) Responsibilities:**

- Identifying the location of on-scene decontamination and informing the chain of command.
- Retrieve and set up the StormStick Decontamination kit and prepare the on-scene gross decontamination area.
- Consider bringing the StormStick Decontamination kit forward to the decontamination area, if the responding jurisdiction does not carry the kit in their inventory.

### **All Personnel Responsibilities:**

- Ensuring compliance with proper decontamination procedures.
- Maintaining an additional set of clean bunker gear to be placed in service while soiled PPE is decontaminated.
- Personnel shall carry a change of department issued clothing in their issued go-bags. After completing on-scene decontamination, personnel will change into this clothing utilizing a department issued changing tent.

### **Overview**

1. Contamination is the exposure to chemicals (including carcinogens), radioactive, or biological material on personnel or physical material (equipment, vehicles, etc.)
  - (a) Personnel and equipment should be considered 'contaminated' when they are exposed to a potentially toxic/hazardous environment.
  - (b) All members should be cognizant that an exposure to toxic/hazardous environments does NOT require visible smoke; inhalation and absorption of low doses, in parts per million (PPM) range or microscopic amounts, can have a negative effect.
2. The decontamination process described in this policy strictly refers to an immediate Gross Decontamination of personnel in full protective ensemble following exposure to products of combustion. This procedure must be systematic and orderly to reduce exposure.
3. The Gross Decontamination process shall be utilized for all fires where PPE are worn and exposed to products of combustion. This shall include, but not be limited to, brush fires, vehicle fires, structure fires, training fires, and/or any other incident in where the combustion process occurs.
4. The marking of formal exclusion zones may not occur at every fire incident. All personnel should be aware that exclusion, and control zones, still exist. It is important to remember that many toxins are colorless and/or odorless gases. To limit the amount of exposure and the subsequent required decontamination, consider apparatus placement and approach during any incident.

### **Levels of Exposure Requiring Decontamination:**

- **Light exposure-** Exposure to dry products of combustion for a short duration.
  - Decon requirements- Dry decontamination.
- **Moderate to Heavy Exposure-** Exposure to interior firefighting or exterior operations while working in close proximity to the fire for longer durations.
  - Decon requirements: Wet decontamination.
  - Cold/increment weather: Dry decontamination.

### **On-Scene Decon Procedures**

On-scene Decon procedures will include some combination of Gross Decon, Dry Decon and Wet Decon depending on levels of exposure and weather conditions.

### **Gross Decon Set-Up:**

1. Establish the Gross Decon area, and a Drop Zone, within the warm zone, and away from smoke, as follows:
  - (a) Establishment of a Gross Decon area is usually the responsibility of the attack engine pump operator/engineer.
  - (b) The area should be approx.40 feet from the pump panel. Designate the gross decontamination area using a traffic cone.
  - (c) Set up the StormStick system as needed.
  - (d) Place the dry bag Decon kit containing the wipes and plastic bags used to clean the skin and isolate the PPE in the designated Drop Zone a minimum of 50 feet away from the gross decontamination area and attack pumper.
2. Once in place, the Driver/Operator will communicate with the Incident Commander that Gross Decon is established and the location. For example: "Incident Command from E26 Driver, Gross Decon has been established at E26 located on the alpha side of the structure". The Incident Commander will then broadcast to all units.

### GROSS DECON PROCESS

1. Firefighters exiting the structure shall assist each other in conducting the Gross Decon process. When personnel are assigned to the decontamination process (wet or dry), the minimum personal protective equipment worn to reduce exposure to carcinogens shall be EMS gloves, HEPA mask, and eye protection against splash.
2. After exiting the IDLH, crews must remain on-air and report directly to the designated decontamination area. Members with the lowest air supply should be decontaminated first.

### DRY DECON PROCESS

1. During cold and inclement weather, the process of soaking our members while performing wet decontamination procedures may create additional safety problems. To minimize this risk, dry decontamination may be performed utilizing the following procedures:
  - (a) After exiting the IDLH, it is recommended that all crew members remain on-air and report to the designated Decontamination area.
  - (b) Working from the head down, dry brush off all large particles from the firefighters PPE.
  - (c) Use a damp towel or wipes to wipe the area around the mask and face piece to suspend any particulate matter.
  - (d) Use wipes to clean the face, neck, hands.

### WET DECON PROCESS

1. Ensure Velcro neck collar is closed. Dry brush off large particulate from helmet, gear, and SCBA.
2. While standing, have the firefighter bend forward at waist and rinse debris from helmet.
3. With firefighter arms outstretched from their sides, and air pack loosened, rinse PPE starting at the collar-line down. Be mindful of higher potential collection points such as under arms and between the legs. Rinse behind SCBA straps and pack. Do not saturate gear.
4. Utilizing the StormStick Decontamination System and a scrub brush, wash and rinse all areas below the collar-line. Do not saturate the inner lining of the protective ensemble.
5. After Wet Decon is complete, personnel may go off-air. Move to the **Drop Zone** and begin to doff their SCBA/PPE.
6. Remove the hood by taking a deep breath before sliding it off. This will reduce exposure time of products of combustion contained on the hood. An alternative method involves removal of the hood at the same time as the mask using an "over the head" technique.
7. Depending on the extent and length of the fire and weather conditions, all PPE, other than bunker pants and fire boots, shall be left in a prepared 'Drop Zone.' If a formal rehabilitation area is not established due to a quicker knock-down and/or demobilization, a 'Drop Zone' would not necessarily be needed.
8. Personnel shall use department approved wipes for a gross cleaning of their head, neck, face, hands, and other exposed areas such as the torso.

## REPORTING TO REHAB OR REASSIGNMENT

1. Once in rehab, and weather permitting, personnel shall lower their bunker pants to allow for rapid cooling and increase the distance between off gassing contaminated gear and their respiratory system and skin.
2. If a crew is returned to an assignment in the 'Hot Zone' they are to repeat the gross decontamination procedure before returning to rehab or leaving the scene.

## PPE EQUIPMENT EXCHANGE

1. All personnel are encouraged to carry their own spare hood and gloves.
2. Damaged or missing hoods can be exchanged on the scene with the Battalion Chief.

## DEMOBILIZATION

1. Prior to leaving the scene, all contaminated structural gear must be encapsulated using department provided plastic bags. The bagging of gear shall be performed wearing EMS gloves. The bag opening will be twisted on itself and secured and/or taped. This process will greatly minimize any off gassing. Place the bagged gear into an assigned apparatus in a location that will limit personnel exposure to off gassing.
2. All other equipment (SCBA packs, cylinders, tools, etc.) will be cleaned/rinsed at the Decon area wearing EMS gloves. TIC, radio, and radio strap shall be wiped down.
3. Personnel will carry a change of department issued clothing in their issued go-bags. After completing on-scene decontamination, personnel will change into this clothing utilizing a department provided changing tent.

## POST-FIRE DECON

1. Showering, changing clothes, and placing the apparatus and clean PPE in-service shall be the priority upon returning to the station.
2. PPE, including helmets, shall be washed, and dried per department procedure as operational need allows. Back-up sets of PPE should be used while front line sets are being washed/dried.
3. Prior to taking a shower, place PPE in extractor and lay out all contaminated equipment to allow for off-gassing. Prefer to lay out PPE outside if the area is secured.

## DECON FOR FIRE INVESTIGATORS

1. Fire Investigators should undergo the same Gross Decon process noted above, including changing out of coveralls or exterior exposed clothing.
2. They shall follow Personal Decon procedures and shower at home or at a fire station.

# Appendix D- IMS Communications Form (Example)

## Snohomish County IMS Communications

### Alarm/Dispatch Center - Standard Communication Forms

<b>Initial Radio Report</b>	<b>Follow-Up Report</b>
<p><b><u>Building/Area Description:</u></b>  <b>Size:</b> Small    Medium    Large  <b>Height:</b>        1        2        3        4        5  <b>Occupancy Type:</b> House    Apartment    Strip mall    Commercial</p> <p><b><u>Problem Description:</u></b>            Nothing Showing    Light Smoke    Working Fire    Defensive Fire Conditions            Location of the Problem: _____</p> <p><b><u>Initial Incident Action Plan:</u></b></p> <ul style="list-style-type: none"> <li>• <b>Tasks :</b> Water supply    Stretch an Attack Line    2 1/2"    Deck gun</li> <li>• <b>Location:</b> Alpha, Bravo, Charlie, Delta, <b>Floor</b> 1 2 3 4</li> <li>• <b>Objective:</b> Primary Search    Fire Control    Extension    Quick Hit</li> </ul> <p><b><u>Strategy:</u></b>    Offensive                      Defensive</p> <p><b><u>Resource Determination:</u></b>            Cancel    Continue non-code    Balance Alarm type    Upgrade Alarm Level</p> <p style="color: red;"><b><u>Establishing _____ Command:</u></b></p>	<p><b><u>Results of the 360:</u></b>            Not Completed                      Completed</p> <p><b><u>Stories from Charlie Side:</u></b> _____</p> <p><b><u>Basement Type:</u></b>    No basement,            Window Well,    Look-out,    daylight</p> <p><b><u>Any Changes to IAP</u></b>            Yes    No            _____</p> <p><b><u>Engine :</u></b> _____  <b><u>will be the Accountability Location</u></b>            Alpha    Bravo    Charlie    Delta</p>

**Unit Assignment**

Unit: \_\_\_\_\_

Tasks: \_\_\_\_\_

Location: \_\_\_\_\_

Objectives: FC PS EXT OD

**Unit Assignment**

Unit: \_\_\_\_\_

Tasks: \_\_\_\_\_

Location: \_\_\_\_\_

Objectives: FC PS EXT OD

**Unit Assignment**

Unit: \_\_\_\_\_

Tasks: \_\_\_\_\_

Location: \_\_\_\_\_

Objectives: FC PS EXT OD

**Command Transfer**      Unit Rundown:                      Transfer CAN:

**Unit:**      **Assume Command:**      **Command Post Location:**      **Strategy:**                      **Resource Determination:**

Yes    No                      Where: \_\_\_\_\_                      Offensive    Defensive                      Cancel Assn    Greater Alarm

**CAN Reports**    IC driven    Priority traffic    Status Change    No Good news Reporting

**Conditions:** Smoke    Heat    visibility

**Tactical Priorities Achieved:**    Search: nothing found    Fire Control    Extension

**Needs:** No needs    or    Requesting what?

**Air:**    50 Plus    or    50 Minus



# 2024 Roadmap for Snohomish County EMS

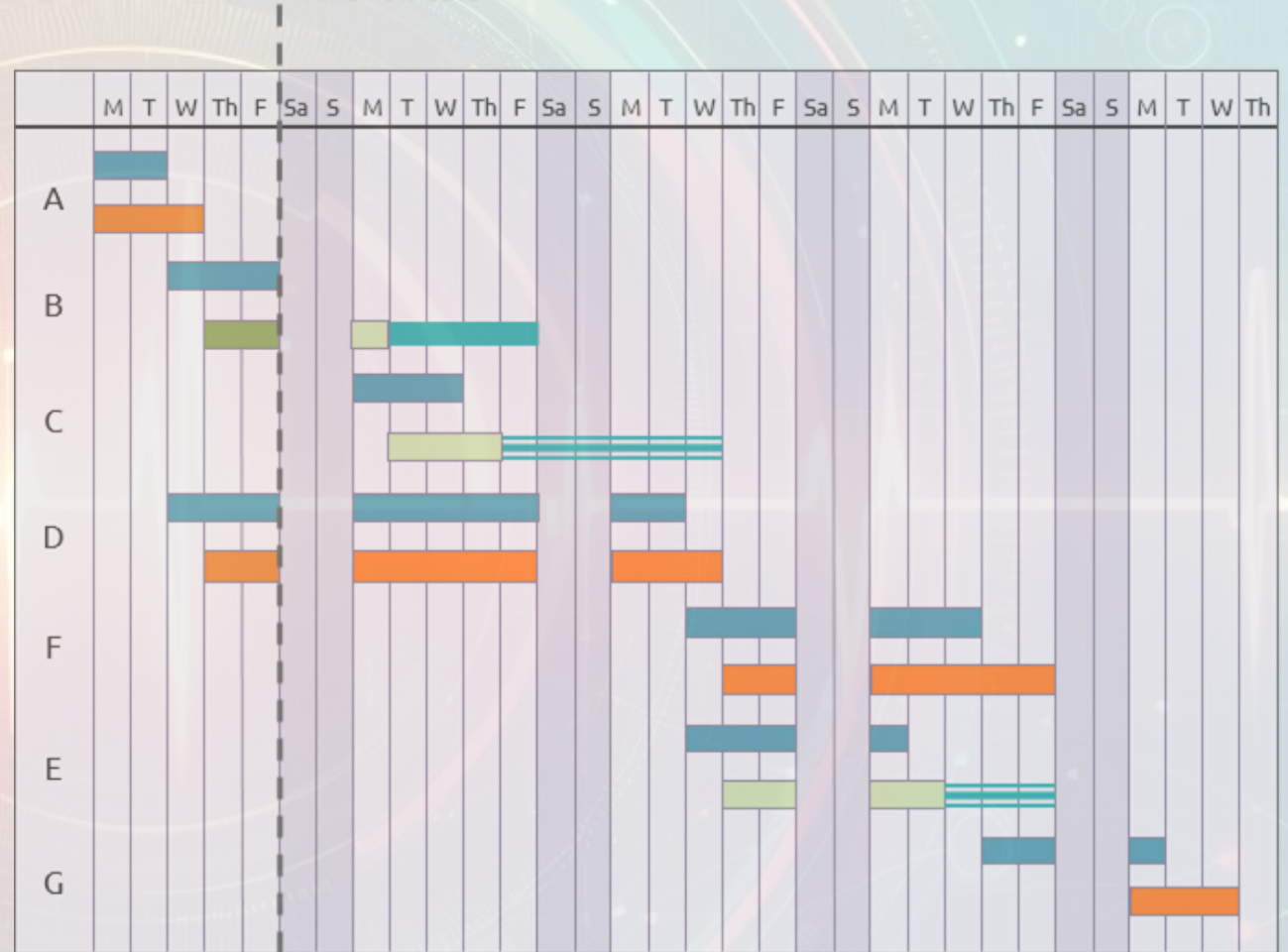


# 2024 Goals

1. Build Trust

2. Develop Systems

3. Support Providers



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)





# Countywide Contracts



# Countywide Contracts

- **ESO:** Electronic Health Record system for EMS
- **ESO:** Personnel Management for recertification documentation
- **Code Stat:** Data analysis tool for cardiac arrest cases
  - Exploring subscription to provide service
- **Protocol Management:** Tool to manage our protocols
  - Includes administrative development
  - Includes ready access for field providers
- **Handtevy:** Pediatric resuscitation system
- **Other:** any other contracts that need to be reviewed or renewed





# Protocol Updates



# Adopt a sustainable Document Management System



- Evaluate
  - Power DMS
  - Mission Critical Protocols





# Restart regular protocol committee meetings



- Protocol committee meetings
  - Develop project management structure
  - Establish regular meeting cadence
  - Discuss protocol changes and feedback





# Revisions submitted to DOH by August

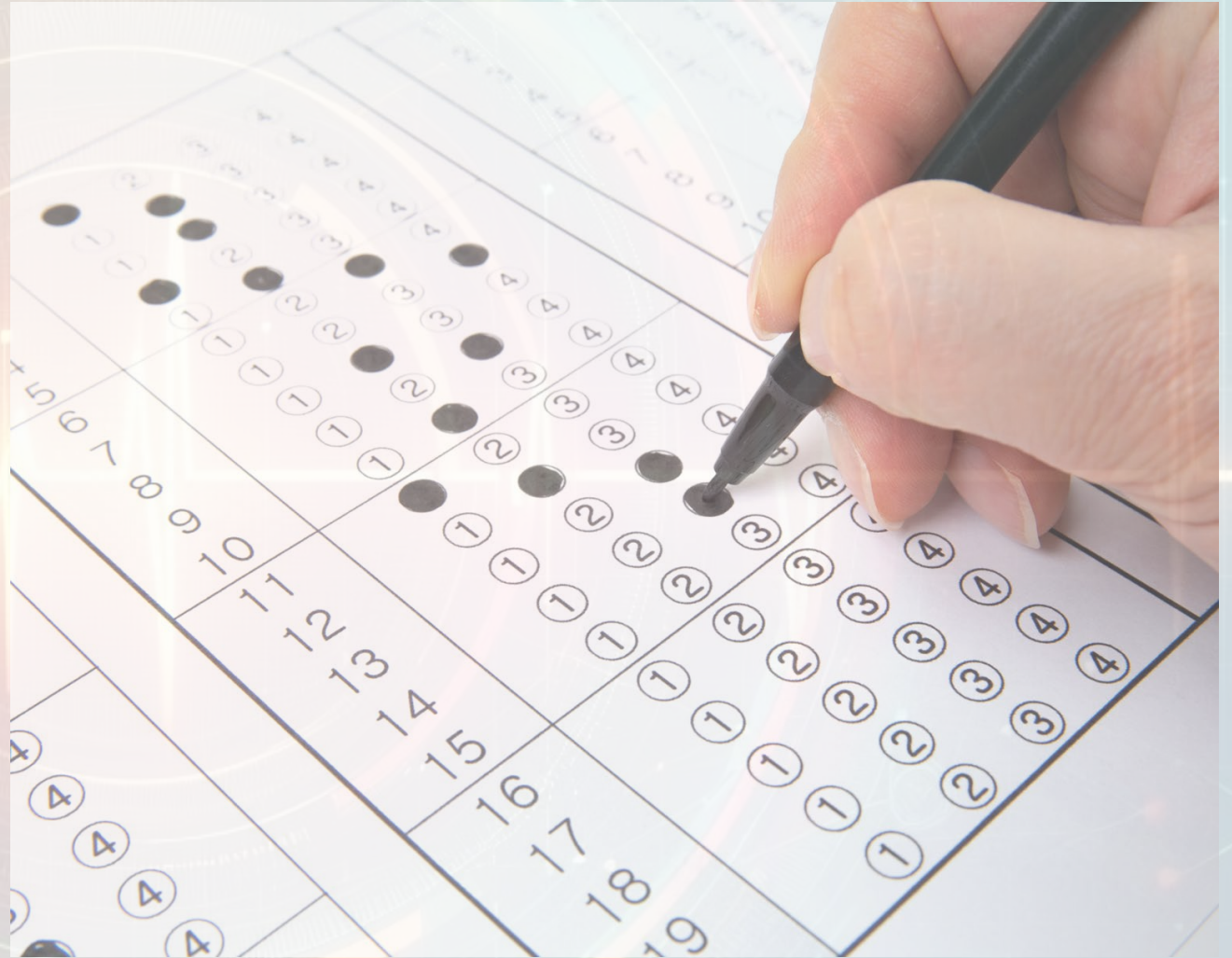
Submit revised protocols to Department of Health for approval by August 2024





# Protocol Education by October

Provide education, training, and tests in one package on new protocols to EMS providers by October 2024.





# Protocol Go Live



- January 1, 2025
  - Implement new protocols
  - County-wide simultaneous go-live



# Comprehensive Airway Management





# Review content and adapt to SCEMS protocol

- Review PEAC content
  - PEAC is a state standard for continuing education and assessment for EMS providers
- Adapt to Snohomish Count EMS protocol



# Deliver content, scenarios, and survey of learning by December 2024

- Content, Scenarios, and Survey of Learning
  - Online and in-person learning materials
  - Case scenarios
  - Evaluation tools
- Target Date: December 2024
- ***Best practice: Develop a CAM team of skilled instructors from each ALS department to facilitate uniform CAM instruction across the county***





# Update CAM calendar schedule

Revise the calendar for CAM topics and deadlines for 2025





# Learning Management System



# Learning Management System

- LMS to support OTEP
  - OTEP is **O**ngoing **T**raining and **E**valuation **P**rogram for EMS providers
- Presently Snohomish County has different platforms to manage OTEP
  - *Evaluate* interest in adopting a single platform that SCEMS can manage on behalf of agencies
  - For agencies who do not wish to participate; develop a package of required educational requirements for them to implement





# OPEP





# OTEP 2025-2028



- June 2024
  - New rule for OTEP from Department of Health set to take effect.



# Rule Interpretation

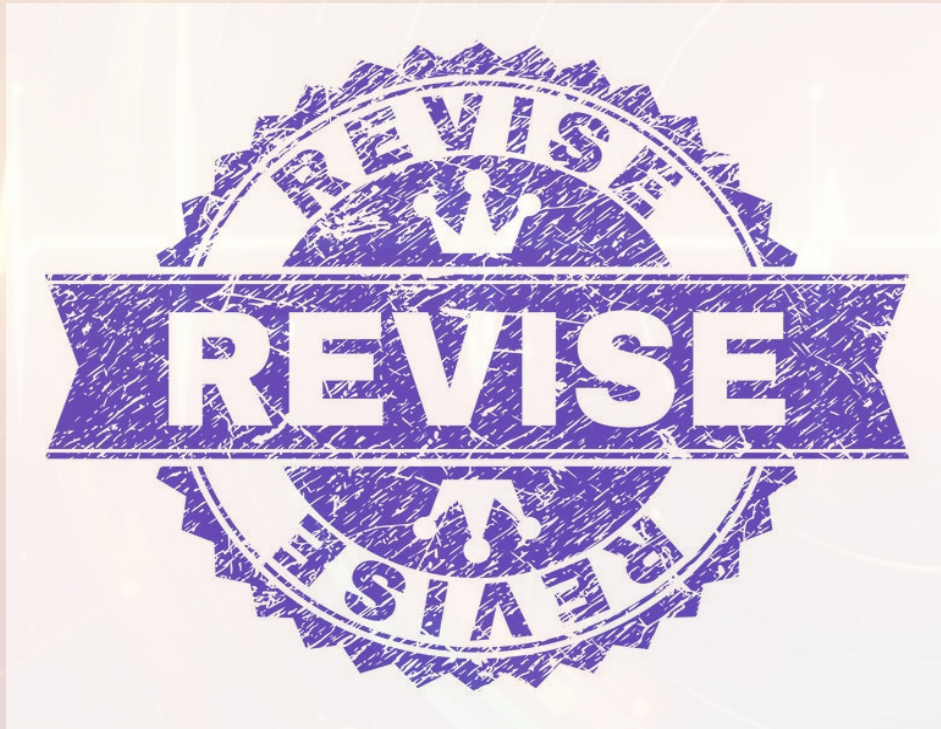


- Review and understand the new rules and how they affect OTEP





# OTEP 2025-2028: July/August – OTEP revision



- July/August
  - Revise OTEP content and format to align with new rules.

This Photo by Unknown Author is licensed under [CC BY-NC](#)





# OTEP - September

Communicate and distribute the new OTEP plan to departments.



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

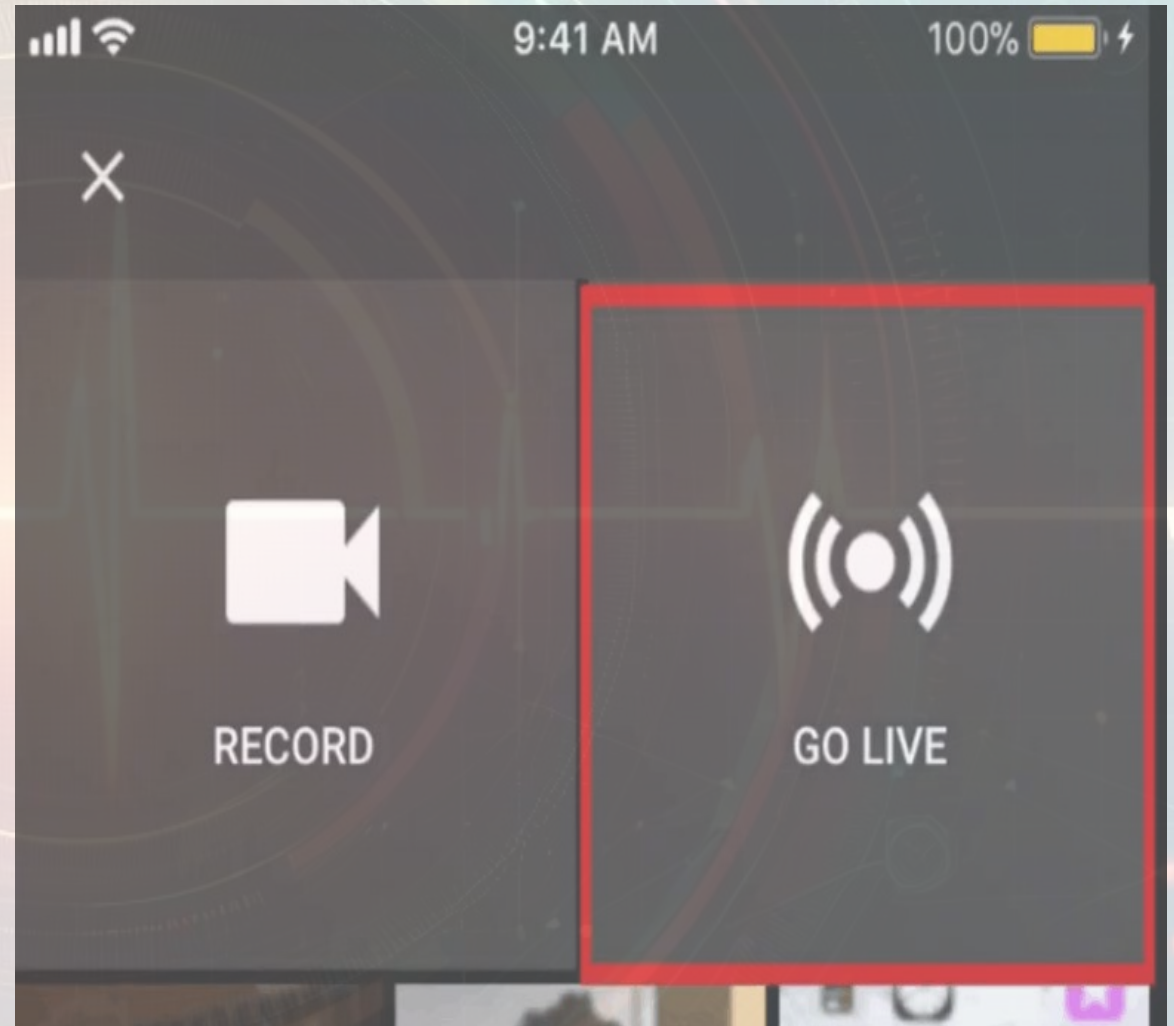




# OTEP Go-Live

January 1, 2025

Launch the new  
OTEP program  
for providers



[This Photo](#) by Unknown Author is licensed under [CC BY-NC](#)



# Endorsements





# Supraglottic Airway & IV

Survey departments to  
determine how many  
providers need  
endorsements



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)





# Education Coordinator: Develop an education plan



- Skills Evaluator
  - Responsible for evaluating skills
- Education Coordinator
  - Responsible for planning and delivering endorsement courses
- Plan for departments without SEI
  - Education coordinator to develop plan for these departments





# SGA & IV Endorsement County classes for smaller agencies without ESE- Paramedics



- Offering county-wide classes for BLS providers
  - For those without ESE-Paramedics
  - Endorsements for SGA and IV

[This Photo](#) by Unknown Author is licensed under [CC BY](#)





# Open class for ESE-Paramedics to teach SGA (train-the-trainer)



- Open class for ESE-Paramedics to teach SGA endorsement
  - Train-the-trainer program
  - ESE: Emergency Services Educator
  - Paramedics can teach SGA to other providers



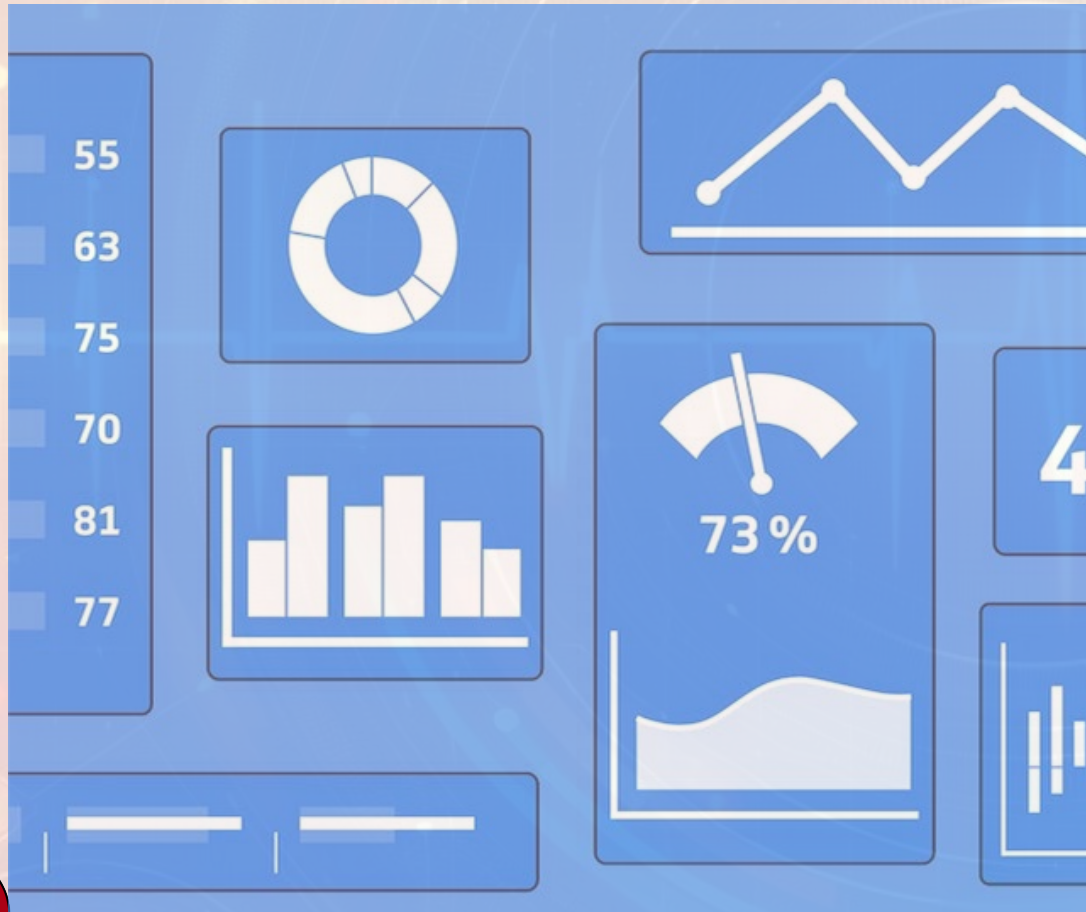


# Quality and Key Performance Indicators





# Develop KPI dashboard



- Key Performance Indicators (KPIs)
  - Important metrics to track for EMS
- Dashboard Creation
  - Display and track KPIs in an organized manner

This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)



# KPIs/Data Measurement



Include KPIs that measure county-wide EMS performance and outcomes.

- Account for agency size
- Population density
- Urban, Suburban, and Rural response standards





# KPIs/Data: By department

Measure and report individual department performance and outcomes





# Monthly Data Distribution

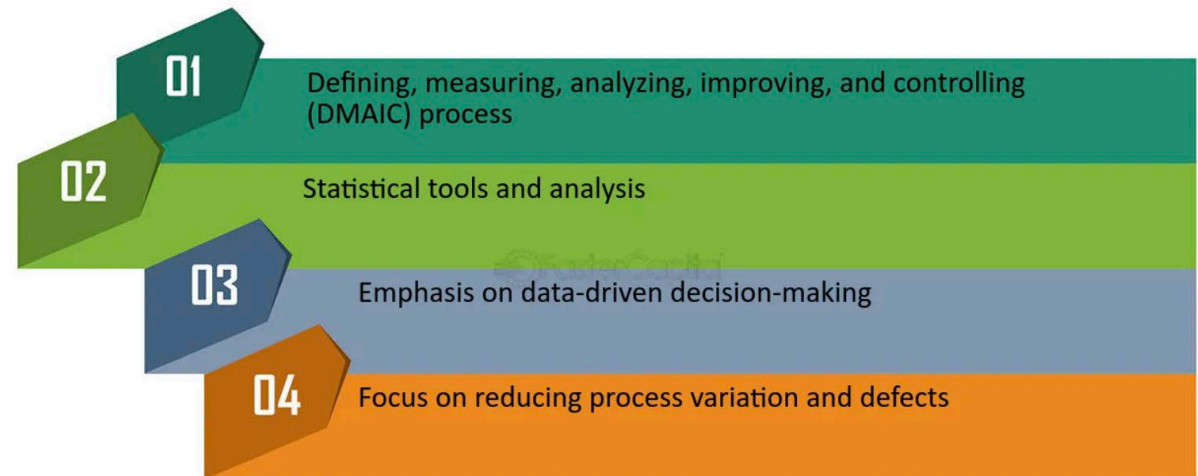
- Monthly Distribution
  - Send dashboard to EMS stakeholders monthly



# Driving Quality Improvement

- Integrate QA Committee work with KPIs to establish quality improvement work
- County-wide accountability for patient outcomes

## Driving Continuous Improvement and Quality Control





# Data standards group



Form a group that sets and maintains data standards and quality for EMS agencies





# Incorporate WEMESIS, Utstein, and CARES data

- WEMESIS
  - Washington EMS information system
- Utstein
  - Standard for reporting cardiac arrest data
- CARES
  - Multistate data registry for cardiac outcomes



# Policy Development and Implementation Committee





# Re-establish regular PDIC



- Resume regular meetings of this group





# Evaluate county policies and get into adopted Document Management System



- Review and update county-wide EMS policies
  - Store updated policies in Document Management System





# Identify policy gaps



- Identify gaps
  - Find areas where policies are missing, incomplete, or contradictory
- Examples of risk
  - Blood-born pathogen policy

This Photo by Unknown Author is licensed under [CC BY-ND](#)



# Update Policies

Find policies that are outdated or inconsistent





# Bylaws





# Bylaws

- This body of work is dependent on Joint Taskforce governance structure
- This work cannot proceed until the future governance is determined
- There are significant updates that need to occur
  - The present operations do not reflect the dated Bylaw document



[This Photo](#) by Unknown Author is licensed under [CC BY-NC](#)





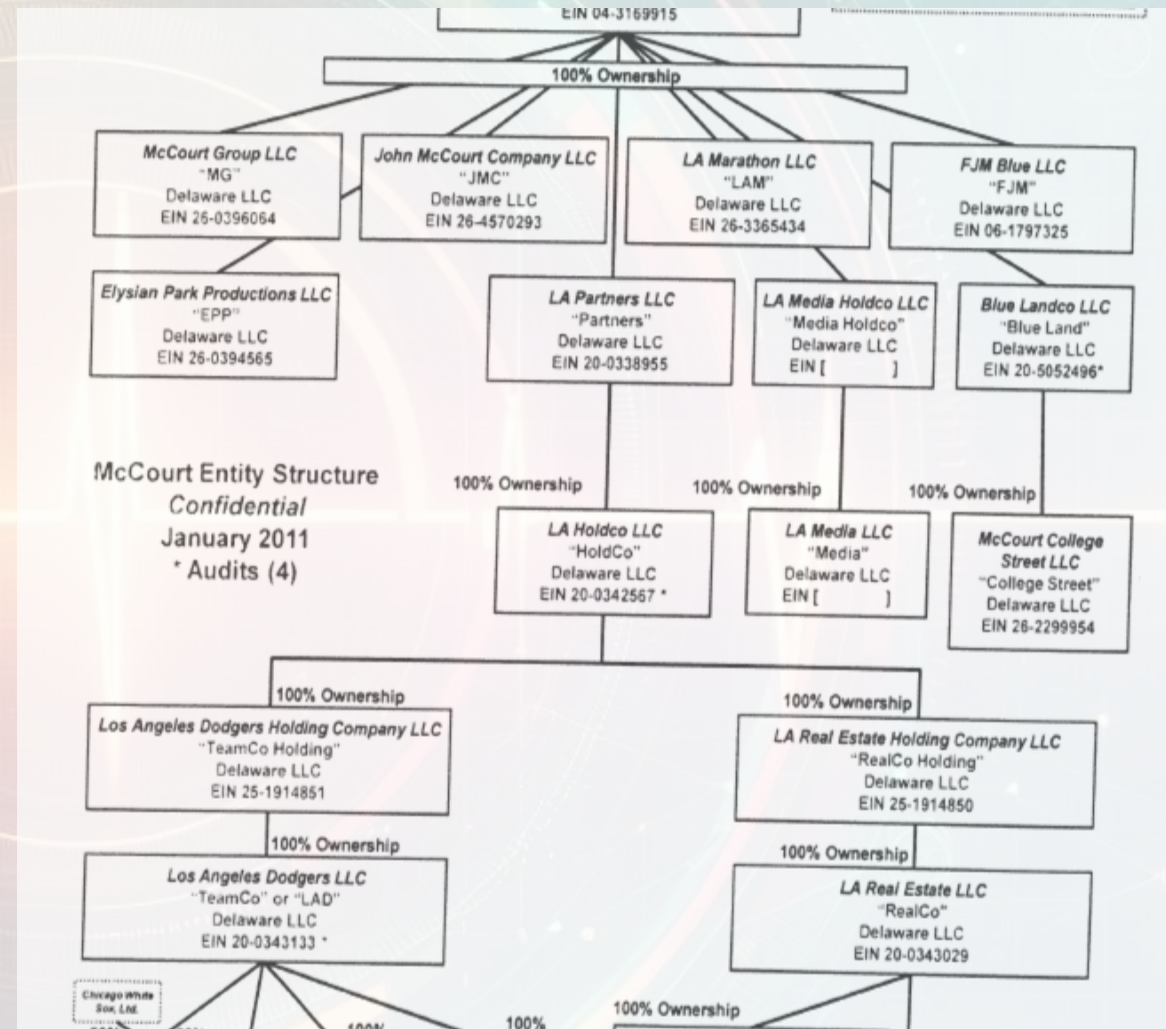
# Min/Max Evaluation





# County-wide assessment

- Obligation of the local EMS and Trauma Care Council
- Informs the strategic plan of the North Region EMS and Trauma Care Council
- North Region product informs the priorities of the Department of Health



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

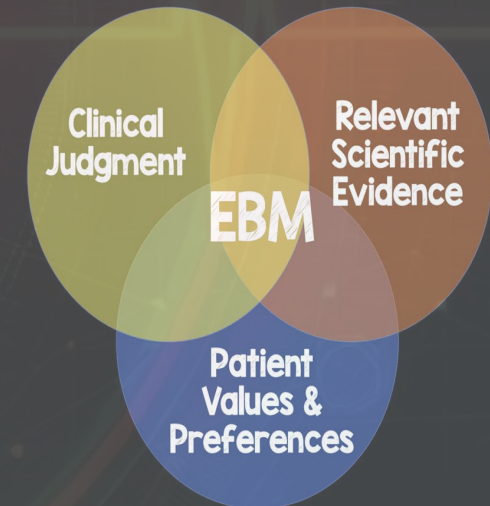




# Using Standards in Rule to determine resource allocation

- The local EMS and Trauma Care Council provides a detailed evidenced based rationale for how we meet the needs of our community
  - Rule will inform response standards for urban, suburban, and rural EMS response
- Using standards in Rule to determine how best to address our community need
  - Identify areas where EMS services are most efficient
  - Determine level of service required based upon population density need
    - Basic (EMT-B)
    - Intermediate (AEMT)
    - Advanced (EMT-P)

## Evidence Based Medicine



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)



# Snohomish County EMS & Agency Operations

- We understand and appreciate our boundaries regarding daily operations
  - SCEMS is not involved in local agency operations
- Community needs assessment
  - Our county is diverse
  - Our agencies are equally diverse
  - Our goal as SCEMS is to be a trusted partner
    - We desire your trust
    - We want to help you develop systems that best support your local experience
    - We want to make sure that our providers have the resources they need to care for their community
    - We want to be an invested partner to your community





# Ambulance Patient Offload Time



# Ambulance Patient Offload Time Work-Group

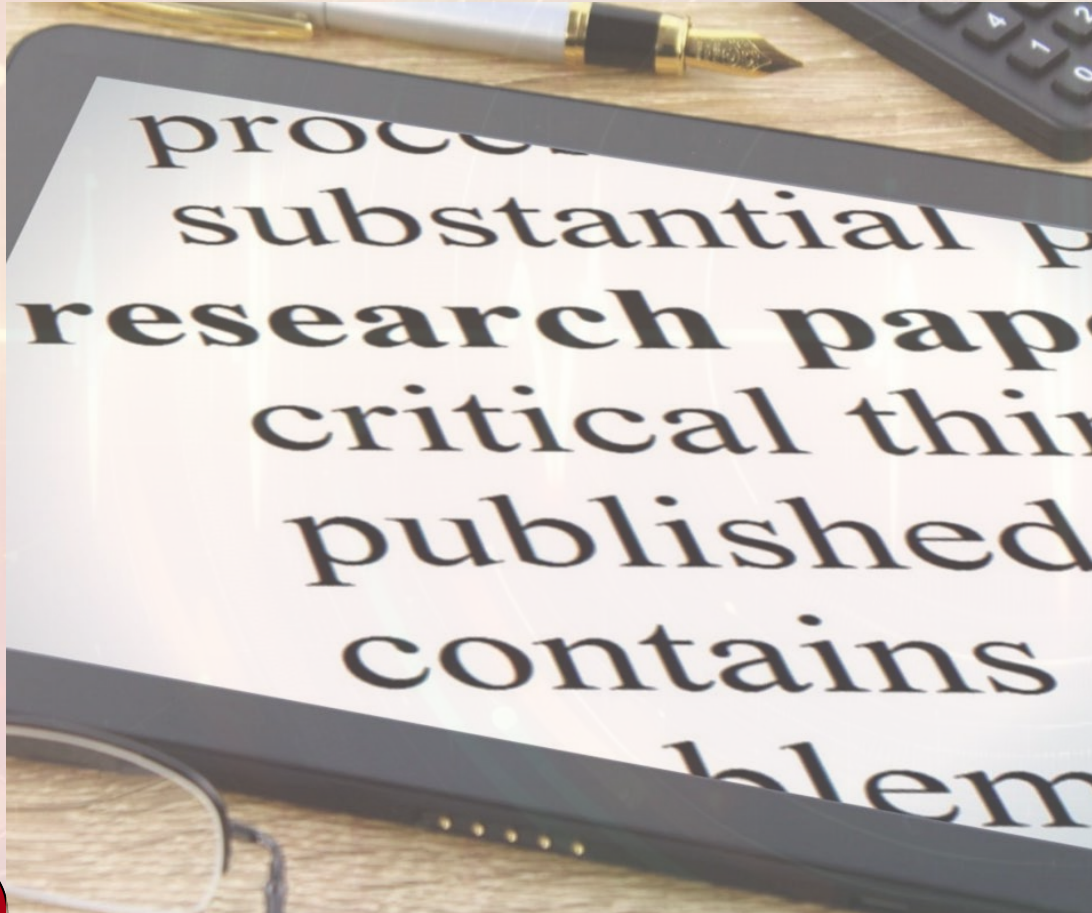


- Ambulance Patient Offload Time is not solely an EMS Issue
- To find success we must engage stakeholders across the patient care continuum





# Use research to determine best practices for managing APOT



Use evidence-based practices to manage this issue

Evaluate current research to inform best practices to manage the issue

This Photo by Unknown Author is licensed under [CC BY-SA](#)





# Parking Lot/Unsupported Work





# Ongoing projects that need direction and support

- AED medical direction and education county-wide
  - <https://kingcounty.gov/en/dept/dph/health-safety/health-centers-programs-services/emergency-medical-services/community-programs/automated-external-defibrillator>
- Ongoing support of Pulse Point
- Mobile Opiate Use Disorder (MOUD) pilots
- County-wide blood program
- Reversions
- Standardization of support systems for ALS programs
- And more...



This Photo by Unknown Author is licensed under [CC BY-ND](https://creativecommons.org/licenses/by-nd/4.0/)





# Threats to EMS in Snohomish County

- Infrastructure
- Turnover
- Analytics
- Personnel
- Challenges in adapting to change and integration
- Fragmentation



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)





# Conclusion



Snohomish County EMS is driven by a deep sense of purpose and commitment to advocate for the well-being and health of our community.

We are grateful for the opportunity to partner with you contribute to the greater good and make an impact in the big picture.



# Snohomish County EMS

## JTF Recommendations: Projected Systemic Improvements

The members of the joint task force wish to thank the many stakeholders responsible for management of emergency medical services in Snohomish County. Without your support, and vision, the significant effort invested in developing our recommendations would not have been possible.

Much discussion has occurred about measurable benefits which are projected to result from adoption and implementation of the JTF recommendations. This document is meant to serve as a synopsis of those expected benefits.

### **Quantifying the Negative: Areas of known prior weakness.**

- Lack of clearly communicated staff expectations rooted in human resource policy.
- Staff accountability through oversight, direct supervision, and periodic performance evaluation.
- Staff capacity to comply with statewide regulation of EMS systems.
- Staff compensation not commensurate with needed qualifications, skills and expected results.
- Lack of agency accessibility to current information, documents, communications, and staff.
- Lack of IT systems, support, policy, redundancy and accountability.
- Inconsistent and unevenly applied countywide Quality Management.
- Lack of countywide content for ongoing training and education of providers.
- Protocol development every four years, allowing for lapses in currency and accuracy.

### **Improvement: Governance**

- A governance board comprised of agency executive leadership tasked with fiscal oversight, policy adoption and executive director employment contract management.
- An operations board of agency subject matter experts supported by full-time staff responsible for steering EMS delivery through research, trials, data, and emerging trends.

### **Improvement Funding**

- Agency funding model is designed to match EMS levy models recognizing agency levy limitations.
- Funding based on agency A/V.
- Year 1 funding is 6/10<sup>th</sup> of one cent per \$1,000 A/V
- Year 2 funding us 3/4<sup>th</sup> of one cent per \$1,000 A/V
- Subsequent budget years restricted to +/- 3% change in total annual budget.
- Reassessment of A/V with lift to 3/4<sup>th</sup> of one cent available at supermajority board vote.

### **Improvement: Protocol Development and Maintenance**

- Continuous protocol development and annual updates, with administrative support from full-time staff throughout the development, approval and publication workflow.
- Protocol maintenance in an information system tracking published protocols, drafts, and archived versions.



- Instant agency and provider access to protocols via a searchable portal.

#### **Improvement: Business Management**

- An executive director fully qualified and compensated to oversee a countywide EMS oversight system.
- Clearly understood reporting relationships with annual performance evaluations, and support from human resources professionals.

#### **Improvement: Quality Management**

- A robust countywide quality management plan that integrates with agency QM plans.
- Information systems and staff supporting both retrospective and prospective views of service delivery across the county.
- The ability to identify systemic and/or local opportunities for improvement and develop education and training to support improvement.

#### **Improvement: Certification Management**

- Leveraged information systems for initial and ongoing protocol testing.
- Increased throughput rate for daily testing of providers (nearly limitless rate.)
- Staff supported workflow for MPD approvals and delivery to state authority.

#### **Improvement: Ongoing Education**

- Countywide training content development, deliverable across all LMS platforms.
- Consistent training across all agency boundaries.
- Driven by available QM data.
- Supported by full time education professionals.

#### **Improvement: Opportunity Management**

- Opportunity to further engage and organize delegate physicians in countywide EMS systems.
- Responsive enough to seize new opportunities for Snohomish County quickly.
- Foundationally strong enough to support the needs of the community for the foreseeable future.
- Flexible enough to adapt to changes across our communities when they occur.