After Action Report
Skilled Nursing Facilities
Communication Exercise
CUP-24-31T

Overview

Description:	Skilled Nursing Facilities (SNF) Communications Exercise
Event Type:	Cupertino ARES Exercise
Event Name	SNF CommEx
Activation No:	CUP-25-31T
Managing Entity:	Cupertino ARES
Event Date:	17 May 2025
Report Date:	12 June 2025
Report Revision:	1.2, **FINAL**
Submitted by:	Jim Oberhofer

Requirements for Reporting[1]

Completing an After-Action Report is part of the required California SEMS reporting process. The Emergency Services Act, Section 8607 (f) mandates that the Office of Emergency Management (OEM) in cooperation with involved state and local agencies complete an After-Action Report within 120 days after each declared disaster. Section 2450 (a) of the SEMS Regulations states that, "Any city, city and county, or county declaring a local emergency for which the governor proclaims a state of emergency, and any state agency responding to that emergency shall complete and transmit an after-action report to OEM within ninety (90) days of the close of the incident period as specified in the California Code of Regulations, Title 19, s2900(q)."   Additionally, "Section 2450 (b) The after-action report shall, at a minimum, be a review of response actions taken, application of SEMS, suggested modifications to SEMS, necessary modifications to plans and procedures, identified training needs, and recovery activities to date."

Terms

AAR[2]: After Action Report - a document intended to capture observations of an exercise and make recommendations for post-exercise improvements. The final AAR and Improvement Plan (IP) are printed and distributed jointly as a single AAR/IP following an exercise.

AAR/IP: Improvement Plan - identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion.

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[1] http://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/after-action-corrective-action-reporting; http://temp.caloes.ca.gov/PlanningPreparednessSite/Documents/01%202450.pdf
[2] https://training.fema.gov/programs/emischool/el361toolkit/glossary.htm

AHF	Allied Health Facility: a term used by SCC PHD to describe the Skilled Nursing Facilities (SNFs) with whom they coordinate.
CAP (FEMA):	Corrective Action Plan; FEMA; HSEEP[3] - actions identified during activations or exercises that are tracked to completion, ensuring that exercises yield tangible preparedness improvements.
CARES:	Cupertino Amateur Radio Emergency Service - a volunteer organization of FCC-licensed amateur radio operators who will respond to requests from the city during times of emergencies. Their focus is on understanding risks facing the city and putting plans, communications processes, and tools in place to respond to these risks.
CCC:	Cupertino Citizen Corps - the City's umbrella organization for CARES, CERT, and MRC.
Comm 469, C469:	City of Cupertino Public Safety Communications Vehicle #469.
DOC:	Department Operations Center - manages the overall field CCC deployment; aggregates data to be passed to the EOC. Advises EOC Staff on CCC capabilities, readiness, and activities.
H&W:	Health & Welfare - used within the context of a Health & Welfare Check. Usually check of field teams to ensure they are OK.
NCO/NCS:	Net Control Operator / Net Control Station - the control function that ensures the efficient passing of messages between stations on the frequency.
OEM:	Office of Emergency Management
PHD	Santa Clara County Public Health Department: Ensures ongoing communication, planning, training and education to SNFs for emergency preparedness.
SNF	Skilled Nursing Facility; provides inpatient rehabilitation and medical treatment for individuals recovering from illness, injury, or surgery

i. Background

Introduction

The purpose of an After-Action Report (AAR) is to analyze the management and response to an incident, event, or exercise by identifying our operational strengths to be maintained and promoted, as well as the areas for improvement.

The focus of this AAR is on the Cupertino Amateur Radio Emergency Service (CARES) exercise that was designed to test the Cupertino ARES tools and procedures at real or simulated SNFs and transmit the necessary data required by County PHD and county hospitals in response to a simulated surge. This report is submitted to Cupertino OEM and SCCo RACES as a record of our findings, planned follow-up actions, and recommendations to the city.

Summary

Santa Clara County Public Health Department (SCC PHD) has protocols to manage hospital capacity during emergency situations, often referred to as "surges."

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[3] https://www.fema.gov/emergency-managers/national-preparedness/exercises/hseep

The County provides guidance to Skilled Nursing Facilities (SNFs), to ensure they can effectively help during surges. The intent is to allow County Hospitals to move less-critical hospital patients to available beds that may exist at SNFs. This is where the SCCo RACES Allied Health Facility Status Form comes in.

This exercise was designed to test updates to tools and procedures for deploying CARES members to perform message passing from SNF sites. Updates included a focus on informal voice message passing, handling county PHD forms originated from SNF staff, and dual destination of specific packet messages.

The purpose of this exercise was for Cupertino ARES field responders to deploy to real or simulated SNFs in Cupertino. They transmitted the necessary data required by the County PHD and county hospitals in response to a simulated patient surge.

CARES members were activated and responded to Cupertino EOC for briefing and assignment paperwork. From there, they proceeded to their respective assignments.

Key Findings

Following the exercise, CARES performed an after-action review of our existing operating procedures and new aspects under test. The lessons learned from this review will drive specific Corrective Action Plan activities within key areas of the CARES response. Three specific findings from this exercise are:

1. *Plausible scenario*. This is another scenario where CARES members are likely to respond, in this case, for Day 2 tasks. SNFs are critical to County PHD in support of the hospital surge process. Coupled with the potential for a total regional communications failure, this makes this scenario plausible.

2. *SNF relationships*. Where CARES members are in residence at retirement communities with SNFs, the linkage with SNF staff has the potential to build solid relationships and coordination for assisting and passing PHD messages. With 4 SNFs in Cupertino, we spanned the range from good to non-existent engagement. It is likely that CARES could have solid relationships with 3 of the 4 SNFs due to members in residents at these facilities.

3. **Procedural Improvements.** As with all our exercises, actions were identified that will help improve our overall response concerning training, procedures, and equipment. This will be the focus for CARES for the rest of this year.

ii. Type / Location

Event Type: City of Cupertino, Cupertino ARES Training Activation
Event Identifier: CUP-25-31T
Event Name: SNF Communications Exercise
Location: City of Cupertino,
                              Both real and simulated SNF sites

iii. Description of the Event / Drill / Exercise

Over the course of the exercise, the following objectives were tested:

1. Manage the emergency net per CARES standard procedures.
2. Exchange voice messages between SNFs and Cupertino EOC.
3. Exchange packet messages between SNFs and County EOC and Cupertino EOC.
4. The CARES Demob Process is performed for all responders.

Event resources came from the following organizations:

1. **_Cupertino ARES/RACES._** CARES staffed both actual and simulated SNF field sites and Comm 469. Sixteen (16) CARES members participated during the 4-hour exercise.
2. **_SCCo RACES._** The County held a quarterly county-wide exercise at the same time. CARES participated in this exercise by exchanging packet messages with County EOC.

Performance to Objectives

Objective #1 - _Manage the emergency net per standard procedures._
The CARES Net Control Operator (NCO) was recognized for maintaining an organized and effective net and handling a relatively high volume of voice message traffic. Field resource tracking was executed well, and responders mostly kept the NCS aware of their transit and operational status.

Two rounds of Health & Welfare (H&R) checks were conducted, but there were a few instances where these checks went unanswered, highlighting the need for better monitoring among some field responders.

Additionally, the absence of a dedicated Resource Net for in-transit responders occasionally caused delays in tracking, particularly when Net Control was actively engaged in message passing. While CARES had previously chosen to consolidate resource tracking and message passing into a single net (anticipating lower initial participation) this approach may be better suited for Day 1 activities only and should be re-evaluated for extended operations on Day 2 and beyond.

Recommendations:
1. Reassess the current practice of using a single Emergency Net for both responder tracking and message handling, particularly as a strategy to reduce net congestion during Day 2 operations.

2. If a separate Resource Net is adopted, then adjust C469 staffing to include an additional resource as a dedicated Resource NCO and for other C469 activities. Consider an approach where the initial resource net starts from an operator at home.

3. Reinforce expectations with field responders regarding continuous radio monitoring and timely responses to Net Control.

4. Develop a summarized version of the F3 class to be delivered during a CARES general meeting.

Objective #2 - _Exchange voice messages between SNFs and Cupertino EOC._
Voice messaging was largely successful with 30 messages passed during the exercise Realistic reply traffic from the (simulated) Cupertino EOC was included. Field teams were engaged and appreciated the opportunity to practice voice-based message handling in a realistic setting.

However, longer messages introduced delays as the NCO worked through message queues, increasing the overall message turnaround time. Operators using handheld radios with rubber ducky antennas also reported reception issues, resulting in marginal copy into the repeater. In addition, some procedural inconsistencies were noted during message passing — such as formatting and phrasing — which could be addressed through more regular refresher training.

Recommendations:
1. Encourage the use of external antennas (e.g.: roll-up j-poles, mag mounts, counterpoise antenna pigtails) to improve signal coverage for voice operators.

2. Organize a group purchase of roll-up j-poles or develop counterpoise antenna pigtails followed by in-field hands-on training to promote their use and ensure operators are comfortable deploying with them.

3. Hold pre- and post-event OTA drills to refine our skills with common/specific procedures. Incorporate them also into our weekly nets to help increase familiarity.

4. Reinforce standard voice message procedures in refresher training, including techniques such as 5-word blocks, pauses, and the handling of "End of Message".

5. Evaluate the need for a scribe to assist NCO with message taking. This may be a personal preference based on the experience of the NCO.

6. Develop and share a recorded comparison of a radio with rubber duck, radio with counterpoise, and radio with j-pole antenna to help assess signal quality.

Objective #3 - *Exchange packet messages between SNFs and County EOC and Cupertino EOC.*
Packet operations successfully delivered 36 PackItForms messages during the exercise. At one SNF location, SNF staff collaboration with on-site CARES members enhanced the realism of the scenario. CARES Packet operators who had completed SCCo RACES packet training generally performed well, and most message forms were transmitted without issue.

Some packet operators faced technical and logistical difficulties, including equipment failures, configuration issues, and message delays attributed to slow BBS response or network congestion. Some participants also had difficulties with message formatting and process flow due to limited familiarity with PackItForms. Additionally, there was some confusion with packet operator field processes and whether they were required to be on a SCCo RACES voice net at the same time. These issues underscored the need for clarifying expectations.

Recommendations:
1. Encourage all CARES packet operators to take the SCCo RACES Packet Type III A & B Classes.

2. Develop a self-paced training resource focused on SCCo RACES PackItForms usage and procedures.

3. Encourage all CARES packet operators to participate in the Weekly and Monthly Packet Practice exercises.

4. Clarify the expectations regarding the simultaneous monitoring of county voice nets during packet operations.

5. Promote the use of external antennas (e.g., roll-up j-poles) for packet stations to avoid hidden-node problems and improve signal reliability.

Objective #4 - *The CARES Demob Process is performed for all responders.*
Field responders executed effective setup and tear-down of their stations and demonstrated initiative in addressing real-world logistical challenges, such as parking restrictions and limited facility access. These actions demonstrated good problem-solving skills under realistic conditions and contributed to the overall success of the deployment.

All required forms were submitted with appropriate signatures. However, some forms had incomplete headers, indicating a need to reinforce attention to detail and need for standard documentation procedures.

Recommendations:

1. Incorporate a brief forms refresher into future training AND exercise briefings to emphasize proper form completion including headers and signatures.

iv. Chronological Summary of Event / Drill / Exercise

The following timeline is a compilation from ICS214s, and other documentation submitted as part of this event.

Time	Description, Notes, Comments
Saturday 17 May	6:55 Arrived Service Center
	7:18 C469 Arrived at City Hall
	8:14 C469 full setup complete
	8:30 Briefing
	9:15 All CARES members deployed
	9:22 Started CARES Net
	9:36 Arrived, Golden
	9:42 Arrived, Bedside Manor
	9:43 Arrived, Sunny View
	9:46 First message
	9:46 Arrived, Harmony
	9:49 Arrived, Marianist Center
	9:55 H&W Check
	10:05 H&W Check
	10:12 Arrived, Forum
	11:16 End of Event announced
	11:22 Opened Demob
	11:50 Closed Demob
	12:02 Closed CARES Net
	12:40 C469 Depart City Hall for SS
	13:00 C469 secured at SS

v. Response at SEMS Levels (as appropriate):

The Field Response was made up of CARES members only. As a Day 2 Response, staging was set up at the Cupertino City Hall for the safety briefing and assignments.

The following items were noted:

- Six field team assignments were made.

- The Two-Man Rule (buddy system) was in effect for all field responders operating in public spaces.

- Thirty-six county packet messages and 30 CARES voice messages were passed. Voice messages were passed as informal messages.

- A single net was run to cover both the Resource Net and Message Net functions. This essentially was the CARES Emergency Net.

- SCCo RACES held its own county-wide exercise from 10:00 to 12:00 on the same day. Cupertino contributed to their packet message volume.

- No other organizations were involved.

vi. Interacting Systems, Agencies, and Programs

No notifications were made to County Fire or County Sheriff about this exercise. No other interaction occurred.

vii. Improvements, Conclusions, Corrective Actions:

The following is a 'grouped' summary of the Corrective Actions as identified above:

Training

1. Hold pre- and post-event OTA drills to refine our skills with common/specific procedures. Incorporate them also into our weekly nets to help increase familiarity.

2. Reinforce standard voice message procedures in Drill Prep / refresher training, including techniques such as 5-word blocks, pauses, and the use of "End of Message.".

3. Encourage all CARES packet operators to take the SCCO RACES Packet Type III A & B Classes.

4. Encourage all CARES packet operators to participate in the Weekly and Monthly Packet Practice exercises.

5. Develop a self-paced training resource focused on SCCo RACES PackItForms usage and procedures.

6. Incorporate a brief paper forms refresher into future training AND exercise briefings to emphasize proper completion of all required fields, including headers and signatures.

7. Develop a summarized version of the F3 class to be delivered during a CARES general meeting.

Procedures

8. Reassess the current practice of using a single Emergency Net for both responder tracking and message handling, particularly as a strategy to reduce net congestion during Day 2 operations.

9. If a separate Resource Net is adopted, then adjust C469 staffing to include an additional resource as a dedicated Resource NCO and for other C469 activities. Consider an approach where the initial resource net starts from an operator at home.

10. Reinforce expectations with field responders regarding continuous radio monitoring and timely responses to Net Control.

11. Evaluate the need for a scribe to assist NCO with message taking. This may be a personal preference based on the experience of the NCO.

12. Clarify the expectations regarding the simultaneous monitoring of county voice nets during packet operations.

Equipment

13. Develop a recorded comparison for demo purposes of radio with rubber duck, radio with counterpoise, and radio with j-pole antenna.

14. Encourage the use of external antennas (e.g.: roll-up j-poles, mag mounts) to improve signal coverage for voice operators.

15. Promote the use of external antennas (e.g., roll-up j-poles) for packet stations to avoid hidden-node problems and improve signal reliability.

16. Organize a group purchase of roll-up j-poles, followed by in-field hands-on training to promote their use and ensure operators are comfortable deploying with them.

Conclusion

The Skilled Nursing Facility Communications Exercise highlighted the interest, technical capabilities, and willingness of CARES volunteer responders to deploy. From managing the emergency net to passing realistic voice and packet messages, CARES members showed a strong commitment to community service. The ability of responders to set up in the field, maintain communications under evolving conditions, and interact with the community reflected both preparation, practical problem-solving, and professionalism. For many, this was a valuable opportunity to reinforce existing skills and build confidence in real-world operational settings.

At the same time, the exercise highlighted several areas where we can improve. Procedural inconsistencies in message passing, unfamiliarity with packet tools, and equipment limitations all point to opportunities for targeted training and improved readiness.

These are all indicators of a learning organization where we continue to evolve our readiness with experience, with the outcome of being a stronger organization that can serve the community when called upon.