

# Fire Recovery in Sonoma County

*Selected results from a Mortality Analysis and Rapid Needs Assessment*

**Sonoma Complex Fires  
October-November, 2017**

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# Objectives

## Selected findings of two projects:

### 1. Mortality analysis

- Geography
- Demographics

### 2. Post-fire Rapid Needs Assessment

- Physical health findings
- Mental/emotional health findings
- Barriers to communication

# 2017 Sonoma Complex Fire Mortality Analysis

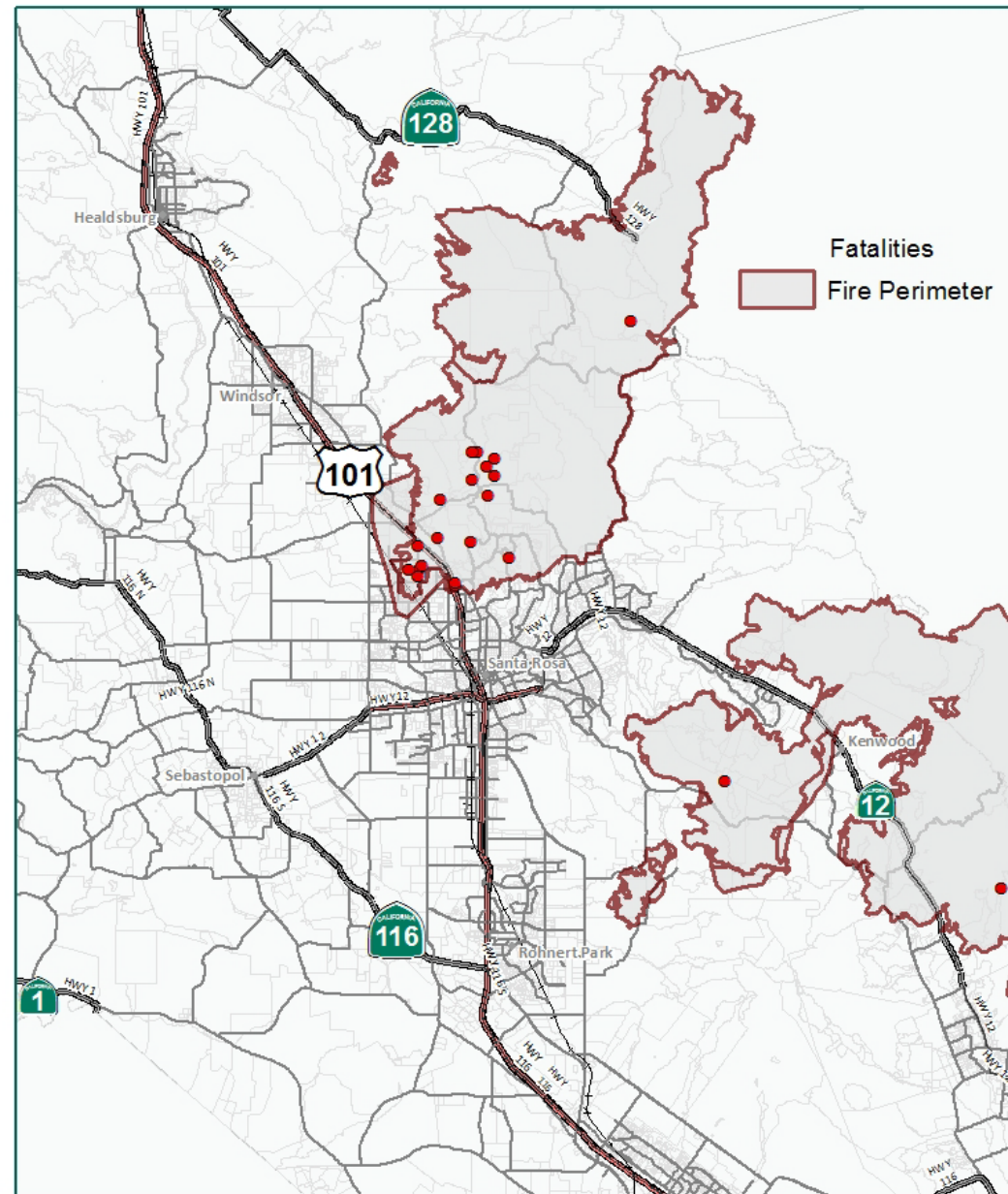


# Direct Fatalities

- 24 total fatalities
  - 22 Tubbs, 2 Nuns
  - DOD ranged from 10/9/17 – 11/26/17
- Majority of fatalities likely occurred during the initial firestorm on October 9, 2017.
  - One of the Nuns fatalities likely occurred on 10/12/2017.
  - One person was injured in the Tubbs fire on 10/9 but later succumbed to injuries in November.

# Geography

- Fatalities occurred throughout the fire zone.
- The proximity to major roads can be misleading.
  - There was not a clear advancing fire front
  - Multiple fires made it hard to predict path

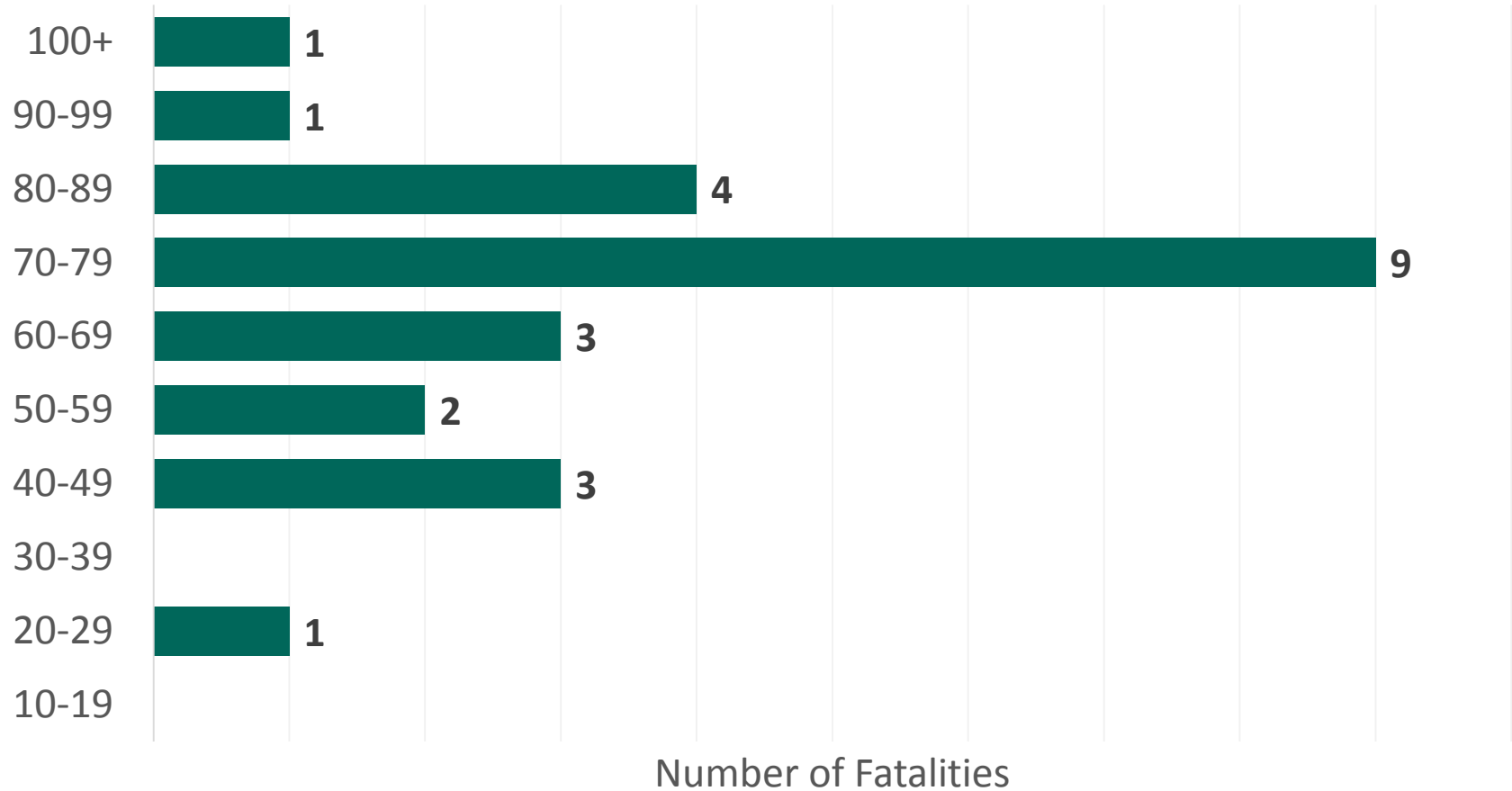


Location of Fatalities (N=24), Tubbs and Nuns Fires  
Sonoma County, California  
October-November, 2017

Miles  
Map Created by K Tiura and L Gardner  
County of Sonoma Dept of Health Service  
March, 2018

# Sonoma Complex Fire - Fatalities by Age Group

## October-November, 2017



# SCF Fatalities - Circumstances

- The majority of fatalities occurred within the physical perimeter of the residence
  - 2 were mobile homes
- Locations outside the home were varied
- One person was overcome while driving

	Tubbs/Nuns Fire	
	5	21
Outside the Home	4	17
Roadway	1	4

# Other Factors - Disability

## Caveats:

- 1. The presence/absence of disability is not routinely recorded on death certificates.*
  - 2. Information on possible disability was collected via family statements as reported by news outlets.*
- Two fatalities were reported to have physical disabilities.
  - One additional fatality was reported to have hearing loss.



# Next Steps – Preparedness

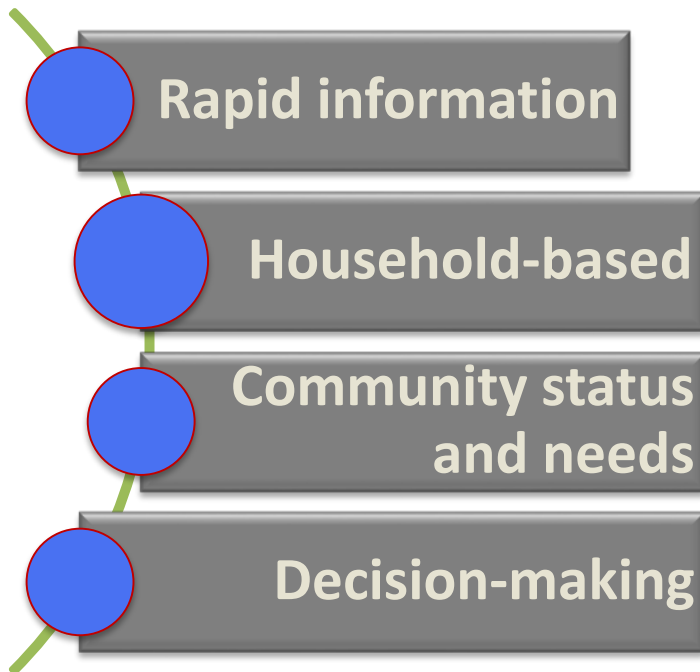
- Reassess preparedness messages to include evacuation and wildfire readiness.
- Work with advocacy groups to promote preparedness among highly vulnerable populations.
- Continue work on notification system and local alerting.

# 2018 Sonoma County Rapid Needs Assessment



# Rapid Needs Assessment Methods

## Community Assessment for Public Health Emergency Response



### Objectives:

1. Assess health and health care needs
2. Assess mental, emotional and behavioral health
3. Housing insecurity/stability
4. Community resilience

# Summary Results – Physical Health

**The rapid needs assessment successfully captured a representative sample of Sonoma County households.**

## PHYSICAL HEALTH AND MEDICAL CARE

- Prior to the fires, the most common chronic conditions of those assessed were:
  - Hypertension (1 out of 3 households)
  - Asthma (1 out of 4 households)
  - Depression or other mental health condition (1 out of 5 HH)
- Household residents with **asthma and COPD/emphysema report worsening conditions** following the October 2017 fires.
  - Depression and other MH conditions to a more moderate degree

# Summary Results – Mental Health

## MENTAL/EMOTIONAL HEALTH

- In the year prior to the fires:
  - 3 in 10 households reported anxiety or fear
  - 1 in 6 HH reported depression or hopelessness
- The prevalence of both these conditions **nearly doubled** in the year following the October 2017 fires.
- 4 out of 10 households reported exposure to at least 1 traumatic event, most often a direct threat to life (self /family) or separation from family member with status unknown → *increased risk for MH condition and lost wages or employment*
- Among households whose residents sought treatment, the most common setting was a primary care or clinic. Of those that didn't seek help, main reasons were it “wasn't serious enough” or “wasn't needed.”

# Summary Results – Communication

## COMMUNICATION

- At least 12% of households prefer emergency communication in languages other than English
- Barriers to effective communication include auditory, visual and physical impairments in addition to language and literacy difficulties.
- Trusted sources of emergency information were most often neighbors/word of mouth, radio and the internet.
- The public expects to hear all types of information from the Health Department in an emergency.

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**sonoma county**  
DEPARTMENT OF HEALTH SERVICES