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
Sonoma Complex Fire - Fatalities by Age Group
October-November, 2017

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>100+</td>
<td>1</td>
</tr>
<tr>
<td>90-99</td>
<td>1</td>
</tr>
<tr>
<td>80-89</td>
<td>4</td>
</tr>
<tr>
<td>70-79</td>
<td>9</td>
</tr>
<tr>
<td>60-69</td>
<td>3</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
</tr>
<tr>
<td>30-39</td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>1</td>
</tr>
<tr>
<td>10-19</td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>14</td>
<td>58</td>
</tr>
<tr>
<td>Driveway/Garage</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Outside the Home</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Roadway</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
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

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

Community Assessment for Public Health Emergency Response

- Rapid information
- Household-based
- Community status and needs
- Decision-making
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
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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