Table 1. Socioeconomic Indicators by Sample Strata, Whittier Narrows.

| | Area | |
|---|---|---|
| | High-Impact | Los Angeles County |
| A. Education | | |
| % College degree or more* | 13.1 | 23.8 |
| % High school degree | 42.4 | 44.3 |
| # of years completed | 12.5 | 13.0 |
| % Trade or technical training | 32.5 | 33.5 |
| B. Employment | | |
| % Employed full-time | 59.2 | 55.5 |
| % Employed part-time | 7.3 | 12.8 |
| % of not employed ever employed | 86.7 | 82.8 |
| Mean SEI | 33.6 | 37.3 |
| C. Income | | |
| Median household income | $36,250 | $33,750 |
| % with Income >$40,000 | 38.8 | 38.4 |
| # contributing to income* | 2.0 | 1.7 |
| # ≥ 18 dependent on income* | 2.2 | 1.9 |
| # < 18 dependent on income | 0.9 | 0.7 |
| | 3.1 | 2.6 |
| Per capita income within household | $11,694 | $12,981 |
| % Female | 57.1 | 53.1 |
| Mean age | 44.9 | 43.7 |
| % Married* | 55.9 | 49.7 |
| Total N | 191 | 499 |

* $p < .05$
** $p < .001$

Table 2. Socioeconomic Indicators by Sample Strata, Loma Prieta.

| | Area | | |
|---|---|---|---|
| | 5-County | San Francisco/ Oakland | Santa Cruz |
| A. Education | | | |
| % College degree or more* | 60.6 | 50.6 | 31.1 |
| % High school degree | 41.5 | 32.5 | 45.9 |
| # of years completed | 14.3 | 14.5 | 14.2 |
| % Trade or technical training | 36.8 | 45.8 | 45.9 |
| B. Employment | | | |
| % Employed full-time | 56.1 | 60.2 | 52.5 |
| % Employed part-time | 12.0 | 9.6 | 18.9 |
| % of not employed ever employed | 89.5 | 92.3 | 100.0 |
| Mean SEI | 43.3 | 42.9 | 42.2 |
| C. Income | | | |
| Median household income | $37,500 | $27,500 | $37,500 |
| % with Income >$40,000 | 55.9 | 40.5 | 52.3 |
| # contributing to income* | 1.8 | 1.5 | 1.8 |
| # ≥ 18 dependent on income** | 1.9 | 1.5 | 1.9 |
| # < 18 dependent on income** | 0.6 | 0.2 | 0.5 |
| | 2.5 | 1.7 | 2.4 |
| Per capita income within household | $15,000 | $16,208 | $15,625 |
| % Female | 56.1 | 59.0 | 52.5 |
| Mean age | 45.7 | 46.8 | 45.6 |
| % Married* | 51.0 | 20.5 | 45.9 |
| Total N | 451 | 83 | 122 |

* $p < .05$
** $p < .001$

Table 3. Earthquake Experience and Impact by Sample Strata, Whittier Narrows.

| Earthquake Experience | Area | |
|---|---|---|
| | High-Impact | Los Angeles County |
| Mean Mercalli at home** | 7.3 | 6.2 |
| # of prior earthquakes** | 12.6 | 10.0 |
| % with damage** | 31.3 | 11.9 |
| $ estimate of damage** | $1,111 | $162 |
| % evacuated | 4.7 | 2.2 |
| # of hours evacuated* | 5.0 | 0.7 |
| % had others stay with them | 4.6 | 3.2 |
| % know families with substantial loss** | 41.5 | 16.8 |
| # of families known* | 3.7 | 2.2 |
| % know injured** | 6.3 | 4.2 |
| Total N | 191 | 499 |

* $p < .05$
** $p < .001$

Table 4. Earthquake Experience and Impact by Sample Strata, Loma Prieta.

| Earthquake Experience | Area | | |
|---|---|---|---|
| | 5-County | San Francisco/ Oakland | Santa Cruz |
| Mean Mercalli at home** | 6.7 | 8.3 | 8.2 |
| Mean Mercalli where R. was[1]** | 6.7 | 7.3 | 7.9 |
| # of prior earthquakes** | 20.4 | 14.6 | 27.9 |
| % with damage** | 32.2 | 33.7 | 66.4 |
| $ estimate of damage** | $717 | $2,292 | $12,768 |
| % evacuated** | 17.5 | 16.9 | 42.6 |
| # of hours evacuated* | 7.3 | 65.6 | 73.7 |
| % had others stay with them** | 8.6 | 14.5 | 20.5 |
| % know families with substantial loss** | 41.9 | 34.9 | 74.6 |
| % know injured** | 10.0 | 9.6 | 22.1 |
| # injured | 0.2 | 0.2 | 0.6 |
| Total N | 451 | 83 | 122 |

* $p < .05$
** $p < .001$

[1] Excludes 23 residents who were outside the 5-county area at the time of the earthquake.

Table 5. Identity of Person Reported Injured by Sample Strata Where the Respondent Lives, Whittier Narrows.

| Identity of Injured Person | Area: High-Impact (N = 191) % | High-Impact (N = 191) N | Area: Los Angeles County (N = 499) % | Los Angeles County (N = 499) N |
|---|---|---|---|---|
| R reports no injuries | 94.2 | 180 | 96.2 | 480 |
| R reports injury to: | | | | |
| Self | 2.6 | 5 | 0.6 | 3 |
| Other HH member | 0 | 0 | 0.2 | 1 |
| Relative | 1.0 | 2 | 0.8 | 4 |
| Neighbor | 2.6 | 2 | 0.4 | 2 |
| Co-worker | 0.5 | 1 | 1.0 | 5 |
| Friend | 1.0 | 2 | 1.2 | 6 |
| Total injuries described: | | 12 | | 21 |
| by (...) respondents: | | 11 | | 19 |
| Rate of injury to R per 1,000 | 26 | | 6 | |

$p = .03$

Table 6. How the Injury Occurred by Sample Strata Where Respondent Lives, Whittier Narrows.

| How Injury Occurred | Area | |
|---|---|---|
| | High-Impact % | Los Angeles County % |
| Objects fell | 50.0 | 14.3 |
| Parts of building fell | 25.0 | 9.5 |
| Building collapsed | 0 | 4.8 |
| Power outage | 0 | 9.5 |
| Behavior of person | 8.0 | 23.8 |
| Fell during earthquake | 16.7 | 9.5 |
| Mental | 0 | 14.3 |
| Don't know | 0 | 9.5 |
| No information | 0 | 4.8 |
| Total N | 12 | 21 |

Table 7. Type of Injury Reported by Sample Strata Where Respondent Lives, Whittier Narrows.

| Type of Injury | Area | |
|---|---|---|
| | High-Impact % | Los Angeles County % |
| Death | 0 | 4.8 |
| Broken bones | 0 | 9.5 |
| Cuts, bruises | 50.0 | 52.4 |
| Concussion | 8.3 | 0 |
| Panic at time | 0 | 4.8 |
| Post-quake emotional | 0 | 4.8 |
| Heart attack | 0 | 9.5 |
| All else | 41.7 | 4.8 |
| Total N | 12 | 21 |

Table 8. Identity of Person Reported Injured by Sample Strata Where the Respondent Lives, Loma Prieta.

| Identity of Injured Person | Area | | | | | |
|---|---|---|---|---|---|---|
| | 5-County (N = 451) | | San Francisco/ Oakland (N = 83) | | Santa Cruz (N = 122) | |
| | % | N | % | N | % | N |
| R reports no injuries | 90.0 | 406 | 90.0 | 75 | 77.9 | 95 |
| R reports injury to: | | | | | | |
| Self | 4.7 | 3 | 0 | 0 | 9.3 | 4 |
| Other HH member | 3.1 | 2 | 0 | 0 | 14.0 | 6 |
| Relative | 4.7 | 3 | 14.3 | 2 | 9.3 | 4 |
| Neighbor | 1.6 | 1 | 0 | 0 | 9.3 | 4 |
| Co-worker | 34.4 | 22 | 14.3 | 2 | 11.6 | 5 |
| Friend | 43.8 | 28 | 71.4 | 10 | 34.9 | 15 |
| Other | 7.8 | 5 | 0 | 0 | 11.6 | 5 |
| Total injuries described: | | 64 | | 14 | | 43 |
| by (...) respondents: | | 45 | | 8 | | 27 |
| Rate of injury to R per 1,000 | 6.7 | | 0 | | 32.8 | |

$p = .016$

Table 9. How the Injury Occurred by Sample Strata Where the Respondent Lives, Loma Prieta.

| How Injury Occurred | Area: 5-County (N = 451) % | N | San Francisco/ Oakland (N = 83) % | N | Santa Cruz (N = 122) % | N |
|---|---|---|---|---|---|---|
| R reports no injuries | 90.0 | 406 | 90.0 | 75 | 77.9 | 95 |
| Reason R gives for injury: | | | | | | |
| Objects fell | 9.4 | 6 | 7.1 | 1 | 7.0 | 3 |
| Parts of building fell | 12.5 | 8 | 7.1 | 1 | 14.0 | 6 |
| Glass/Windows/Doors | 4.7 | 3 | 0 | 0 | 14.0 | 6 |
| Building/Freeway collapsed | 14.1 | 9 | 28.6 | 4 | 7.0 | 3 |
| Earthquake caused fall, vehicle collision, trapped, etc. | 26.6 | 17 | 7.1 | 1 | 9.3 | 4 |
| Other aspects of quake experience | 3.1 | 2 | 50.0 | 7 | 2.3 | 1 |
| Person ran/jumped/ caught objects | 3.1 | 2 | 0 | 0 | 7.0 | 3 |
| Not reported | 26.6 | 17 | 0 | 0 | 39.5 | 17 |
| Total injuries described: | | 64 | | 14 | | 43 |
| by (...) respondents: | | 45 | | 8 | | 27 |

$p < .01$

Table 10. How a Reported Injury Occurred by Who Was Injured, Loma Prieta.

| How Injured | Person Reported Injured | | | |
|---|---|---|---|---|
| | Respondent % | Other HH Member or Relative % | Co-Worker % | Friend/ Other % |
| Objects fell | | 4.5 | 10.3 | 9.5 |
| Glass from windows, doors, mirrors, etc. | 14.3 | 13.6 | 3.4 | 6.3 |
| Parts of building fell | | 9.1 | 27.6 | 7.9 |
| Collapse of freeway/ building | | 4.5 | 17.2 | 15.9 |
| Behavior of individual | 14.3 | 4.5 | | 4.8 |
| Experience of being in earthquake | | 13.6 | | 11.1 |
| Earthquake caused fall, trapped, or accident | 42.9 | 13.6 | 17.2 | 17.5 |
| Not reported | 28.6 | 36.4 | 24.1 | 27.0 |
| Total Injuries Reported | 7 | 22 | 29 | 63 |

p = NS

Table 11. Nature of the Injury Reported by Sample Strata Where the Respondent Lives, Loma Prieta.

| Nature of Injury | Area | | | | | |
|---|---|---|---|---|---|---|
| | 5-County (N = 451) | | San Francisco/ Oakland (N = 83) | | Santa Cruz (N = 122) | |
| | % | N | % | N | % | N |
| R reports no injuries | 90.0 | 406 | 90.0 | 75 | 77.9 | 95 |
| Injury that R reports: | | | | | | |
| Death | 15.6 | 10 | 35.7 | 5 | 9.3 | 4 |
| Crushed | 1.6 | 1 | 0 | 0 | 9.3 | 4 |
| Paralysis | 0 | 0 | 0 | 0 | 2.3 | 1 |
| Amputation | 1.6 | 1 | 0 | 0 | 2.3 | 1 |
| Multiple severe | 1.6 | 1 | 0 | 0 | 0 | 0 |
| Internal | 0 | 0 | 0 | 0 | 4.7 | 2 |
| Concussion | 0 | 0 | 0 | 0 | 4.7 | 2 |
| Broken bones | 9.4 | 6 | 7.1 | 1 | 2.3 | 1 |
| Wrenched/Torn | 6.3 | 4 | 0 | 0 | 7.0 | 3 |
| Sprain | 0 | 0 | 7.1 | 1 | 2.3 | 1 |
| Minor head | 3.1 | 2 | 0 | 0 | 0 | 0 |
| Cuts/Bruises | 45.3 | 29 | 0 | 0 | 41.9 | 18 |
| Panic | 1.6 | 1 | 0 | 0 | 0 | 0 |
| Post-quake emotional | 1.6 | 1 | 50.0 | 7 | 7.0 | 3 |
| Not reported | 12.5 | 8 | 0 | 0 | 7.0 | 3 |
| Total injuries described: | | 64 | | 14 | | 43 |
| by (...) respondents: | | 45 | | 8 | | 27 |

p = NS

Table 12. Type of Injury Reported by Who Was Injured, Loma Prieta.

| Type of Injury | Person Reported Injured: Respondent % | Other HH Member or Relative % | Co-Worker % | Friend/ Other % |
|---|---|---|---|---|
| Emotional | | 13.6 | | 14.3 |
| Cuts, bruises, etc. | 71.4 | 40.9 | 55.2 | 33.3 |
| Wrenched/Concussions, etc. | 14.3 | 13.6 | | 7.9 |
| Broken bones | | 13.6 | 6.9 | 4.8 |
| Severe | | 9.1 | 17.2 | 6.3 |
| Death | | 9.1 | 13.8 | 20.6 |
| Not reported | 14.3 | | 6.9 | 12.7 |
| Total Injuries Reported | 7 | 22 | 29 | 63 |

p = NS

Table 13. Type of Injury Reported by How Injury Occurred, Loma Prieta

| Type of Injury | Objects Fell % | Glass % | Parts of Bldg % | Structure Collapsed % | Indiv.'s Behavior % | Quake Exper. % | Quake Caused Fall % | Not Rep. % |
|---|---|---|---|---|---|---|---|---|
| Emotional | | | | | | 100.0 | 0 | 5.9 |
| Cuts, bruises, etc. | 70.0 | 66.7 | 33.3 | 6.3 | 80.0 | 0 | 31.8 | 61.8 |
| Wrenched/Concussions, etc. | 10.0 | | | 6.3 | 20.0 | 0 | 18.2 | 5.9 |
| Broken bones | | | 6.7 | | | | 18.2 | 8.8 |
| Severe | | | 33.3 | 25.0 | | | 4.5 | 2.9 |
| Death | 10.0 | | 20.0 | 62.5 | | | 9.1 | 8.8 |
| Not reported | 10.0 | 33.3 | 6.7 | | | | 18.2 | 5.9 |
| Total Injuries Reported | 10 | 9 | 15 | 16 | 5 | 10 | 22 | 34 |

$p < .01$

Table 14. Level of Fear Expressed by Sample Strata, Whittier Narrows and Loma Prieta.

"Thinking back to your feelings and experiences during and immediately after the October 17, 1989 earthquake, which of the following best describes your overall feelings?"

| | Whittier | | Loma Prieta | | |
|---|---|---|---|---|---|
| | High-Impact % | L.A. County % | 5-County % | San Francisco/ Oakland % | Santa Cruz % |
| Very frightened & upset | 32.3 | 23.5 | 28.2 | 36.1 | 40.2 |
| Somewhat frightened & upset | 33.9 | 31.3 | 35.7 | 30.1 | 32.0 |
| Not very frightened & upset | 18.3 | 21.3 | 18.4 | 16.9 | 14.8 |
| Not at all frightened & upset | 12.9 | 19.6 | 14.0 | 10.8 | 5.7 |
| Enjoyed the experience | 2.7 | 4.3 | 3.8 | 6.0 | 7.4 |
| Total N | 191 | 499 | 451 | 83 | 122 |
| p = | .055 | | .055 | | |

Table 15. Mean Score on the 9-Item Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory by Sample Strata, Whittier Narrows and Loma Prieta.

| | Mean Score 9-Item BSI PTSD | N |
|---|---|---|
| Whittier Narrows | | |
| Los Angeles County | 0.27 | 499 |
| High-Impact Area | 0.25 | 191 |
| p = | N.S. | |
| Loma Prieta | | |
| 5-County | 0.29 | 451 |
| San Francisco/Oakland | 0.26 | 83 |
| Santa Cruz-Watsonville-Boulder Creek | 0.36 | 122 |
| p = | N.S. | |

Table 16. Relationship Between the 9-Item Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory and Level of Fear Reported Following the Earthquake, Whittier Narrows and Loma Prieta.

| Level of Fear | Mean PTSD Score | |
|---|---|---|
| | Whittier | Loma Prieta |
| Very Upset | 0.33 | 0.42 |
| Somewhat Upset | 0.29 | 0.27 |
| Not Very Upset | 0.30 | 0.23 |
| Not at All Upset | 0.15 | 0.14 |
| Enjoyed Earthquake | 0.13 | 0.26 |
| $p <$ | .05 | .05 |

Table 17. Relationships Between Demographic Characteristics and Scores on the 9-Item Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory, Whittier Narrows and Loma Prieta.

| | Whittier | | Loma Prieta | |
|---|---|---|---|---|
| | N | Mean PTSD | N | Mean PTSD |
| **A. One-Way Analysis of Variance** | | | | |
| Gender | | | | |
| Female | 359 | 0.30* | 366 | 0.34* |
| Male | 311 | 0.22 | 288 | 0.24 |
| Ethnicity | | | | |
| White | 366 | 0.25* | 468 | 0.29 |
| Black | 57 | 0.28 | 51 | 0.33 |
| Asian | 42 | 0.12 | 50 | 0.24 |
| Chicano | 147 | 0.26 | 39 | 0.34 |
| Other Hispanic | 49 | 0.39 | 38 | 0.34 |
| Marital Status | | | | |
| Never Married | 167 | 0.29* | 177 | 0.35* |
| Married | 354 | 0.19 | 323 | 0.25 |
| Formerly Married | 165 | 0.29 | 154 | 0.33 |
| Home Ownership | | | | |
| Own | 399 | 0.23* | 371 | 0.24* |
| Rent | 291 | 0.31 | 285 | 0.38 |
| **B. Pearson Correlations with:** | | | | |
| Age | | -0.11* | | -0.14* |
| # of Children in Household | | 0.05 | | -0.03 |
| Education | | -0.09* | | -0.08* |
| Income | | -0.11* | | -0.12* |
| Years in California | | -0.02 | | -0.04 |

* $p < .05$

Table 18. Relationships Between the 9-Item Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory and Earthquake Experiences, Whittier Narrows and Loma Prieta.

| Earthquake Experiences | Whittier | | Loma Prieta | |
|---|---|---|---|---|
| | N | Mean PTSD | N | Mean PTSD |
| Damage | | | | |
| Yes | 151 | 0.27 | 254 | 0.38* |
| No | 521 | 0.26 | 402 | 0.25 |
| Evacuated | | | | |
| Yes | 20 | 0.48* | 145 | 0.42* |
| No | 652 | 0.26 | 511 | 0.26 |
| Housed Others | | | | |
| Yes | 24 | 0.42 | 80 | 0.42* |
| No | 648 | 0.26 | 576 | 0.28 |
| Knew Injured | | | | |
| Yes | 30 | 0.31 | 80 | 0.40* |
| No | 660 | 0.26 | 576 | 0.28 |
| Knew Families With Substantial Loss | | | | |
| Yes | 162 | 0.32 | 309 | 0.31* |
| No | 510 | 0.25 | 347 | 0.25 |

* $p < .05$

Table 19. Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory by Gender and Damage Status, Whittier Narrows and Loma Prieta.

| Gender and Damage Status | Whittier Narrows[1] N | Whittier Narrows[1] Mean Score | Loma Prieta[2] N | Loma Prieta[2] Mean Score |
|---|---|---|---|---|
| Males | | | | |
| Report Damage | 30 | 0.30 | 104 | 0.31 |
| Do Not Report Damage | 281 | 0.22 | 184 | 0.20 |
| Females | | | | |
| Report Damage | 54 | 0.32 | 150 | 0.43 |
| Do Not Report Damage | 305 | 0.29 | 216 | 0.28 |

[1] Main effect for gender only significant at $p < .05$.

[2] Main effects for gender and damage significant at $p < .01$.

Table 20. Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory by Gender and Evacuation Status, Whittier Narrows and Loma Prieta.

| Gender and Evacuation Status | Whittier Narrows[1] N | Whittier Narrows[1] Mean Score | Loma Prieta[2] N | Loma Prieta[2] Mean Score |
|---|---|---|---|---|
| Males | | | | |
| Evacuated | 5 | 0.31 | 56 | 0.41 |
| Did Not Evacuate | 306 | 0.22 | 232 | 0.20 |
| Females | | | | |
| Evacuated | 15 | 0.54 | 89 | 0.43 |
| Did Not Evacuate | 344 | 0.29 | 277 | 0.31 |

[1] Main effects for gender and evacuation significant at $p < .05$.

[2] Main effects for gender and evacuation significant at $p < .01$.

Table 21. Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory by Home Ownership and Damage Status, Whittier Narrows and Loma Prieta.

| Ownership and Damage Status | Whittier Narrows[1] N | Whittier Narrows[1] Mean Score | Loma Prieta[2] N | Loma Prieta[2] Mean Score |
|---|---|---|---|---|
| Owns Home | | | | |
| Reports Damage | 56 | 0.28 | 151 | 0.29 |
| Does Not Report Damage | 329 | 0.22 | 218 | 0.20 |
| Rents Home | | | | |
| Reports Damage | 28 | 0.37 | 103 | 0.51 |
| Does Not Report Damage | 259 | 0.30 | 182 | 0.30 |

[1] Main effects for ownership and damage significant at $p < .05$.

[2] Main effects for ownership and damage significant at $p < .001$; interaction significant at $p < .05$.

Table 22. Post-Traumatic Stress Disorder (PTSD) Scale from the Brief Symptom Inventory by Home Ownership and Evacuation Status, Whittier Narrows and Loma Prieta.

| Ownership and Evacuation Status | Whittier Narrows[1] N | Whittier Narrows[1] Mean Score | Loma Prieta[2] N | Loma Prieta[2] Mean Score |
|---|---|---|---|---|
| Owns Home | | | | |
| Evacuated | 7 | 0.59 | 72 | 0.36 |
| Did Not Evacuate | 378 | 0.23 | 297 | 0.21 |
| Rents Home | | | | |
| Evacuated | 13 | 0.43 | 73 | 0.49 |
| Did Not Evacuate | 274 | 0.30 | 212 | 0.34 |

[1] Main effects for ownership and evacuation significant at $p < .05$.

[2] Main effects for ownership and evacuation significant at $p < .001$.

## LITERATURE CITED


Alexander D. (1985) Death and injury in earthquakes. Disasters 9(1):57-60.

Aneshensel C. (1985) The natural history of depressive symptoms: Implications for psychiatric epidemiology. Pp. 45-75 in Greenley J (ed.), Research in Community and Mental Health, Volume 5. Greenwich, CT: JAI Press.

Baum A, Solomon S, Ursano R. (1987) "Emergency/Disaster Research Issues: A guide to the preparation and evaluation of grant applications dealing with traumatic stress." Bethesda, MD: Uniformed Services University of the Health Sciences.

Beinin L. (1981) An examination of health data following two major earthquakes in Russia. Disasters 5(2):142-146.

Bolin R. (1989) "Temporary Sheltering After the Whittier Narrows Earthquake." Final Report to the National Science Foundation. Las Cruces, NM: New Mexico State University.

Bourque L, Reeder L, Cherlin A, Raven B, Walton D. (1973) "The Unpredictable Disaster in a Metropolis: Public response to the Los Angeles earthquake of February, 1971." Los Angeles: Survey Research Center, University of California, Los Angeles.

Committee on the Alaska Earthquake. (1969) Toward Reduction of Losses from Earthquakes: Conclusions from the Great Alaska Earthquake of 1964. Washington, DC: National Academy of Sciences.

De Bruycker M, Greco D, Lechat M. (1985) The 1980 earthquake in Southern Italy--morbidity and mortality. International Journal of Epidemiology 14(1):113-117.

Derogatis L, Melisaratos N. (1983) The Brief Symptom Inventory: An introductory report. Psychological Medicine 13:595-605.

Derogatis L, Spencer P. (1982) The Brief Symptom Inventory (BSI). Clinical Psychometric Research.

Frankel M. (1983) Sampling theory. Pp. 21-67 in Rossi P and Wright J, Handbook of Survey Research. New York: Academic Press.

Fritz C. (1961) Disaster. In Merton R and Nisbet R (eds.), Social Problems. New York: Harcourt, Brace & World.

Glass R, Urrutia J, Sibony S, Smith H, Garcia B, Rizzo L. (1977) Earthquake injuries related to housing in a Guatemalan village. Science 197:638-643.

Green B, Lindy J, Grace M, Gleser G, Leonard A, Korol M, Winget C. (1990) Buffalo Creek survivors in the second decade: Stability and change of stress symptoms over 14 years. American Journal of Orthopsychiatry 60(1):43-54.

Hoffman M. (ed.) (1991) The World Almanac and Book of Facts. New York: Pharos Books.

Janis I. (1951) Air War and Emotional Stress: Psychological Studies of Bombings and Civilian Defense. New York: McGraw-Hill.

Keane T, Caddell J, Taylor K. (1988) Mississippi Scale for Combat-Related Posttraumatic Stress Disorder: Three studies in reliability and validity. Journal of Consulting and Clinical Psychology 56(1):85-90.

Keane T, Wolfe J, Taylor K. (1987) Post-Traumatic Stress Disorder: Evidence for diagnostic validity and methods of psychological assessment." Journal of Clinical Psychology 43(1):32-43.

Kessler R, Price R, Wortman C. (1985) Social factors in psychopathology: Stress, social support, and coping processes. Annual Review of Psychology 36:531-572.

Kish L. (1965) Survey Sampling. New York: John Wiley & Sons, Inc.

Lechat M. (1979) Disasters and public health. Bulletin of the World Health Organization 57(1):11-17.

Logue J, Hansen H, Struening E. (1979) Emotional and physical distress following Hurricane Agnes in Wyoming Valley of Pennsylvania. Public Health Reports 94:495-502.

Mahoney L, Reutershan T. (1987) Catastrophic disasters and the design of disaster medical care systems. Annals of Emergency Medicine 16:1085-1091.

Melick M, Logue J. (1985-1986) The effect of disaster on the health and well-being of older women. International Journal of Aging and Human Development 21(1):27-38.

Mileti D, O'Brien P. (1991) "Public Response to Aftershock Warnings During the Loma Prieta Earthquake Emergency." Draft Report to the National Science Foundation. Ft. Collins, CO: Colorado State University.

Morbidity and Mortality Weekly Report. (1990) Earthquake disaster: Luzon, Philippines. Morbidity and Mortality Weekly Report 39(34):573-577.

Noji E. (1989) The 1988 earthquake in Soviet Armenia: Implications for earthquake preparedness. Disasters 13(3):255-262.

Noji E, Kelen G, Armenian H, Oganessian A, Jones N, Sivertson K. (1990) The 1988 earthquake in Soviet Armenia: A case study. Annals of Emergency Medicine 19:891-897.

Norris F. (1989) Screening for traumatic stress: A scale for use in the general population. Journal of Applied Social Psychology 20:1704-1718.

O'Brien P, Mileti D. (1991) "Citizen Participation in Emergency Response Following the Loma Prieta Earthquake." Draft Report to the National Science Foundation. Ft. Collins, CO: Colorado State University.

Ortiz M, Roman M, Latorre A, Soto J. (1986) Brief description of the effects on health of the earthquake of 3rd March 1985--Chile. Disasters 10(2):125-140.

Pollander G, Rund D. (1989) Analysis of medical needs in disasters caused by earthquake: The need for a uniform injury reporting scheme. Disasters 13(4):365-369.

Quarantelli E. (1985) An assessment of conflicting views on mental health: The consequence of traumatic events. Pp. 173-215 in Figley C. (ed.), Trauma and Its Wake, Volume 1. New York: Brunner-Mazel.

Sapir D, Lechat M. (1986) Reducing the impact of natural disasters: Why aren't we better prepared? Health Policy and Planning 1(2):118-126.

Shah B. (1983) Is the environment becoming more hazardous? A global survey 1947 to 1980. Disasters 7(3):202-209.

Sheng C. (1987) Medical support in the Tangshan earthquake: A review of the management of mass casualties and certain major injuries. Journal of Trauma 27(10):1130-1135.

Sudman S. (1983) Applied sampling. Pp. 145-194 in Rossi P, Wright J, Handbook of Survey Research. New York: Academic Press.

Thoits P. (1983) Dimensions of life events that influence psychological distress: An evaluation and synthesis of the literature. Pp. 33-103 in Kaplan H (ed.), Psychological Stress: Trends in Theory and Research. New York: Academic Press.

Tierney K. (1985) "Report on the Coalinga Earthquake of May 2, 1983." Seismic Safety Commission, State of California, September 1985.

Tierney K. (1986) "Disasters and Mental Health: A Critical Look at Knowledge and Practice." Disaster Research Center, University of Delaware.

Trent R. (1990) "Injury Surveillance in the Aftermath of an Earthquake." Presentation to Bay Area Regional Earthquake Preparedness Project, October 1990.

Turner R, Nigg J, Heller Paz D. (1986) Waiting for Disaster: Earthquake Watch in Southern California. Los Angeles: University of California Press.

Wheaton B. (1988) "When More Stress is Stress Relief: Life Events as the Resolution of Ongoing Stress." Presentation to Society for the Study of Social Problems, August 1988.