

**Table3 People who were victimized by the tsunami  
97 people in Kirikiri region**

Number	Situation	Block number	Age	Category
41	Believed to have died in own house.	1-chome	80	Own home
42	Believed to have died in own house.	1-chome	86	Own home
37	Believed to have died in own house.	1-chome	87	Own home
1	Believed to have died in own house.	1-chome	74	Own home
71	Believed to have died in own house.	1-chome	79	Own home
47	Believed to have died in own house.	1-chome	81	Own home
48	Believed to have died in own house.	1-chome	62	Own home
59	After walking dog, arranged with neighbors to evacuate, believed to have been preparing to evacuate in own house.	1-chome	83	Own home
13	Believed to have died in own house.	1-chome	72	Own home
36	Believed to have died in own house.	1-chome	72	Own home
86	Believed to have died in own house.	1-chome	77	Own home
87	Believed to have died in own house.	1-chome	81	Own home
94	Believed to have died in own house.	1-chome	74	Own home
93	Believed to have evacuated to house of relative in 2-chome block.	1-chome	94	Evacuated
3	Died in Otsuchi.	1-chome	38	Outside area
16	Believed to have died in own house.	1-chome	62	Own home
67	Believed to have died in own house.	1-chome	83	Own home
84	Believed to have died in own house.	1-chome	72	Own home
85	Believed to have died in own house.	1-chome	79	Own home
23	Believe to have returned to own house after being at sister's house.	1-chome	58	Own home
70	Evacuated to the house of an acquaintance in 2-chome block and died there.	1-chome	53	Evacuated
77	Believed to have returned to lower ground because worried about grandchild, and died.	2-chome	85	Checking on someone's safety
18	In own house, or ...?	2-chome	37	Own home
33	Believed to have died in own house.	2-chome	82	Own home
34	Believed to have died in own house.	2-chome	83	Own home
90	Believed to have died in own house.	2-chome	83	Own home
91	Believed to have died in own house.	2-chome	75	Own home
92	Died in Otsuchi.	2-chome	51	Outside area
7	Believed to have died in own house.	2-chome	79	Own home
8	Believed to have died in own house.	2-chome	73	Own home
45	Believed to have died in own house.	2-chome	86	Own home
46	Believed to have died in own house.	2-chome	56	Own home
79	Died at own home, possible was worried about husband in nursing care.	2-chome	84	Own home (Nursing)
80	Died in own home, could not walk well.	2-chome	88	Own home (Disabled)
72	Believed to have died in own house.	2-chome	88	Own home
73	Believed to have died in own house.	2-chome	88	Own home
39	Believed to have died in own house.	2-chome	69	Own home
40	Believed to have died in own house.	2-chome	70	Own home
19	Believed to have died in own house.	2-chome	38	Own home (Disabled)
35	Worried about disabled son and returned to own house.	2-chome	71	Own home (Checking on someone's safety)
26	Believed to have been killed at work hut near fishing center.	2-chome	75	Workplace
64	Believed to have died at evacuation zone.	2-chome	66	Evacuated
60	Believed to have died in own house.	2-chome	77	Own home
75	Believed to have died in own house.	2-chome	50	Own home
29	Believed to have died in own house.	2-chome	65	Own home
30	Believed to have died in own house.	2-chome	63	Own home
57	Believed to have died in own house.	2-chome	68	Own home
31	Believed to have died in own house.	2-chome	75	Own home
32	Believed to have died in own house.	2-chome	71	Own home
4	Believed to have died in own house.	2-chome	82	Own home
88	Believed to have died in own house.	2-chome	77	Own home
65	Believed to have died in own house.	2-chome	73	Own home
66	Believed to have died in own house.	2-chome	78	Own home
68	Believed to have died on bus from facility to home.	2-chome	48	Outside area (Disabled)

**Table4 About the People Who Died in Kirikiri**

**a) By City Block**

Block Number	Number of Victims
1-chome	21
2-chome	53
3-chome	16
4-chome	7
<b>Total</b>	<b>97</b>

**b) By Estimated Situation of Death**

City block number	In transit	Associate d death	Own home	Outside home	Outside region	Total
1-chome	0.0%	0.0%	<b>85.7%</b>	9.5%	4.8%	100.0%
2-chome	<b>17.0%</b>	3.8%	<b>66.0%</b>	5.7%	7.5%	100.0%
3-chome	6.3%	0.0%	<b>75.0%</b>	6.3%	12.5%	100.0%
4-chome	0.0%	<b>28.6%</b>	0.0%	<b>14.3%</b>	<b>57.1%</b>	100.0%
<b>Total</b>	<b>10.3%</b>	<b>4.1%</b>	<b>67.0%</b>	<b>7.2%</b>	<b>11.3%</b>	<b>100.0%</b>

**<Testimony of Survivors>**

A woman in her 70s:

"I have a husband in his late 70's who can't walk. At the time of the tsunami, he was in a hospital in Kamaishi to receive treatment and be examined. If he had been in our house, maybe I would have died along with my husband. We were lucky."

70歳代女性  
「70歳代後半の足の不自由な夫がいる。津波の時に、たまたま、夫は釜石の病院に治療・診察に行っていた。もし、夫が自宅にいたならば、不自由な夫とともに自分も被災していたかもしれない。幸運であった。」

A woman in her 60s:

"My husband's family home is in the inundation zone, and we were caring for (nursing) my mother in law, but she died before the disaster. If mother had been alive, both me and my husband may have died along with her. Now I believe that in a way my mother in law saved us."

60歳代女性  
「浸水域に夫の実家があり、そこで、夫の母(義理の母)の介護をしていた。その母が、震災の前に亡くなった。もし、母が生きていたなら、自分たち夫婦も、一緒に犠牲になっていたかも知れない。今は、母が救ってくれたと思っている。」

A woman in her 50s:

"My mother is bedridden, and my older brother can't walk very well and uses a cane due to damage from a stroke. During the day, I cared for the two of them, and during the night I worked. On March 11, 2011, my mother happened to be in day nursing care at a hospital in Miyako. My older brother died in the tsunami. If my mother had been at the house, all three of us might have died. I have complicated feelings about this fact."

50歳代女性  
「母が寝たきり、兄が脳こうそくの後遺症で足が不自由、杖で歩く。自分は日中この二人の介護をしていて、夜は働いていた。3.11の時はたまたま母の通院介護のために、宮古の病院にいた。それで、兄が被災して亡くなった。もし母が自宅にいれば、自分も含めて3人亡くなっていたかもしれない。複雑な心境である。」

**Table5 Disabled People Victimized by the Great Tohoku Earthquake and Tsunami (Iwate, Miyagi and Fukushima Prefectures) :Research by NHK**

Prefecture	City	Death of all people/population	Death rate (all)	Deaths of disabled people/Population of people	Death rate (disabled)	Deaths of physically handicapped/population physically handicapped	Death rate (physically handicapped)	Death of mentally handicapped/population of mentally handicapped	Death rate (mentally handicapped)
Iwate (7)	Miyako	514(As of August 4)/59,442	0.86%	36(*1)/3,371	1.07%	28/2,465	1.14%	2/479	0.42%
	Ofunato	336(As of September 1)/40,738	0.82%	47/2,268	2.07%	42/1,742	2.41%	2/359	0.56%
	Rikuzentakata	1,425(As of August 4)/23,302	No data						
	Kamaishi	879(As of August 3)/39,578	2.22%	56/2,586	2.17%	53/2,052	2.58%	2/346	0.58%
	Otsuchi	799(As of September 1)/15,277	5.23%	59/1,012	5.83%	53/807	6.57%	5/81	6.17%
	Yamada	723(As of August 25)/18,625	3.88%	6/1,114	0.54%	5/859	0.58%	0/172	0%
<b>Total (27 cities)</b>		12,853/1,244,167	1.03%	1,388/67,509	2.06%	1,243/53,928	2.30%	80/8,362	0.96%

Disabled People Victimized by the Great Tohoku Earthquake and Tsunami (Iwate, Miyagi and Fukushima Prefectures) \*Population: from Heisei 22 Census Deaths(all), deaths(handicapped):from survey to local governing bodies



Picture by Hiroki Haga :2011.3.11.14.24

**<About Hurricane Katrina in New Orleans>**

Nursing home residents suffered from higher rates of mortality

■ Nursing home residents suffered from higher rates of mortality, functional decline, and hospitalization due to Hurricane Katrina.

Dosa, David, et al. "Effects of Hurricane Katrina on nursing facility resident mortality, hospitalization, and functional decline." *Disaster Medicine and Public Health Preparedness* 4.S1 (2010): S28-S32.

About 71 percent were above age 60, with 47 percent over age 75

■ About 71 percent of Louisiana victims were above age 60, with 47 percent over age 75. The majority of these victims died in their homes and communities. At least 68 died in a nursing home.

Gibson, Mary Jo, and Michele Hayunga. "We can do better: lessons learned for protecting older persons in disasters." (2006).

By housing tenure. 45.7% of homes in damaged areas were occupied by renters,

■ In the New Orleans-Biloxi Gulfport metropolitan areas, neighborhoods damaged by Katrina were disproportionately black, living in rental housing, and below the poverty line.

Logan, John R. "The impact of Katrina: Race and class in storm-damaged neighborhoods." Brown University 16 (2006).

49 percent of Katrina victims were 75 years

The victims were also more likely to be black

■ In another study, 49 percent of Katrina victims were 75 years and older. The victims were also more likely to be black, especially in Orleans Parish.

Brunkard, Joan, Gonza Namulanda, and Raoult Ratard. "Hurricane Katrina Deaths, Louisiana, 2005." *Disaster medicine and public health preparedness* 2.4 (2008): 215-223.

「22% said they were physically unable, and 23% were caretaking for someone physically unable.」

■ In a survey of Hurricane Katrina evacuees staying in Houston shelters, of the 61% who did not evacuate, 55% gave having no car as a reason, 22% said they were physically unable, and 23% were caretaking for someone physically unable. 42% of those who did not evacuate reported they could not have found a way to leave before the storm.

Washington Post, Kaiser Family Foundation, and Harvard University. 2005. Survey of Hurricane Katrina Evacuees. Report No. 7401. Washington, DC: The Henry J. Kaiser Family Foundation. <http://www.kff.org/newsmedia/upload/7401.pdf>

**Conclusion:** From the case studies of those victimized--the elderly, the elderly under nursing care, the disabled, and their respective families--we can reaffirm that those at risk to disasters and their families are vulnerable in this kind of large scale natural disaster. One outstanding characteristic of Tohoku disaster areas is found in the examples of firefighters and district welfare officers **who had to undergo sacrifices** in the course of lifesaving and evacuation assistance.

As well as the rebuilding of the public sphere through cooperation between government and the public, and the development of "regional power" to rebuild local community, the completion of concrete plans to ensure the safety of those vulnerable to disasters is a very important factor in disaster recovery.