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## **NJ SANDY PANEL: SURVIVOR MENTAL HEALTH**

### *1-in-5 still suffer serious distress two years after storm*

Many victims of Superstorm Sandy continue to suffer from psychological stress, including post-traumatic stress disorder (PTSD) more than a year after the storm. This finding comes from a **Monmouth University Poll** tracking survey of New Jersey residents who suffered significant property damage from the storm or displaced from their homes for a month or longer. Approximately one year after Sandy hit, Monmouth pollsters interviewed nearly 1,000 of the most impacted New Jersey residents. More than 600 were re-interviewed over the past few months. The survey finds that little has changed in these survivors' mental health picture over the past year.

There was slight improvement in the aggregate regarding the number of New Jersey Sandy victims displaying psychological distress on the Kessler-6 scale. Specifically, 20% now register at the serious distress level compared to 26% about one year ago. However, it's worth noting that nearly half (47%) continue to report symptoms of at least moderate distress, which is only slightly lower than the 50% registered last year. Sandy survivors continue to exhibit signs of emotional stress at much higher rates than the population as a whole.

"Resilient individuals and families are able to maintain a sense of hope, and are able to identify the areas of their lives that they have control over and enact change. However, the longer that environmental conditions remain poor, such as continuing to be displaced, resiliency, mental health and coping skills can decline," said Dr. Christine Hatchard, Assistant Professor of Psychology and Director of the Clinical Psychology Research Center at Monmouth University.

The panel design of Monmouth's study allowed for the examination of individual level changes. The survey found that 28% of the Sandy survivors have improved stress scores from year one to year two, while 21% have worse scores. Half (50%) have no change in their individual stress scores. The only group that shows significant improvement are those who were able to move back into their homes since we first interviewed them. Among those who have moved back into their home over the past year, fully half (50%) register better scores on the Kessler-6 scale, while 24% have worse scores and 27% have

similar scores as they did one year ago. Among those who have been back in their homes for more than a year, 24% have better scores and 19% have worse scores, while the majority (57%) show no change. Among those who remain displaced two years after the storm, 31% have better distress scores and 26% have worse scores, while 43% show no change in their stress levels.

“Getting people back in to their homes is not a panacea for healing all the mental health concerns of Sandy survivors. However, it is the biggest single positive factor we see in these results,” said Patrick Murray, director of the Monmouth University Polling Institute.

It’s worth noting that other factors do not seem to predict change in emotional well-being over the past year. For example, among displaced residents earning less than \$50,000, 36% record an improved Kessler-6 distress score in this year compared to last year, 27% have a worse score, and another 37% recorded little to no change. Among lower income residents living in their pre-Sandy homes, 25% record an improved score and 26% record a poorer result, with 49% exhibiting little to no change on the psychological distress index. These findings underscore the difficulties facing the mental health community in identifying segments of the Sandy-impacted population most likely to exhibit signs of emotional distress nearly two years after the event.

### ***Post Traumatic Stress Disorder (PTSD)***

The Wave 2 survey also included the widely used PCL-5 index to identify potential symptoms of Post Traumatic Stress Disorder (PTSD). Approximately 1-in-5 (22%) Sandy survivors surveyed exhibit signs of a provisional diagnosis of PTSD. This includes 31% who are still displaced and 18% who are in their pre-Sandy home. Those who say they will never move back to their pre-Sandy home (38%) are even more likely to exhibit provisional PTSD than those who are planning on returning to that home (27%).

“Previous research suggests that posttraumatic stress disorder is the most prevalent mental disorder following other natural disasters such as Hurricane Katrina. The rates of PTSD in our sample are high considering that the one-year prevalence of PTSD is only around 3.5% of the general population,” said Dr. Hatchard.

There are some slight age differences in this result for PTSD, ranging from 29% among those age 18 to 39, 31% age 40 to 49, 23% age 50 to 59, 19% age 60 to 69, and 15% age 70 and older. By income level, provisional PTSD diagnoses are highest among those earning less than \$50,000 (35%) compared to 19% for higher income categories. Women (26%) are slightly more likely than men (17%) to show provisional signs of PTSD. Parents of children under age 18 (35%) have among the highest rates of PTSD among this group of Sandy survivors.

“It was not surprising that parents of children reported the highest rates of PTSD. Caring for children, worrying about their well-being and feeling helpless to improve the family’s situation is understandably stressful and tests parents’ resiliency,” said Dr. Hatchard, a licensed Psychologist who also counsels Sandy-affected residents in her clinical practice. “When parents are stressed, children are stressed. With children, sleep disturbance is often the red flag that signals that the child may be experiencing PTSD or other mental distress.”

### ***Access to Mental Health Care***

Accessing mental health care is proving difficult for some, in part because many do not recognize their own need for support. Only half of those who exhibit either a provisional PTSD diagnosis on the PCL-5 scale (52%) or serious distress on the Kessler-6 scale (50%) feel they need mental health services. [Among all Sandy survivors surveyed, 21% say they need these services.] There are few significant differences between who says they need help and who doesn’t based on their Sandy experience (e.g. how long they were out of their home, region of the state, participation in government recovery assistance programs). There are also few demographic differences in these two groups (e.g. gender, age).

Just under 1-in-5 (18%) of all those surveyed report having actually received some type of counseling or therapy since Sandy hit. This includes only 28% of those who register serious psychological distress or who exhibit a provisional PTSD diagnosis. Another 38% of those with serious distress and 41% of those with a PTSD risk say they would be likely to use these support services if they were available. On the other hand, about 1-in-3 impacted residents who are showing signs of serious distress (33%) or PTSD (31%) say they would probably refuse emotional support assistance regardless of accessibility.

Those age 40 to 49 (28%) and 50 to 59 (23%) are the most likely to report receiving counseling services. They are followed by 18 to 39 year olds (16%) and those age 60 to 69 (13%). Those age 70 and older (6%) are least likely. Women (24%) are also more likely than men (10%) to have received counseling. There are no significant income differences for accessing mental health services. Among those who have received counseling, one-third (34%) report it has helped them a lot and 38% say it has helped them some.

The survey also found that 29% of impacted residents report that they could not get needed therapy at some point in the past two years. More women (35%) than men (21%) to report this experience. Parents (38%) are also more likely than others. Interestingly, those at both the lowest – 38% earning under \$50,000 – and the highest – 37% earning \$150,000 or more – income levels are more likely to report having experienced problems accessing mental health care when compared to those in the middle income levels – 24% earning \$50,000 to under \$150,000.

Reasons given for not accessing counseling services include a lack of time or being overwhelmed with other concerns (28%), affordability (20%), not knowing where to look or how to access these services (19%), feeling that there was no need for services or the issues would resolve themselves (19%), or simply not seeking out the services (13%).

It's worth noting that about half (49%) of impacted residents in the survey report that they did receive information about available counseling services. Having this information available shows a strong relationship with seeking out services, especially among those with a provisional PTSD diagnosis. Specifically, among residents with a demonstrated PTSD risk, 44% of those who received counseling information eventually sought counseling compared to just 14% of those who did not receive this type of information. Among those with no registered PTSD risk, counseling was sought out by 23% who received information and 9% who did not.

Those who were approved for the state recovery assistance program (57%) are more likely than those who were denied (40%) or did not apply at all (35%) to say they received information about mental health support services.

"Finding ways to get information about counseling services into the hands of those who need it is key to promoting access. Unfortunately, many residents who were denied or did not apply for state aid may fall through the cracks because they have fewer points of contact with service providers," said Murray. "Making regular announcements in hard hit towns or having schools in the those communities periodically send mental health referral brochures home to parents are some ways to reach those who are not participating in the state financial recovery assistance programs."

These results will be featured on a special program "The State of New Jersey's Health: Living in Sandy's Shadow" airing on NJTV, New Jersey public television, Wednesday October 29 at 8:00pm.

***Methodological Note:***

The Monmouth University Polling Institute conducted this Sandy Recovery Survey online and by telephone with 616 New Jersey residents who suffered significant damage to their primary home (*defined as having more than one foot of water in the first floor or at least \$8,000 in property damage*) and participated in the tracking survey in both Year 1 and Year 2. Year 1 interviews were completed between September 2013 and January 2014 and Year 2 interviews were completed between July and October 2014. This survey is part of a larger panel study designed to track the experiences of New Jersey residents who continue to be impacted by the storm. Because survey respondents were recruited using a variety of non-probability methods, the survey results cannot be statistically projected to the larger population of all Sandy victims in the state. The value of these survey findings rests in comparisons over time among the same group of residents to better understand individual-level recovery progress as well as for internal poll comparisons among different groups (e.g. variations between those who remain displaced and those who are now back in their homes, variations by income levels, etc.).

This project was designed to complement Monmouth University's statewide and regional poll tracking of Sandy issues and specifically to highlight continuing issues in New Jersey's Sandy recovery and provide recommendations for improving communication channels between hardest-hit residents and public/private authorities. This project was made possible by a New Jersey Recovery Fund grant from the Community Foundation of New Jersey and the Geraldine R. Dodge Foundation.

**Survey Questions**

1. Do you need assistance with any of the following now?  
21% Help with mental/emotional counseling
  
2. Have you received therapy, counseling or other emotional support services since Superstorm Sandy?  
18% Yes
  
3. Who did you see or talk to about these issues?  
37% Psychologist  
17% Psychiatrist  
26% Family doctor or general practitioner  
4% Other medical doctor  
4% Nurse  
34% Social worker  
20% Other type of counselor  
14% Clergy member or other spiritual advisor  
6% Friends group  
6% Other
  
4. How much has this treatment or counseling helped you?  
34% A lot  
38% Some  
20% Just a little  
8% Not at all
  
5. Since Sandy, was there a time when you needed therapy, counseling or other emotional support services, but you did not get it?  
29% Yes
  
6. If they were available to you, how likely would you be to use therapy, counseling or other emotional support services?  
9% Very likely  
24% Somewhat likely  
31% Not too likely  
37% Not at all likely
  
7. During the recovery process, has anyone given you any information about therapy, counseling or other emotional support services?  
49% Yes

**Kessler-6 Psychological Distress Scale YEAR 1**

	TOTAL	HOUSING STATUS			REGION			NEW JERSEY (BRFSS)
		Still Displaced	Pre-Sandy home	Monmouth bayshore	Monmouth coast	Ocean County	Other	
Serious	26%	33%	21%	31%	29%	24%	25%	4%
Mild to moderate	24%	31%	19%	27%	22%	24%	21%	8%
None	50%	36%	60%	43%	49%	52%	54%	89%
n	595	256	339	124	76	296	99	4,677

**Kessler-6 Psychological Distress Scale YEAR 2**

	TOTAL	HOUSING STATUS		REGION			
		Still Displaced	Pre-Sandy home	Monmouth bayshore	Monmouth coast	Ocean County	Other
Serious	20%	26%	17%	18%	23%	20%	21%
Mild to moderate	27%	39%	20%	32%	33%	24%	22%
None	53%	35%	63%	50%	44%	55%	57%
n	579	209	365	119	73	287	100

**INDIVIDUAL LEVEL CHANGE PAST YEAR**

	TOTAL	HOUSING STATUS				REGION			
		Still Displaced	Pre-Sandy home	Moved back past year	Have been home for over 1 year	Monmouth bayshore	Monmouth coast	Ocean County	Other
Much better	10%	13%	8%	19%	7%	9%	7%	10%	15%
Somewhat better	18%	18%	18%	31%	17%	20%	20%	18%	16%
Little to no change	50%	43%	54%	27%	57%	44%	51%	54%	45%
Somewhat worse	15%	18%	14%	17%	13%	18%	17%	11%	21%
Much worse	6%	8%	5%	7%	6%	9%	6%	7%	3%
n	562	203	354	59	268	117	71	279	95

**YEAR 2 KESSLER-6 - AMONG THOSE STILL DISPLACED**

n=209	TOTAL	FAMILY INCOME						
		Monmouth bayshore	Monmouth coast	Ocean County	Other	Under \$50K	\$50-\$100K	\$100K or more
Serious	26%	17%	44%	26%	24%	36%	21%	21%
Mild to moderate	39%	49%	44%	34%	33%	33%	45%	37%
None	35%	34%	11%	39%	42%	30%	35%	42%

**YEAR 2 KESSLER-6 - AMONG THOSE IN PRE-SANDY HOME**

n=365	TOTAL	FAMILY INCOME						
		Monmouth bayshore	Monmouth coast	Ocean County	Other	Under \$50K	\$50-\$100K	\$100K or more
Serious	17%	18%	11%	17%	20%	42%	11%	11%
Mild to moderate	20%	21%	26%	19%	15%	19%	25%	14%
None	63%	61%	63%	64%	65%	39%	64%	75%

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The Kessler-6\* Psychological Distress scale is based on the responses to six different items (see below). Each question response is scored from 0 to 4 (0 = none of the time) (4 = all of the time) and each respondent's answers are totaled (range = 0 - 24). Serious Psychological Distress is a score of 13 or more; Mild to Moderate Psychological Distress is a score from 8 to 12; and No Psychological Distress is a score of 7 or less.

For more information: <http://dhds.cdc.gov/guides/demographics/core?i=PsychologicalDistress>

\* Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J., Normand, S-L.T., Manderscheid, R.W., Walters, E.E., Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population *Archives of General Psychiatry*. 60(2), 184-189.

**Kessler-6 scale items:** The following questions ask about how you have been feeling during the past 30 days. For each question, please select the option that best describes how often you had this feeling. During the past 30 days, about how often did you feel...[nervous / hopeless / restless or fidgety / so depressed that nothing could cheer you up / that everything was an effort / worthless] – none of the time, a little of the time, some of the time, most of the time, all of the time?

The PCL-5 Post-Traumatic Distress Syndrome [PTSD] Scale is based on the responses to 20 items (see below). A provisional PTSD diagnosis can be made by treating each item rated as 2 = "Moderately" or higher as a symptom endorsed, then following the DSM-5 diagnostic rule which requires at least: 1 B item (questions 1-5), 1 C item (questions 6-7), 2 D items (questions 8-14), 2 E items (questions 15-20).

**PCL-5 scale items:** Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one and indicate how much you have been bothered by that problem in the last month – not at all, a little bit, moderately, quite a bit, extremely?

1. Repeated, disturbing, and unwanted memories of the stressful experience

2. Repeated, disturbing dreams of the stressful experience
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)
4. Feeling very upset when something reminded you of the stressful experience
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?
6. Avoiding memories, thoughts, or feelings related to the stressful experience?
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)
8. Trouble remembering important parts of the stressful experience
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)
10. Blaming yourself or someone else for the stressful experience or what happened after it
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame
12. Loss of interest in activities that you used to enjoy
13. Feeling distant or cut off from other people
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)
15. Irritable behavior, angry outbursts, or acting aggressively
16. Taking too many risks or doing things that could cause you harm
17. Being "super alert" or watchful or on guard
18. Feeling jumpy or easily startled
19. Having difficulty concentrating
20. Trouble falling or staying asleep

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<b>PANEL SAMPLE DEMOGRAPHICS</b>			
<b>Current Home</b>		<b>Respondent Age</b>	
64%	Pre-Sandy home	6%	18 to 39
10%	Permanent or 2nd home	17%	40 to 49
16%	Temporary rental	33%	50 to 59
8%	Family, friends	27%	60 to 69
2%	Hotel, trailer	16%	70 or older
<b>County</b>		<b>Family Income</b>	
33%	Monmouth	25%	Under \$50K
50%	Ocean	20%	\$50 - 74K
17%	Other	20%	\$75 - 99K
<b>Parent of minor child</b>		21%	\$100 - 149K
22%	Yes	14%	\$150K or more
<b>Gender</b>		<b>Displacement Status</b>	
43%	Male	12%	Won't move back
57%	Female	26%	Still waiting
		62%	Returned home

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