



Disaster Mental Health Surveillance at State Health Agencies: Results from a 2013 CSTE Assessment

A Report for the
Council of State and Territorial
Epidemiologists (CSTE)

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Table of Contents

Acknowledgements	2
Background	3
Methods	4
Results	5
Background Relations	5
Mental Health and Disaster Preparedness Planning	11
Disaster Response	12
Disaster Recovery	17
Response Evaluation and After-action Assessment	19
Discussion	21
Conclusion and Recommendations	26
References	29
Appendices	30
Appendix A: Disaster Mental Health Surveillance Focus Group Questions	30
Appendix B: Disaster Mental Health Surveillance Assessment for State Epidemiologists	32

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Deborah Gould, PhD
Senior Public Health Advisor
Centers for Disease Control and Prevention

Catherine A. Okoro, PhD, MS
Epidemiologist
Centers for Disease Control and Prevention

Michael Heumann, MPH, MA
HeumannHealth Consulting LLC
Consultant, Council of State and Territorial
Epidemiologists

Amy Wolkin, MSPH
Lead, Disaster Epidemiology and Response
Team
Centers for Disease Control and Prevention

Sharon M. Watkins, PhD
Sr. Environmental Epidemiologist
Florida Department of Health

Pamela Holland, LCPC
Dir., Disaster Behavioral Health
Maine Center for Disease Control & Prevention

Denise Bulling, PhD
Senior Research Director
University of Nebraska Public Policy Center

Jim Harvey
Division of Behavioral Health
Nebraska Department of Health and Human
Services

Hal Johnson
Managing Epidemiologist
Florida SAMH Program

Collette Young, PhD
Preparedness Surveillance & Epidemiology
Manager
Oregon Public Health Division

David Zane, M.S.
Epidemiologist
Texas Department of State Health Services

Chance A. Freeman
Branch Manager, Disaster Behavioral Health
Services
Texas Department of State Health Services

Doug Thoroughman, PhD, MS
CAPT, US Public Health Service
CDC Career Epidemiology Field Officer
Kentucky Department for Public Health

Wm. Scott Sumrall, Director
Division of Disaster Preparedness and Response
Mississippi Department of Mental Health

Monika Erős-Sarnyai, M.D. MA
Best Practices Specialist
New York City Department of Health & Mental
Hygiene

Erin Simms, MPH
Associate Research Analyst
Council of State and Territorial Epidemiologists

Background

A disaster is a sudden event, natural or manmade, that causes great physical damage, loss of life or drastic change to the environment.¹ In the modern world, disasters are becoming increasingly common, disrupting social systems and necessitating a public health response to mitigate adverse effects on physical and mental health.² Disasters can impact virtually every aspect of individuals' lives, inflicting stress and anxiety, causing grief due to the loss of a loved one or home, disrupting access to health care, prompting loss of sleep and feelings of alienation, and generating uncertainty about basic needs.³ These stressors may exacerbate existing psychopathology and are associated with increased incidence of mental illnesses, such as clinical depression and post-traumatic stress disorder (PTSD).^{4,5} Mental health status, in turn, directly and indirectly influences individuals' health risk factors and resilience. For example, poor mental health is linked to adverse behaviors (e.g., smoking, substance abuse, physical inactivity) and chronic conditions (e.g., hypertension, cardiovascular disease) and may impede the success of public health directives.⁶ Although there is growing awareness of the need for post-disaster behavioral and emotional services,^{7,8} the extent to which state public health (PH) and mental health (MH) agencies are able to meet this need is unclear.

Surveillance data are integral to PH preparedness, response and recovery strategies. Mental and physical health consequences of disasters are equally important in terms of population health, and there are important interactions between them. For pre-disaster planning, surveillance should include demographic information, as well as core, standardized and validated measures of MH, physical health and health care access and utilization. Following a disaster, standardized surveillance is critical for identifying needs, targeting interventions, monitoring conditions, and evaluating the efficacy of interventions.⁷⁻⁹ Yet the Centers for Disease Control and Prevention (CDC) and states' MH response to disasters is challenged by limitations in the existing surveillance infrastructure, existing data collection methods and the compartmentalization of PH and MH at the state and local levels. To date, no state-level, comprehensive standardized PH/MH surveillance protocol addresses these needs.

In 2012–2013, the Council of State and Territorial Epidemiologists (CSTE), in collaboration with CDC, conducted a nationwide, disaster MH surveillance needs assessment. The assessment aimed to characterize important aspects of state preparedness for a post-disaster MH response:

- Existing use of state or federal MH surveillance systems.

- MH surveillance needs and priorities.
- The nature of relations and interactions between state epidemiologists and MH personnel during a response.
- The extent to which MH is included in disaster preparedness planning (e.g., response protocols, training, preparedness exercises).
- How states use MH surveillance data in the context of disaster response.
- Types of MH data/assessments needed following a disaster.
- Barriers to MH surveillance and the use of MH surveillance data.
- At-risk populations within the state.
- Sampling and other challenges related to post-disaster MH surveillance.

This initial assessment focused on the perspective of State Epidemiologists because they participate in disaster response planning and execution and are, in general, responsible for state PH surveillance activities. Furthermore, the nature of relations between State Epidemiologists and MH personnel with respect to disasters is unknown. The assessment is an initial step to understand the relationship between PH and MH in the states. Next steps may include the creation of guidance and tools for improved post-disaster MH and PH response.

Methods

In 2012, a workgroup of representatives from CSTE and CDC developed the *Disaster Mental Health Surveillance Needs Assessment for State Agencies*, wherein *mental health* was defined as “a range of psychological (e.g., depression, anxiety, PTSD, suicide, etc.), emotional (e.g., grief, fear, anger, loss of sleep, inability to concentrate, etc.) and behavioral (e.g., substance abuse/misuse, domestic violence, gambling or other addictions, etc.) responses that may be felt by people affected by a disaster.”

Specifically, from July–September 2012, an extensive list of questions (See Appendix A) was used as the basis for five focus group conference calls conducted with State Epidemiologists with disaster experience. Focus group results informed development of a pilot Web-based assessment tool. The pilot questionnaire was administered in three states in December 2012 and revised and finalized based on feedback. The final assessment tool (See Appendix B) included 36 questions covering five main topic areas: (1) background relations (i.e., relations between PH and MH personnel outside of a disaster or

disaster planning), (2) disaster preparedness planning related to PH and MH, (3) disaster response, (4) disaster recovery, and (5) response evaluation and after-action assessment. The assessment tool included three opinion questions and some comment areas, allowing respondents to report additional practices or tools used in their state to augment responses to select questions. Common themes identified from among these comments are presented as examples in the assessment results below.

The Web-based assessment was sent to the State Epidemiologist in the 50 U.S. states and the District of Columbia during January 2013 using *SurveyMonkey*.¹⁰ If contacts did not deem themselves the most appropriate person within their department to take part in the assessment, they were asked to refer the Web-based questionnaire to the most appropriate person. Forty-one of the 51 jurisdictions completed the assessment for an 80% response rate. Non-responders were re-contacted by e-mail and telephone. For convenience, all 41 responding jurisdictions are referred to as *states* in the remainder of this report.

Results

Background Relations

The majority of respondents (59%) identified themselves as epidemiologists, with the remainder identifying themselves as administrators or managers in emergency preparedness (24%), behavioral health (12%) or social work (5%) (See Table 1). Among the 24 epidemiologists who responded, 15 were State Epidemiologists.

Table 1. Overview of assessment respondents

	Number of Respondents	%
Epidemiologist	24	58.5
State Epidemiologist	15	36.6
Other Epidemiologist	9	22.0
Emergency Preparedness	10	24.4
Behavioral Health (BH)	5	12.2
BH Coordinator	1	2.4
Disaster-related BH	4	9.8
Social Worker	2	4.9
Total	41	100.0

The affiliation between PH and MH agencies in state government was reported for all but one state (See Table 2). Fifty-nine percent of respondents reported that the two agencies are in different departments, and 32% reported they are in the same department, but in different administrative divisions. In only two states were the two agencies reported to be part of the same department and division.

Table 2. Affiliation between state public health and mental health agencies

Affiliation Between Public Health and Mental Health Agencies	Number of Respondents	%
In different department or agencies	24	58.5
In same department or agency, <i>but</i> in a separate division	13	31.7
In same department or agency <i>and</i> same division	2	4.9
Don't know	1	2.4
Other	1	2.4
Total	41	100.0

State MH and PH agencies provide a wide range of behavioral health services and programs. The assessment asked specifically about seven services: alcohol and drug abuse prevention and treatment, tobacco control, suicide prevention, community MH services, services for those with developmental disabilities, child and family services, and senior and aging services. Respondents in 34 states (83%) reported that portions of these services are spread across the MH agency, PH agency and other departments. For the seven service programs listed on the assessment, respondents indicated that four programs are either fully or partially administered by a separate agency outside the primary PH and MH agencies (alcohol and drug abuse prevention and treatment, services for those with developmental disabilities, child and family services, and senior and aging services). It was more likely that services for seniors and the disabled were administered by a separate department altogether.

About half of respondents (51%) characterized the level of collaboration between PH and MH as *some*, 29% as *frequent*, 17% as *minimal*, and 2% (just one respondent) as *no collaboration* (See Table 3).

Table 3. Level of collaboration between state public health and mental health programs

Level of Collaboration	Number of Respondents	%
Frequent	12	29.3
Some	21	51.2
Minimal	7	17.1
None	1	2.4
Total	41	100.0

MH data in states are most often collected and analyzed by the MH agency (95%). But 56% of respondents reported that the PH agency also plays a role collecting and analyzing these data, and 10% reported that another entity—specifically, the state health care authority, a contracted care provider, the state department of medical assistance services, or the state department of substance abuse—has some role in the collecting and analyzing state MH data.

The assessment identified six federal surveillance systems that collect at least some MH information: (1) the Behavioral Risk Factor Surveillance System (BRFSS), (2) the Selected Metropolitan/Micropolitan Area Risk Trends BRFSS, (3) BioSense (which monitors chief complaint data reported by emergency departments), (4) the National Health Interview Survey (NHIS), (5) the National Health and Nutrition Examination Survey (NHANES), and (6) the National Survey on Drug Use and Health (NSDUH). State PH agencies were reported to utilize data from all of these surveillance systems, with usage ranging from 15% of responding states (NSDUH) to 88% (BRFSS). State MH agencies were reported to use five of the six federal surveys, with usage ranging from 7% of responding states (NHANES) to 44% (NSDUH). No respondents reported that MH agencies use BioSense for surveillance. Only a small proportion of respondents indicated that other agencies—outside of PH and MH—use any of the surveys, with usage ranging from 0% (BioSense, NHANES, other syndromic surveillance) to 10% (BRFSS). A third of PH agencies (34%) reported also using other syndromic surveillance systems (e.g., Essence, etc.) to gather MH data. Two respondents reported they were not aware of using any of the six federal surveillance systems in their state.

Respondents from states that gather MH data through any of the six federal surveillance systems indicated the data is used for a variety of purposes (See Table 4): assessing baseline prevalence

of MH (68%); policy, planning or decision-making (56%); gauging MH service needs (54%); identifying vulnerable populations (46%); and projecting funding needs (39%). Additional uses of the data were identified, and some common examples include:

- Assessing the burden of MH in the criminal justice system.
- Identifying high-risk populations and health disparities (using BRFSS).
- Exploring the relationship between mental health and physical health (using BRFSS).
- Setting benchmarks for progress (using the NSDUH).
- Comparing demographics of MH clients to statewide population.
- Informing planning/decision-making for the Health Resources and Services Administration's (HRSA) emergency services grant.

Table 4. State uses of mental health data from federal surveillance systems*

Type of Mental Health Data Usage	Number of Respondents Citing Usage (n=41)	%
To gauge baseline prevalence of mental illness in state	28	68.3
For policy, planning, or decision-making	23	56.1
To determine the need for mental health services	22	53.7
To identify vulnerable populations based on use of mental health services	19	46.3
To inform funding projections	16	39.0
Don't know	8	19.5
Other	6	14.6
Missing response	1	2.4

*Multiple responses were allowed for this question.

Most respondents supported integrating MH surveillance into state-based population surveys (85%), state and local health surveys (76%), and existing national surveys (59%) (See Table 5). Respondents were not as supportive of integrating MH surveillance into either stand-alone surveys (22%) or existing notifiable disease surveillance systems (20%).

Table 5. Support for integration of mental health data into existing or new surveys*

Type of Mental Health Surveillance Integration	Number of Respondents Supporting Integration (n=41)	%
Into an existing state-based population survey (e.g., BRFSS)	35	85.4
Into state and local health surveys	31	75.6
Into existing national surveys (e.g., NHIS, NSDUH, etc.)	24	58.5
Into a new, stand-alone survey	9	22.0
Into existing notifiable disease surveillance systems	8	19.5

*Multiple responses were allowed for this question.

Ten respondents (24%) provided additional comments about their opinions of expanding MH surveillance in their state, through either a stand-alone survey or by integrating MH questions into existing surveys. Sample responses include the following:

- ☐ *Integration into existing surveys is recommended with the caveat that space for questions is limited. There are myriad competing demands. MH surveillance should be considered more broadly. There are other data sources to be considered besides population-based surveys.*
- ☐ *A standard measure of overall mental health status is currently not available in state surveys. Adding questions to a state surveillance survey would allow us to monitor the prevalence of MH needs over time. More information is needed on co-occurring disorders for people with mental health needs, both co-occurring substance abuse and physical health disorders, children's mental health and co-occurring mental health and primary care.*
- ☐ *Integration into the BRFSS through a mental health call back survey might be a cost-efficient option. A stand-alone survey would be more expensive but allow in-depth exploration of mental health. National surveys such as the NHIS do not provide state-level estimates. NSDUH does provide state and sub-state data but we are unable to add questions that may be of particular interest to the state. Therefore, surveys like the BRFSS or YRBS provide more flexibility.*

Respondents reported several barriers to MH surveillance in their state (See Table 6). Funding was the overriding barrier (88%), followed by the perception that MH and PH agencies are compartmentalized in separate "silos" (59%), lack of surveillance skills (44%), lack of coordination

between MH and PH agencies (39%), lack of understanding of MH within the PH agency (37%), and lack of appreciation of surveillance within the MH agency (29%). Ten respondents (24%) provided additional comments about MH surveillance barriers, including, for example:

- ☐ *Funding levels preclude more expansive efforts that would increase existing coordination between PH and MH.*
- ☐ *Not enough staffing to take on MH surveillance.*
- ☐ *Lack of tools, challenges of communicating MH needs.*
- ☐ *MH case definitions need to be established for surveillance purposes.*

Table 6. Barriers to state mental health (MH) surveillance*

Barrier	Number of Respondents Citing Barrier (n=41)	%
Inadequate Funding	36	87.8
Compartmentalization of MH and public health (PH) into separate “silos”	24	58.5
Inadequate staff skill set to address MH issues	18	43.9
Lack of coordination between PH and MH in the state	16	39.0
Lack of understanding/appreciation of MH within PH agency	15	36.6
Lack of understanding appreciation of surveillance within MH agency	12	29.3
Other	10	24.4

*Multiple responses were allowed for this question.

Local PH department involvement in MH services delivery or administration or tracking of MH issues at the local level reportedly occurs in no more than 15% of the 41 states participating in this assessment. A small number of participating states do not have local PH departments altogether or have only a small number of local PH offices. Still, 59% of respondents reported local PH agency collaboration with state MH disaster planning.

Forty-six percent of respondents provided additional comments about local PH department involvement with state MH programs or operations, including for example:

- ☐ *We are gradually trying to involve the local health departments in this relatively new joint plan with MH.*

- *It varies by health departments; most local health departments are not heavily involved with MH, but some are.*
- *There is minimal collaboration at this time, however there is an interest in strengthening the collaborate efforts in disaster planning between local PH and MH centers.*

Mental Health and Disaster Preparedness Planning

In 78% of reporting states, PH staff, MH staff and emergency preparedness coordinators interact regularly for disaster preparedness planning and, when necessary, during a disaster response (See Table 7). Half of respondents (51%) reported collaboration on disaster drills or exercises. Some respondents reported that state MH programs work through the American Red Cross or regional/community crisis response boards and coalitions. Nine respondents (22%) provided comments about coordination between mental health and disaster preparedness programs in their state, for example:

- *Lost capacity to organize and coordinate drills.*
- *Occasional coordination.*
- *Locally, varies by counties in this home rule state. At the state level, more emphasis and coordination has been possible with the PH Preparedness Unit hiring an emergency human services coordinator to focus full time on emergency human services issues and needs, this area is a priority for increasing work and resource development.*
- *Limited coordination at the state level and more coordination at the local level.*

Table 7. Prevalence of “regular” interaction among state disaster preparedness coordinators, public health staff, and state mental health staff under various scenarios*

Scenario	Number of Respondents Citing “Regular” Interaction (n=41)	%
Disaster preparedness planning	32	78
Disaster drills or exercises	21	51
Disaster response	32	78
Don’t know	2	5
Other	9	22

*Multiple responses allowed for this question.

Written PH emergency plans or protocols include MH surveillance in a third (34%) of responding states. In about half (54%), there is no provision for MH surveillance in PH protocols. For the remaining

responding states (12%), this information was either missing or unknown. Written MH emergency plans or protocols include MH surveillance in 27% of responding states. In 32%, there is no provision for MH surveillance in MH protocols. This information was missing or unknown for 41% of responding states.

A quarter (24%) of respondents reported that their state PH program has epidemiology staff with MH training who can assist with MH surveillance during a disaster (See Table 8). This information was unknown for 20% of respondents.

Table 8. Availability of epidemiology staff with mental health training in state public health programs

	Number of Respondents	%
Have epidemiologists with mental health training	10	24
Do not have epidemiologists with mental health training	23	56
Don't know	8	20
Total	41	100.0

Identification of vulnerable populations potentially at risk or in need of MH services during a disaster is performed by the MH agency in 73% of responding states and by the PH agency in 68% of responding states. Only one respondent reported that the state does not perform this service. Forty-one percent of respondents reported that other agencies, organizations and professionals identify vulnerable populations that may require MH services in the event of a disaster. These entities include other state agencies (e.g., child and family services, aging and rehabilitative services, and alcohol and drug abuse services), the American Red Cross, Medical Reserve Corps volunteers and licensed MH professionals, among others.

Disaster Response

MH agency staff members are *always* represented at state emergency operations centers (EOC) during a disaster response in 27% of responding states, *mostly* represented in 24% and not represented in the EOC in 22% (See Table 9). MH agency staff are *always* represented at the PH agency operations

center (AOC) in 12% of responding states, *mostly* in 10% and not represented in the AOC in 41% (See Table 10).

Table 9. Frequency of state mental health agency representation at state emergency operations center (EOC) during disaster response

Frequency of Mental Health Agency Representation at State EOC	Number of Respondents	%
Always represented	11	26.8
Mostly represented	10	24.4
Sometimes represented	4	9.8
Rarely represented	3	7.3
Not represented	9	22.0
Don't know	4	9.8
Total	41	100.0

Table 10. Frequency of state mental health agency representation at state public health agency operations center (AOC) during disaster response

Frequency of Mental Health Agency Representation at State Public Health AOC	Number of Respondents	%
Always represented	5	12.2
Mostly represented	4	9.8
Sometimes represented	8	19.5
Rarely represented	5	12.2
Not represented	17	41.5
Don't know	2	4.9
Total	41	100.0

All responding states indicated that it is *important* to assess changing needs for MH services following a disaster. Eighty-three percent felt that this was *very important* to do.

Assessing MH needs is reportedly done by a variety of entities during a disaster. Three quarters (76%) of respondents reported that the MH agency conducts MH needs assessments and half (49%) reported that the PH department does so. Twenty-nine percent of respondents reported that other entities also conduct MH needs assessments following a disaster, including American Red Cross

volunteers; Medical Reserve Corps behavioral health volunteers; state departments of aging, disabilities and family services; entities under contract to the Federal Emergency Management Agency (FEMA) or Substance Abuse and Mental Health Services Administration (SAMHSA); and hospitals and other care providers.

MH needs are reportedly assessed through a wide variety of federal, state, local and private mechanisms, including shelter surveillance (51% of responding states), crisis counseling hotlines (44%), Community Assessment for Public Health Emergency Response (CASPER) rapid assessment (17%), syndromic surveillance (10%), and CDC Web-based surveys (2%) or morbidity forms (2%). A tenth of state respondents reported that MH needs are not assessed, and another 15% did not know who, if anyone, performed post-disaster MH assessments. Half of respondents (51%) identified additional ways that post-disaster MH needs are assessed in their states, including for example:

- *Area surveillance by behavioral health teams.*
- *Local eyes and ears; mostly qualitative; depends on nature of emergency and local capacity.*
- *Information captured during preliminary damage assessment.*
- *Local community services boards and local MH services providers.*
- *Needs assessment survey developed by state PH agency or MH agency.*

MH data are also collected during intake at shelters (59% of responding states), medical dispensing sites (24%), decontamination sites (15%) and domestic violence shelters (10%), as well as in the immediate vicinity of the disaster site (22%). Responding states also reported that MH data are gathered during calls to crisis counseling hotlines (44%) and through population-based surveys (22%). A third of respondents (32%) mentioned additional data collection mechanisms, including, for example:

- *Enrollment and utilization data for behavioral health services.*
- *Red Cross information and hospitals.*
- *Family assistance centers, disaster recovery centers, disaster recovery forums and community resource fairs.*
- *Sites specifically set up to share information with those affected.*

Only 17% of state respondents reported use of standardized questions in disaster MH surveillance. Approximately 60% of responding states do not use standardized questions, and the

remainder (22%) did not provide information regarding the use of standardized questions (See Table 11).

Table 11. Use of standardized questions for post-disaster mental health needs assessment

Use of Standardized Questions	Number of Respondents	%
Standardized questions used	7	17.1
Standardized questions not used	24	58.5
Don't know	9	22.0
Missing response	1	2.4
Total	41	100.0

State MH agencies collect information about demand for post-disaster MH services in 73% of reporting states, and the state PH agency does so in 34%. In at least one state, both MH and PH agencies work together to gather this information. Local MH providers, volunteer organizations and other state agencies are also reportedly sometimes involved in such needs assessments. Demand for MH services is not assessed in 15% of responding states and, in 12%, respondents did not know if demand for MH services is assessed following a disaster.

Surveillance of MH needs among various types of workers responding to a disaster is an area of growing concern. Most states collect information on MH needs among certain disaster responder groups, including emergency responders (59%), recovery workers (54%), response contractors (37%), and volunteers (56%) (See Table 12). Six respondents were not aware of whether their state collected information on MH needs among disaster responders. A significant portion of respondents who were aware of whether their state collected this information noted that no mental health needs surveillance is conducted among disasters responders, ranging from 20% (who reported no surveillance of MH needs among emergency responders and volunteers) to 29% (who reported no surveillance on MH needs among contractors). Other entities reported as being involved in gathering MH needs data among the various categories of responders included employee assistance programs, trained members of Medical Reserve Corps units, American Red Cross workers, first responder organizations themselves, and other state agencies.

Table 12. Collection of information about mental health needs among various disaster responders (n=41)*

	Public Health Agency		Mental Health Agency		Other Agency		Not Done		Don't Know		Data Missing	
Responder Groups	n	%	n	%	n	%	n	%	n	%	n	%
Emergency responders	12	29.3	13	31.7	8	19.5	8	19.5	8	19.5	1	2.4
Recovery workers	10	24.4	13	31.7	6	14.6	9	22.0	9	22.0	1	2.4
Contractors	6	14.6	10	24.4	3	7.3	12	29.3	11	26.8	3	7.3
Volunteers	11	26.8	13	31.7	5	12.2	8	19.5	10	24.4	0	0.0

*Multiple responses allowed for this question.

Respondents were asked about the relative importance of gathering MH surveillance data for three specific purposes. Fully 100% reported that is *very important* (88%) or *somewhat important* (12%) to identify those in the community who may need MH services. All respondents also deemed it *very important* (73%) or *somewhat important* (27%) to identify increased prevalence among those using MH services. And all deemed it *very important* (83%) or *somewhat important* (17%) to determine the ongoing need for MH services post-disaster.

Half of responding states (49%) reported that volunteer services (e.g., Medical Reserve Corps) include individuals trained in disaster MH response *mostly* or *always*. Five percent reported not having volunteers trained in disaster MH, and 15% did not know.

When asked about barriers to conducting post-disaster MH surveillance, respondents reported that lack of funding (80%), lack of appropriate skills among staff (59%), compartmentalization of MH and PH within their state (56%) , lack of understanding about MH in the PH agency (39%), lack of understanding of surveillance in the state MH agency (34%), and lack of coordination between MH and PH (34%) were listed as barriers. Inadequate or non-standardized MH surveillance systems and instruments were also mentioned as other barriers, along with lack of planning for MH surveillance during disasters, and communication challenges.

If additional funding for state-based disaster MH surveillance were available, 49% of respondents reported that it would go to the MH agency, 27% to the PH agency, 12% to both PH and MH (a “joint effort”) and 10% did not know. One respondent noted that the disposition of any new funding would depend on the type of surveillance to be conducted: syndromic surveillance would be

the responsibility of the PH agency and outcomes-based surveillance the responsibility of the MH agency.

Thirty-three respondents (80%) answered an open-ended question about how they, as the State Epidemiologist, would use funding for MH surveillance in their state. Examples of common responses include the following:

- *Better surveillance systems, more staffing;*
- *Coordination between PH and MH to determine needs and methods available to increase surveillance;*
- *Create and implement a plan, provide training and do disaster drills, do more collaborative cross training and planning with more local and state level workers;*
- *Baseline assessment (prevalence and resources), gap analysis and planning (to close identified gaps);*
- *Expand the sample size for BRFSS and include the K6 screening tool. Improve mental health syndrome definitions in BioSense and expand use of BioSense.*

Disaster Recovery

Less than 20% of states reported having systems in place to collect data on long-term, post-disaster community health needs (See Table 13). Specifically, 17% reported being able to monitor the delivery/efficacy of disaster community MH services after an incident, and 15% reported being able to monitor the population to identify new MH needs emerging in the later stage post-disaster (e.g., late onset PTSD).

Table 13. Prevalence of long-term, post-disaster community mental health needs monitoring (n=41)

Type of Monitoring	Monitoring Performed		Monitoring Not Performed		Don't know	
	n	%	n	%	n	%
Monitoring the delivery/efficacy of disaster community MH services implemented after the incident	7	17.1	21	51.2	13	31.7
Monitoring the population to identify new needs that emerge in the later stage post disaster	6	14.6	21	51.2	14	34.1

Disaster-related MH effects are monitored through many different mechanisms in the aftermath of an emergency (See Table 14). The most common mechanism reported by respondents is a crisis-counseling hotline (34%), followed by shelter surveillance (27%), CASPER survey (12%), reporting by local contracted MH service providers (12%), syndromic surveillance (10%), CDC morbidity forms (5%), and FEMA Crisis Counseling Program (5%). Nearly a third of respondents (30%) indicated that post-disaster MH needs are not assessed in their state, and 17% did not know if such assessments occur. Other data sources mentioned by respondents include in-person crisis counseling programs, non-crisis counseling hotlines (including 211 calls and door-to-door counseling) and aging services department disaster case management program data.

Table 14. Methods for monitoring post-disaster related MH effects

Monitoring Method	Number Respondents (n=41)	%
Crisis counseling hotlines	14	34.1
Shelter surveillance	11	26.8
CASPER assessment	5	12.2
Reporting from contracted MH providers	5	12.2
Syndromic surveillance	4	9.8
CDC Morbidity forms	2	4.9
FEMA Crisis Counseling Program	2	4.9
Telephone survey	0	0.0
Web-based survey	0	0.0
MH needs not assessed	12	29.3
Don't know	7	17.1
Other	9	22.0

*Multiple responses allowed for this question.

Just over a third of respondents (37%) reported that their state uses data collected as part of a FEMA crisis counseling grant. However, even more (40%) did not know if their state uses FEMA crisis counseling data.

Thirty-four percent of respondents reported that, during the first year “recovery period” following a disaster, it is MH staff who review data on MH disaster impacts, while another 20% reported

that both MH and PH staff review this data jointly (Table 15) and 22% reported that such data analysis is not performed.

Table 15. Review of disaster-related, mental health data during the first year post-disaster “recovery period”

Party who reviews disaster-related mental health data in recovery period	Number Respondents	%
MH staff	14	34.1
Both MH and PH staff together	8	19.5
PH staff	1	2.4
Data not reviewed	9	22.0
Don’t know	6	14.6
Other	2	4.9
Missing response	1	2.4
Total	41	(100.0)

Response Evaluation and After-action Assessment

An after-action assessment or *hotwash* is common practice in public health following a disaster response. About half of assessment respondents reported that MH staff participate in this post-disaster review *always* (5%), *mostly* (22%) or *sometimes* (22%) (See Table 16). Another 39% of respondents reported that MH staff *rarely* (12%) or *never* (27%) take part in the hotwash. Finally, 12% did not know if MH staff participates in hotwash following the response phase of a disaster or did not answer this question.

Table 16. Frequency of mental health staff participation in public health hotwash following disaster response

Frequency of mental health staff participation in post-disaster hotwash	Number	(%)
Always	2	(4.9)
Mostly	9	(22.0)
Sometimes	9	(22.0)
Rarely	5	(12.2)
Never	11	(26.8)
Don't know	4	(9.8)
Missing data	1	(2.4)
Total	41	(100.0)

In half (51%) of responding states, MH staff *always* (12%) *mostly* (19.5%) or *sometimes* (19.5%) participate in the development of the state's after-action disaster report (See Table 17). In another 36% of responding states, MH staff either *rarely* (7%) or *never* (29%) participate.

Table 17. MH staff participation in the development of the state after action report

Frequency of MH staff participation in development of after-action report	Number Respondents	%
Always	5	12.2
Mostly	8	19.5
Sometimes	8	19.5
Rarely	3	7.3
Never	12	29.3
Don't know	5	12.2
Total	41	100.0

Discussion

Background Relations between MH and PH. This assessment confirmed great diversity in the configuration of MH and PH agencies across states. In only two responding states (5%) are PH and MH programs co-located administratively. Likewise, the level of collaboration between PH and MH varies among states and may only partially depend upon how the agencies are configured.

Each responding state reported having a large number of MH programs and services, which are often targeted toward specific population groups and administered by the MH department, PH department, a different agency altogether, or some combination. This diversity may directly affect collaboration among staff in PH and MH agencies, which ranges from frequent collaboration (29% of respondents) to no collaboration (2%), with most respondents falling somewhere in between.

Almost all MH agencies collect and analyze MH data, as do more than half of the responding PH agencies. Together, this level of activity suggests that at least some states have baseline data on the populations receiving services—an asset for post-disaster MH surveillance, but only a portion of the information needed to understand overall community mental health needs. Population-wide baseline MH data—beyond the number and types of services being provided—not only supports post-event data collection but also aids post-disaster resource and service allocation that is needs- and target-specific.

There is strong support among respondents for continuing to include MH in national surveys such as the NHIS and for integrating MH surveillance into state-based population surveys (e.g., BRFSS) and other state and local health surveys. This level of awareness and support suggests opportunities to promote the use of standardized MH questions in surveillance systems, thereby allowing for improved assessment of MH impacts attributable to emergencies.

Barriers to conducting MH surveillance, however, are significant, including perceived compartmentalization of PH and MH programs and limited staff skill sets. Recognizing these difficulties can help state and federal planners focus efforts to improve MH surveillance and coordinated service delivery; for example, through joint staff training and skill development and the creation of better tools for state-based surveillance. Funding limitations is another important barrier.

Only a small proportion of states reported local PH participation in MH service provision, administration or tracking. A number of states have few or no local PH departments, and, even in states

with local PH agencies, collaboration with state MH programs is rare. Thus, collaboration between MH and PH programs will likely be focused at the state level in most parts of the country.

MH and Disaster Preparedness Planning. Three quarters of states reported some level of interaction and collaboration between MH and PH for disaster preparedness planning and disaster response. Half also participate in joint drills and exercises. Collaboration between state MH programs and the American Red Cross was also mentioned by some states.

A third of reporting states have PH emergency preparedness plans or protocols that include MH surveillance, and a quarter have MH emergency preparedness plans or protocols addressing MH surveillance specifically. Nearly three quarters of MH agencies and two-thirds of PH agencies have provisions for identifying vulnerable populations that may need MH services as part of their disaster response efforts. In addition, many states have additional resources—volunteers, other state agency programs and trained, local MH professionals—that may be available during emergencies to identify populations needing MH services. These findings may prompt development of tools and training to help states use vulnerable population data to improve disaster planning and response capabilities to take best advantage of all resources at hand.

A third of responding PH departments indicated having epidemiology staff with MH training who could assist in disaster-related MH surveillance. Training for epidemiologists on the conduct of MH surveillance and utilization of MH surveillance data sources would build health department capacity for this critical service.

MH and Disaster Response. Representation of MH agency staff in the state EOC or PH AOC is uncommon among responding states. MH is *always* represented in the EOC in about a quarter of states and *always* represented in the AOC in 12% of responding states—just five states. Yet, MH representation undoubtedly increases the likelihood that decision-makers address MH concerns during an incident response.

Assessing changes in MH needs following a disaster is important to inform resource-allocation, especially for vulnerable populations who may already rely on state MH services. Among responding states, three quarters of MH agencies and half of PH agencies conduct some form of MH needs assessments. Such assessments may also be carried out by other agencies with program jurisdiction and by volunteer organizations, such as the American Red Cross.

Post-disaster MH needs assessments are most commonly performed as part of shelter surveillance (59%) and through crisis-counseling hotlines. MH data are also gathered at disaster sites, decontamination sites, domestic violence shelters and sites dispensing other forms of assistance. Other mechanisms, such as CASPER surveys, syndromic surveillance, and Web-based surveys, were mentioned at much lower frequencies. Data from all of these sources can be useful to inform decisions about post-disaster resource allocation.

Fewer than one in five respondents reported using standardized questions to assess MH needs following an emergency. Lack of standardized surveillance practices may impede collection of reliable and accurate data and hinder cross-state comparisons (especially in the event of a multi-state emergency). This serious gap can be addressed through CDC training for MH responders and others on the use of validated MH assessment tools.

According to respondents, MH agencies are predominantly responsible for collecting information about the demand for MH services (73%), although PH agencies also play a role in a third of responding states. Some respondents report that MH and PH staff are beginning to collaborate on this effort, a development that may support better utilization of response resources, more rapid understanding of needs and a more effective overall crisis response.

All respondents agreed that it is at least *somewhat important*—and usually *very important*—to gather MH surveillance data to identify community members who may need MH services, to document increased prevalence of those using MH services and to assess ongoing needs for such services in the wake of a disaster. A review of current post-disaster, MH surveillance practices could be the basis for developing recommendations about best practices. CDC support for such a review—including subsequent development of surveillance tools and recommended surveillance approaches—would expand and improve state assessment of new demand for MH services.

Because of the potential for work-related exposures, assessing and addressing the MH needs of disaster responders (including volunteers) is an important public health function and should be systematic and standardized. Federal Public Health Emergency Preparedness Capability 14 describes four public health functions related to protecting public health agency staff responding to an incident, including identifying “mental/behavioral health risks.”¹¹ About half of reporting states have at least some mechanisms to assess the MH needs of workers involved in disaster response, although the responsible entity varies among states; the MH agency, PH agency or another agency may gather these

data. Responses, however, suggest that occupational MH surveillance is inconsistent. More needs to be done to clarify the extent of surveillance and type of MH information gathered about workers and volunteers responding to disasters.

State and local disaster response volunteer organizations (e.g., Medical Reserve Corps) provide important services following major emergencies. However, less than half of responding states reported that volunteers include individuals trained in disaster MH response. There are opportunities to learn from states that have been successful in recruiting trained MH personnel to be part of their response resources.

States reported many barriers to conducting MH surveillance after a disaster. First among these is funding. Other important impediments include insufficient staff capability and lack of understanding and communication within and across agencies—essentially the same barriers noted above regarding pre-disaster MH surveillance.

Asked how they might employ additional funding for disaster MH surveillance, respondents cited ways to address the surveillance shortcomings and barriers noted above. Common themes among the responses include improving coordination between PH and MH programs around disaster response, enhancing surveillance systems, developing and using standardized tools, increasing staff and staff training, and creating or improving plans for MH surveillance for disaster response. Half of respondents noted that the state MH agency would likely direct the use of any new MH funding, while a quarter indicated that the state PH agency would probably direct its use. A quarter of respondents suggested shared or collaborative PH-MH leadership in determining the use of new MH funds.

Disaster Recovery. Based on assessment results, fewer than one in five states collect data on the delivery/efficacy of community MH services post-disaster. A similarly small proportion of states monitor the population to identify new MH needs that might emerge in the wake of a disaster. Yet these under-attended activities are essential to improve understanding about the MH impacts of disasters and to focus MH service delivery where it is needed most.

Where post-disaster surveillance is conducted, crisis-counseling hotlines and shelter surveillance are the most common data sources. Data from CASPER surveys, local MH service providers and other sources are currently less utilized. Just over a third of states reported using data collected as part of a FEMA crisis counseling grant—perhaps a result of grant restrictions that authorize support for MH services only in cases of presidentially declared disasters.

In about half of responding states, MH staff—either alone or in collaboration with PH staff—review data on disaster-related MH impacts during the yearlong post-event period. This longer-term, post-event MH assessment is not performed in nine responding states (22%), and respondents in six states (15%) did not know if this activity takes place or not. Post-event assessments can help a jurisdiction better understand disaster impacts and can improve planning and training for future incident responses.

Response Evaluation and After-action Assessment. Participation in an immediate post-event assessment or *hotwash* and development of a detailed after-action report are important to evaluate agency response activities and to identify areas needing improvement. They also offer a means for the broader response leadership to learn how PH and MH staff contributed to the response and how their contribution could be enhanced, perhaps with greater leadership support or improved coordination among responders. Yet, in only two responding states (5%) do MH staff *always* participate in the hotwash. In 44%, participation occurs *some* or *most* of the time, and in 27%, MH staff never participate in the hotwash. In just 12% of responding states do MH staff *always* participate in the development of an after action report, while in almost a third, they never do.

Limitations. While this assessment was directed to State Epidemiologists or their designee, respondents included epidemiologists as well as behavioral health and social work personnel. Some responses, therefore, may reflect a non-epidemiological point of view. In states where PH and MH agencies are separate, the PH respondent may be unaware of all MH response activities, giving an incomplete picture of state MH disaster response. Compared to other CSTE member assessments, this assessment also had an unusually high rate of *don't know* or *unknown* responses. Future CSTE member assessments addressing MH issues could benefit from formal inclusion of a MH program co-respondent.

The ten jurisdictions that did not respond to the assessment represent geographically and demographically diverse states, with high, medium, and low population densities. Many of these jurisdictions are vulnerable to multiple types of natural and manmade disasters each year, including (but not limited to) hurricanes, blizzards, flooding, forest fires and chemical spills. Thus, the results of this assessment may under- or overestimate the current level of MH surveillance in disaster response in the United States.

Conclusion and Recommendations

This assessment identified areas of collaboration between PH and MH, but also confirmed that much work is needed to increase surveillance for MH needs during disaster response and recovery. Results indicate opportunities to strengthen relationships between MH and PH staff around disaster planning, response and recovery. The recommendations listed below build on assessment findings and are addressed to state PH epidemiologists, to CSTE as a convening body for epidemiologists, and to CDC as the country's national PH leader.

One broad goal reflected in the recommendations is development of state-level guidance for PH MH surveillance that captures the MH needs of both individuals and communities in times of crisis. Ideally, such a surveillance protocol would be developed in concert with, and be responsive to, the needs and priorities of the state MH and PH officials who will implement it and be responsible for acting on its findings. Another broad goal is for PH stakeholders to engage MH officials directly and identify areas of shared interest.

Recommendations for State PH and MH Programs:

- Increase collaboration between MH and PH prior to emergencies through communication, joint planning and training. Build on existing relationships and channels of communication or create new ones as needed.
- Identify surveillance goals, from each agency's perspective, during and after emergencies and use that information to work toward common objectives.
- Create opportunities to exercise and drill with partner organizations, and evaluate the experience.
- Include standardized, validated MH questions in national and state-based surveys used to assess MH needs.
- Increase collaboration between MH programs, PH programs and emergency management personnel through regular engagement in all phases of emergency incident planning, response and recovery.
- Meet jointly with Medical Reserve Corps programs and other partners (e.g., American Red Cross Chapters) to identify and recruit interested MH professionals.
- Consider the guidance and training offered by the National Institute for Occupational Safety and Health (NIOSH), Emergency Responder Health Monitoring and Surveillance system, as it develops programs to address Federal Public Health Emergency Preparedness Capability 14 requirements. (Perhaps most appropriate for PH preparedness programs.)
<http://cdc.train.org/DesktopModules/eLearning/CourseDetails/CourseDetailsForm.aspx?courseId=1045755>

- Invite and encourage the active participation of appropriate state MH officials in PH hotwash assessments and in the development of after-action incident reports.
- Participate in any CSTE disaster mental health surveillance workgroup or sub-committee (See below).
- Encourage state PH agencies to join the Disaster Epidemiology Community of Practice (DECoP) developed by CDC's National Center for Environmental Health.

Recommendations for CSTE:

- Work with states, CDC and other partners (e.g., American Red Cross, FEMA, SAMHSA, etc.) to convene a disaster mental health surveillance workgroup or sub-committee.
- Identify examples of successful PH-MH crisis collaboration from states with substantial disaster experience and make this information available to others.
- Collect, publish, and disseminate 'good practices' for collecting mental health surveillance during disaster events.
- Identify Medical Reserve Corps programs that have been successful in recruiting, training and supporting MH personnel to serve in times of crisis.
- Evaluate and promote the use of standardized, validated tools to gather accurate and reliable MH disaster surveillance data.
- Share all newly developed MH tools and materials through the DECoP.

Recommendations for CDC:

- Work with states to create/validate standardized questions for population-based MH assessments.
- Develop MH surveillance tools and training to guide state MH and PH personnel during disaster planning, response and recovery.
- Make MH surveillance training available to responders, contractors and volunteers through the NIOSH Emergency Responder Health Monitoring and Surveillance system guidance, and offer it to state PH/MH agencies on a regional basis.
- Leverage CDC-facilitated training to increase the joint involvement of PH and MH agencies during crisis response.
- Create epidemiology training opportunities addressing MH issues during emergencies and disasters.
- Create tools and other resources for assessing the effectiveness of disaster MH surveillance on a state and regional level.

- Participate in the CSTE disaster mental health surveillance workgroup or sub-committee.
- Provide technical assistance and resources to states (e.g., Epi Aides) to support a range of disaster MH efforts.
- Share all tools and materials through the DECoP.

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Appendices

Appendix A

Disaster Mental Health Surveillance Focus Group Questions

The following questions were discussed via 1.5 hour-long conference calls. Ten states participated in the focus group sessions.

1. Are those responsible for mental health (MH) in your state part of a stand-alone MH department/agency or part of your public health (PH) department/agency?

Follow-up questions:

- Are you looking at any relationship between behavioral health and chronic diseases?
- Do states conduct any routine or emergency surveillance on MH or are there statistics on the prevalence of MH in the community?
- Would it be worthwhile if surveillance was done for a specific region where a disaster were to occur to know how many people are at risk of mental health issues?

2. How do the state epidemiologists, preparedness coordinators, and MH staff interact/coordinate during a disaster response? How are the local health departments involved?

Follow-up questions:

- A significant proportion of those who seek services after a disaster are likely those who had existing problems. Would it be helpful to do further studies of this?
- To what extent would it help, policy-wise, if the surveillance in MH had some measures of time lost due to illness (i.e., missed work days)? As a result of Gulf States survey, population-based data have allowed the CDC to get this type of information via phone interview.
- Has your state employed a CASPER investigation?
- Was any focused outreach provided for MH needs of responders?

3. How are MH needs assessed during disaster response in your state? Does your state use a set of standardized MH questions, or are data gathered during intake at shelter sites, etc.?

Follow-up questions:

- What types of mental health questions do incident commanders or emergency managers have that they ask ESF6 or ESF8?
- Are the ground teams only responding to behavioral health issues or do they collect any surveillance information?

- Have any people on the PH staff been trained in MH?
- Do disaster behavior response teams only respond to acute issues or general MH concerns in impacted communities?
- Are there tools for data-gathering of routine data on MH between events (baseline data) or just emergency event specific?
- Does any of your epidemiology staff have mental health training that could assist in enhanced mental health surveillance?

4. If funding for state-based disaster MH surveillance were available, who in the state would lead the effort? Does your state have the infrastructure to support such surveillance?

Follow-up question:

- Does the state play a role or have any ability to be able to bring some level of standardization in these local health departments?

5. What are the **barriers** to conducting MH surveillance in your state? Consider funding, skill set of staff, lack of understanding or appreciation of MH, compartmentalization of MH and PH in your state, and other issues.

Follow-up Question:

- Would long-term surveillance fall to the PH or human services agency?

6. Are there other related issues you would like to discuss?

Issues raised:

- Sharing of data among first responders, county emergency management staff, law enforcement officials and public health officials is needed to locate those with potential behavioral health conditions.
- Collecting information at a shelter or in rural areas must be done in a timely manner to determine if clients with mental health conditions are being cared for.
- There is also a need for mental health surveillance among first responders and other emergency management staff.

Appendix B

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Background and Definition of Mental Health

The immediate objective of mental health surveillance is to identify population-specific needs for treatment/rehabilitation services, guide planning and provision of such services, and evaluate their effectiveness. The broader and longer-term objective of mental health surveillance, in general, is to obtain population-specific information that can be used to prevent mental illness and promote well-being.

The Council of State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC) Division of Behavioral Surveillance are collaborating on a project to better understand mental health surveillance for public health response to disasters. In recent years, there has been an increased concern about wide-scale disasters, both natural and human caused, and their impact on the mental health of the affected population. For this assessment, "mental health" includes a range of psychological (e.g. depression, anxiety, PTSD, suicide, etc), emotional (e.g. grief, fear, anger, loss of sleep, inability to concentrate, etc) or behavioral (e.g. substance abuse or misuse, domestic violence, gambling or other addictions) responses that may be felt by those affected by a disaster.

Instructions

The objective of this assessment is to identify the relationship between public health (PH) and mental health (MH) during an emergency, including existing surveillance capacity, utilization and barriers. Because mental health surveillance-related activities may be dispersed among various state government agencies, it may require collaboration within your health department to provide the information needed for this assessment (estimated time to complete is 30-45 min). Please base your responses to the questions below on the disaster preparedness planning, exercising and responses to local, state or federal declared emergencies in your state.

The result of this project will be to create guidance and tools for improved mental health response following a disaster. This assessment represents an initial step in understanding the relationship between public health and mental health in the states.

The assessment is divided into five components:

1. Background relations (between PH and MH, outside of any disaster or planning);
2. Disaster preparedness planning (as they relate to PH and MH);
3. Disaster response;
4. Disaster recovery; and
5. Evaluation

CSTE intends to share de-identified assessment results with CDC's Division of Behavioral Surveillance. CSTE will not release state-specific information in any reports unless otherwise requested of, and approved by the state(s).

If you have questions or difficulties in completing the online questionnaire please contact:

Erin Simms
CSTE National Office
Email: esimms@cste.org
Phone: (770)458-3811
Fax: (770)458-8516

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Demographic Information

***1. Please provide respondent information below.**

Name of person submitting assessment:

Title:

Name of agency:

State:

Email address:

2. If the responses to this survey include information from other people, please list their name(s), title and agency:

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part I. Background Relations (Between PH and MH)

This section is intended to identify the general relationship between PH and MH agencies in your state.

3. In general, what is the affiliation between public health (PH) and mental health (MH) in your state?

- ☐ PH and MH are housed in the same department or agency and same division.
- ☐ PH and MH are housed in the same department or agency, but in a separate division.
- ☐ PH and MH are housed in different departments or agencies.
- ☐ Don't know.
- ☐ Other (please specify):

4. Which of the following services in your state, if any, are administered through a MH, PH or other agency? Check all that apply and list others:

	MH agency	PH agency	Other agency (please specify below) *
A. Alcohol and drug use, prevention, care and treatment	☐	☐	☐
B. Tobacco control program	☐	☐	☐
C. Suicide prevention	☐	☐	☐
D. Community MH services	☐	☐	☐
E. Children, youth, maternal and family services	☐	☐	☐
F. Seniors and aging services	☐	☐	☐
G. Mental retardation/Developmental disabilities	☐	☐	☐

* **Other agency** (Please specify the names of other agencies that provide any of the above services along with the letter A – G of the service(s) they provide.)

5. In your opinion, what is the level of collaboration between PH and MH in your state?

No collaboration	Minimal	Some	Frequent collaboration
☐	☐	☐	☐

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part I. Background Relations (Between PH and MH) (continued)

6. Who in your state collects and analyzes MH data? (Check all that apply)

- ☐ Public health agency
- ☐ Mental health agency
- ☐ Not done
- ☐ Don't know

Other agency (please specify)

7. Who in your state, if anyone, utilizes any of the following surveillance systems for MH data? (Check all that apply.)

	PH agency	MH agency	Other agency (please specify below) *	Not done	Don't know
Behavioral Risk Factor Surveillance System (BRFSS)	☐	☐	☐	☐	☐
Selected Metropolitan/Micropolitan Area Risk Trends (SMART BRFSS)	☐	☐	☐	☐	☐
BioSense (chief complaint data reported by emergency departments)	☐	☐	☐	☐	☐
National Health Interview Survey (NHIS)	☐	☐	☐	☐	☐
National Health and Nutrition Examination Survey (NHANES)	☐	☐	☐	☐	☐
National Survey on Drug Use and Health (NSDUH)	☐	☐	☐	☐	☐
Other syndromic surveillance systems (e.g., ESSENCE, NC-Detect, etc.)	☐	☐	☐	☐	☐

* Other (please specify):

Disaster Mental Health Surveillance Assessment for State Epidemiologists

8. How are MH data from any of the above surveillance systems currently used in your state? (Check all that apply.)

- ☐ Baseline prevalence of MH
- ☐ Identify vulnerable populations based on use of MH services
- ☐ To determine the needs for MH services
- ☐ For funding projections
- ☐ For policy, planning or decision-making
- ☐ Don't know
- ☐ Other (please specify)

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part I. Background Relations (Between PH and MH) (continued)

9. In your opinion, should MH surveillance in your state be (Check all that apply):

- ☐ Integrated into state and local level health surveys
- ☐ Integrated into existing state-based population survey (e.g. BRFSS)
- ☐ Integrated into existing national surveys (NHIS, NSDUH, etc.)
- ☐ Integrated into existing notifiable disease surveillance systems
- ☐ A stand-alone survey

Please add any additional comments to the above (optional):

10. What are the barriers to conducting MH surveillance in your state? (Check all that apply.)

- ☐ Funding
- ☐ Skill set of staff
- ☐ Lack of understanding/appreciation of MH within public health agency
- ☐ Lack of understanding/appreciation of surveillance within MH agency
- ☐ Silos between MH and PH in the state
- ☐ Lack of coordination between PH and MH in the state.
- ☐ Other (please specify)

11. How are the local public health departments involved with MH programs or operations? (Check all that apply)

- ☐ Participate in MH program administration at the local level
- ☐ Participate in MH tracking and surveillance at the local level
- ☐ Are responsible for MH programs or services in the local area
- ☐ Collaborate with MH in disaster planning
- ☐ There is no involvement of local PH in MH
- ☐ Don't know

☐ Other (please specify, or use this box to add additional comments):

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part II. Mental Health and Disaster Preparedness Planning

This section focuses on the coordination and involvement with MH staff on planning for emergency response in your state.

12. Do PH staff, preparedness coordinators, and MH staff interact/coordinate regularly for any of the following: (Check all that apply)

- ☐ Disaster preparedness planning
- ☐ Disaster drills or exercises
- ☐ During a disaster response
- ☐ Don't know
- ☐ Other (please specify)

13. Does the written PH plan/protocol include MH surveillance following a disaster?

- ☐ Yes
- ☐ No
- ☐ Don't know

14. Does the written MH plan/protocol include MH surveillance following a disaster?

- ☐ Yes
- ☐ No
- ☐ Don't know

15. Does any of your epidemiology staff have MH training that could assist in mental health surveillance during a disaster?

- ☐ Yes
- ☐ No
- ☐ Don't know

Disaster Mental Health Surveillance Assessment for State Epidemiologists

16. Who in your state identifies vulnerable populations that may be at risk or in need of MH services during a disaster? (Check all that apply.)

- ☐ Public health agency
- ☐ Mental health agency
- ☐ Not done
- ☐ Don't know
- ☐ Other agency (please specify)

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part III. Disaster Response

This section focuses on the roles and efforts of MH during the response phase, following a disaster.

17. Are MH agency staff represented at the State Emergency Operations Center (EOC) during a disaster response?

- ☐ Yes, always
☐ Yes, mostly
☐ Yes, sometimes
☐ Yes, rarely
☐ No
☐ Don't know

18. Are MH agency staff represented at the public health Agency Operations Center (AOC) during a disaster response?

- ☐ Yes, always
☐ Yes, mostly
☐ Yes, sometimes
☐ Yes, rarely
☐ No
☐ Don't know

19. In your opinion, how important is it to assess changes in MH needs for services following a disaster?

Not important	Of little importance	Somewhat important	Very important
☐	☐	☐	☐

20. Who in your state assesses MH needs during a disaster? (Check all that apply.)

- ☐ Public health agency
☐ Mental health agency
☐ Not done **If "Not done", skip to Question 23**
☐ Don't know
☐ Other agency (please specify)

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part III. Disaster Response (continued)

21. How are MH needs assessed during disaster response in your state? (Check all that apply)

- ☐ Community Assessment for Public Health Emergency Response (CASPER) survey
- ☐ Syndromic surveillance
- ☐ Morbidity forms (from CDC)
- ☐ Shelter surveillance, including Medical Special Needs Shelter surveillance
- ☐ Telephone survey
- ☐ Web-based survey
- ☐ Mental health needs not assessed
- ☐ Crisis counseling hotlines
- ☐ Don't know
- ☐ Other (please specify)

22. Are MH data also gathered during intake at the following locations that are specific to the disaster? (Check all that apply)

- ☐ Site of the event
- ☐ Shelter sites
- ☐ Decontamination sites
- ☐ Medical dispensing points of distribution
- ☐ Domestic violence shelters
- ☐ Crisis counseling hotlines
- ☐ Population-based data gathering (involving directly exposed and/or those not directly exposed)
- ☐ Don't know
- ☐ Other locations (please specify)

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part III. Disaster Response (continued)

23. Does your state use a set of standardized MH questions as part of surveillance to assess MH needs following a disaster?

- ☐ Yes
☐ No
☐ Don't know

24. Who in your state collects information about the level of demand for MH services following a disaster? (Check all that apply.)

- ☐ Public health agency
☐ Mental health agency
☐ Not done
☐ Don't know
☐ Other agency (please specify)

25. Who in your state collects information about MH needs among the following disaster responder groups? (Check all that apply.)

	Public health agency	Mental health agency	Other agency (please specify below)	Not done	Don't know
Emergency responders	☐	☐	☐	☐	☐
Recovery workers	☐	☐	☐	☐	☐
Contractors	☐	☐	☐	☐	☐
Volunteers	☐	☐	☐	☐	☐

Please list other agency:

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part III. Disaster Response (continued)

26. In your opinion, how important should MH surveillance data following a disaster be to your state for:

	Not important	Of little importance	Somewhat important	Very important
Identifying those in the community who may need MH services	☐	☐	☐	☐
Identifying increased numbers above the baseline prevalence of those using MH services	☐	☐	☐	☐
Determining the ongoing need for MH services post-disaster	☐	☐	☐	☐

27. What barriers are there in your state to conducting MH surveillance after a disaster? (Check all that apply)

- ☐ Funding
- ☐ Skill set of staff
- ☐ Lack of understanding/appreciation of MH within public health agency
- ☐ Lack of understanding/appreciation of surveillance within the MH agency
- ☐ Compartmentalization of MH and PH in the state
- ☐ Lack of coordination between PH and MH in the state
- ☐ Other (please specify):

28. Does state and/or local volunteer services (e.g. Medical Reserve Corps) include individuals who are trained in disaster MH response?

- ☐ Yes, always
- ☐ Yes, mostly
- ☐ Yes, sometimes
- ☐ Yes, rarely
- ☐ No
- ☐ Don't know

Disaster Mental Health Surveillance Assessment for State Epidemiologists

29. If funding for state-based disaster MH surveillance were available, who in the state would lead the effort?

- ☐ MH agency
- ☐ PH agency
- ☐ Don't know
- ☐ Other (please specify)

30. If you had funding for MH surveillance in your state, how would you, as the state epidemiologist, want to see the money used?

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part IV. Disaster Recovery

This section focuses on the recovery period after the response phase of a disaster. This can be a longer-term period for MH services.

31. Does your state have a system in place to be implemented during the recovery phase after a disaster to collect data on long term post-disaster community MH needs and including:

	Yes	No	Don't know
Monitoring the delivery/efficacy of disaster community MH services implemented after the incident?	☐	☐	☐
Monitoring the population to identify new needs (e.g. late onset PTSD) – that may emerge in later stage post disaster?	☐	☐	☐

32. How are post-disaster related MH effects monitored in your state? (Check all that apply.)

- ☐ Community Assessment for Public Health Emergency Response (CASPER) survey
- ☐ Syndromic surveillance
- ☐ Morbidity forms (from CDC)
- ☐ Shelter surveillance, including Medical Special Needs Shelter surveillance
- ☐ Telephone survey
- ☐ Web-based survey
- ☐ Mental health needs not assessed
- ☐ Crisis Counseling hotlines
- ☐ Don't know
- ☐ Not done
- ☐ Other (please specify)

33. Does your state use data that are collected as part of a FEMA crisis counseling grant?

- ☐ Yes
- ☐ No
- ☐ Don't know

Disaster Mental Health Surveillance Assessment for State Epidemiologists

34. During the first year after a disaster (e.g. the recovery period) who in your state reviews data on MH impacts from the event?

- ☐ PH staff
- ☐ MH staff
- ☐ Both together
- ☐ Neither/Not Done
- ☐ Don't know
- ☐ Other (please specify)

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Part V. Evaluation

This section focuses on after-action discussions and evaluations of your state's response to a disaster and the inclusion of MH staff in the process.

35. Do MH staff participate in the PH hot wash following the response phase of a disaster?

- ☐ Yes, always
- ☐ Yes, mostly
- ☐ Yes, sometimes
- ☐ Yes, rarely
- ☐ No
- ☐ Don't know

36. Do MH staff participate in the development of the state After Action Report following a disaster?

- ☐ Yes, always
- ☐ Yes, mostly
- ☐ Yes, sometimes
- ☐ Yes, rarely
- ☐ No
- ☐ Don't know

Disaster Mental Health Surveillance Assessment for State Epidemiologists

Thank you!

Thank you for completing this assessment! We appreciate your time and participation.

If you have any questions, please contact Erin Simms (esimms@cste.org) at the CSTE National Office.