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**MOTHERS IN CRISIS:
REDEFINING AND EXPANDING THE DISASTER LAW
FRAMEWORK TO ADDRESS PREGNANT WOMEN’S
HEALTH CARE NEEDS**

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MOTHERS IN CRISIS: REDEFINING AND EXPANDING THE DISASTER LAW FRAMEWORK TO ADDRESS PREGNANT WOMEN'S HEALTH CARE NEEDS

Nancy Zambrana *

ABSTRACT

The management of maternal health care under current United States disaster law remains inadequate in its ability to properly, effectively, and quickly address the needs of pregnant women. Current federal, state, and local emergency plans are not required to conform to a particular standard in their care of pregnant women and most fail to even mention the needs of pregnant women in a meaningful or practical manner. In 2005, Hurricane Katrina shed light on the particular vulnerability of pregnant women in the midst of a disaster. It ignited administrative and legislative reform due to the shortcomings of federal and state governments in their management of victims' health care. As evidenced by the recent Flint Water Crisis, however, systemic failures in government plans and policies continue to prevent pregnant women from accessing satisfactory and speedy health care in the face of an emergency.

To tackle the current shortcomings of disaster law in addressing the needs of pregnant women, this Comment proposes a two-pronged approach. The first prong requires working within the current legal framework to recognize that maternal health is a health care as well as a public health matter. Encouraging the use of emergency declarations under the Public Health Service Act (PHSA), in addition to declarations under the Stafford Act, will allow for quicker federal government involvement and access to additional sources of funding. This is particularly significant for pregnant women who require immediate care and assistance. The second prong requires expanding the current disaster law framework through the introduction of new legislation. By using the Flint Water Crisis to shed light on the shortcomings of the legal and regulatory framework to address pregnant women's health care needs, Flint can serve as an impetus for legislative reform as Hurricane Katrina once did.

The first part of this Comment describes the impact of inadequate disaster planning and management, under the current legal framework, on the health care needs of pregnant women in two tragedies: Hurricane Katrina and the Flint Water Crisis. In times of disasters, pregnant women face an increase in pregnancy-related health complications that require states to be prepared to deal with their particularized health care needs. Although Flint occurred almost a decade later

than Hurricane Katrina, the legislative and policy reforms set forth after Katrina were not sufficient to lead to proper planning and care of the women in Flint.

The second part of this Comment argues that one of the potential solutions to addressing the maternal health care inadequacies is that they should not be viewed solely as a health care matter but as a public health priority as well. The “health care classification” focuses on individualized delivery of medical care while the public health system works to address health issues in populations rather than in individuals. This Comment seeks to broaden the scope of the disaster law framework to address maternal health issues by extending it into the public health field. Utilization of the Stafford Act’s health care classification in conjunction with the PHSA’s “public health classification” can be used to fill in the gaps left by current United States’ disaster plans to address the needs of vulnerable communities like pregnant women.

Lastly, this Comment proposes reform to the emergency and disaster law framework that would result in the formation of a federal standard regarding preparation and response protocols to addressing maternal health concerns. The third part of this Comment describes the legislative and administrative changes to disaster law and health policy in the aftermath of Hurricane Katrina and argues that the recent Flint Water Crisis should serve as a similar impetus for legislative and policy change to the management of maternal health issues in times of disaster. The lack of emergency preparation and response to quickly and effectively protect pregnant women and infants from lead contamination in their main water source highlights systemic failures in the United States disaster law framework. While recommendations have been made from federal agencies and NGOs, no legally binding standard has been established that would require states to model their emergency plans on a minimum standard of care. This standard should treat maternal health as an individualized health care issue as well as a public health matter. Prioritizing the care of pregnant women and mothers is a human issue that affects the entire population and must be treated and addressed as such.

I. INTRODUCTION

The occurrence of natural and man-made emergencies and disasters¹ undoubtedly lead to turmoil. Incidents such as September 11th, Hurricane Katrina, and the Deepwater Horizon oil spill are etched into our memories

¹ See NAN D. HUNTER, THE LAW OF EMERGENCIES: PUBLIC HEALTH AND DISASTER MANAGEMENT 194 (2009) (clarifying that the major difference between a disaster declaration and an emergency declaration is the amount of federal assistance made available to states; a disaster declaration results in the availability of many more forms of financial assistance). The terms “emergency” and “disaster” will both be used concurrently throughout this Comment.

because of the profound consequences they have on human life. Survivors are left to deal with physical and emotional harm, loss of community, finding temporary shelter and long-term housing, and an interruption in their financial and economic sources. As expected, hospitals, clinics, and other health care facilities become flooded with medical emergencies. The health care concerns arising out of the occurrence of disasters are particularly complex in their scope, the short-term and long-term effects they have on individuals and communities, and the legal obligations imparted on government and private actors to adequately prepare and respond to them within a federalized system.

Disasters often lead to disruptions of access to health care due to the severity of their effect on a community. However, they do not affect all communities equally. While disasters do not discriminate in *whom* they affect, there is a discriminatory pattern in *how* they affect individuals and communities.² Poor and medically underserved communities often carry an inequitable amount of the burden resulting from disasters because of preexisting obstacles to obtaining accessible, reliable, and quality health care.³ The medical community has found that disasters may “catalyze new or exacerbate existent disparities in health and health care”⁴ within an affected population.

One group that is specifically vulnerable⁵ to health care inadequacies in the face of emergencies and disasters are mothers and pregnant women. Pregnant women, newborns, and infants are disproportionately harmed by the occurrence of an emergency or disaster⁶ and most United States’ emergency plans do not incorporate the specialized needs of mothers and children. The lack of access to food, clean water, health care, and medication can severely increase pregnancy-related morbidities.⁷ Pregnant women suffer from a

² See Jennifer R. Davis et al., *The Impact of Disasters on Populations with Health and Health Care Disparities*, 4 DISASTER MED. & PUB. HEALTH PREPAREDNESS 30 (2010) (arguing that health care disparities post-disasters must be contextualized by pre-existing factors such as race, income, and sex).

³ *Id.* at 30.

⁴ *Id.*

⁵ See Jane M. Henrici, et al., *Women, Disasters, and Hurricane Katrina*, <http://www.iwpr.org/initiatives/katrina-the-gulf-coast#sthash.ts1vu89J.dpuf> (last visited May 4, 2016) (stating that women, and particularly pregnant women, often suffer disproportionately in comparison to most men when disaster strikes due to multiple factors; these factors include limited access to resources, a higher likelihood of poverty in women than in men, and women “share a greater responsibility for child care than men and more often than men have the home as their workplace, with residences often of less stable construction than commercial or public buildings”).

⁶ *Id.*

⁷ AM. COLL. OF OBSTETRICIANS AND GYNECOLOGISTS, COMM. ON HEALTH CARE FOR UNDERSERVED WOMEN, COMMITTEE OPINION NO. 457, PREPARING FOR DISASTERS: PERSPECTIVES ON WOMEN 1 (2010), <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/co457.pdf?dmc=1&ts=20160518T1922303176>.

disruption of prenatal care, an increase in the incidence of preterm delivery, an increase in complications such as decreased birth weights and small head circumferences, and difficulties with establishing and maintaining lactation.⁸ These health difficulties can have significant short-term and long-term effects on mothers, children, and families.

II. THE IMPACT OF EMERGENCIES AND DISASTERS ON MATERNAL HEALTH CARE

A. Hurricane Katrina

i. Hurricane Katrina and Maternal Health Care

Of the many lessons learned, “Hurricane Katrina demonstrated the critical need for having plans in place for vulnerable populations that have medical and physical limitations.”⁹ In particular, Hurricane Katrina highlighted the extreme vulnerability of women, infants, and children during disasters.¹⁰ United States emergency and disaster preparedness plans “seldom included the needs of mothers and children during the acute or recovery phases of a disaster.”¹¹ In evaluating the impact on mothers and children, the Centers for Disease Control and Prevention (CDC) found that the fourteen FEMA designated counties and parishes affected by Hurricane Katrina had “a significant increase in the number of women who received late or no prenatal care.”¹² The American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women found significant increases in inadequate prenatal care in designated counties in Mississippi (exhibited an increase from 2.3% to 3.3%) and in Louisiana (exhibited an increase from 2.3% to 3.9% among Hispanic women).¹³

⁸ *Id.*

⁹ Dan Sosin, *Emergency Response 10 Years After Katrina*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION PUB. HEALTH MATTERS BLOG (Aug. 28, 2015), <http://blogs.cdc.gov/publichealthmatters/2015/08/emergency-response-10-years-after-katrina/> (underscoring one of the lessons learned from Hurricane Katrina when Dr. Sosin served as the U.S. Public Health Service’s liaison between public health and medical incident command staff at the state and Federal levels).

¹⁰ AM. COLL. OF OBSTETRICIANS AND GYNECOLOGISTS, COMM. ON HEALTH CARE FOR UNDERSERVED WOMEN, *supra* note 7.

¹¹ *Id.*

¹² *Id.*

¹³ *See id.* (providing the statistics). *See also* Brady E. Hamilton et al., *The Effect of Hurricane Katrina: Births in the U.S. Gulf Coast Region, Before and After the Storm*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION NAT’L VITAL STATISTICS REP., Aug. 28, 2009, at 7,

An increase in pregnancy-related health complications was also discovered in the aftermath of Hurricane Katrina. Women who “experienced three or more severe traumatic situations during the hurricane, such as feeling as though one's life was in danger, walking through flood waters, or having a loved one die, were found to have a higher rate of low birth weight infants and an increase in preterm deliveries”¹⁴ Pregnant women with high hurricane exposure had a “more than three-fold increased risk of having low birth weight infants” and “more than two-fold increased risk of having preterm birth infants.”¹⁵

Several impediments within the health care delivery system post-Katrina also contributed to further complications for pregnant women. Many critically ill newborn babies and pregnant women were evacuated to hospitals in neighboring states.¹⁶ “Some of the fragile newborns arrived without their mothers, and some women delivered on their way to the facility;”¹⁷ the occurrences of mother-child separations only caused further anxiety and distress in an already difficult situation. Those who arrived safely to a health care facility often arrived without records, medications, or prenatal vitamins.¹⁸

The maternal health issues resulting from Hurricane Katrina affected women on an individual basis and simultaneously fall within the scope of a public health issue as well. Although health care access concerns – such as a pregnant women’s inability to reach a hospital safely or arriving to the hospital without medical records – are routinely individualized care problems, they are also part of a greater system failure that cultivates these shared, common difficulties affecting women as a whole population. The lack of hospital, federal, state, and local emergency plans to accommodate and adequately address the needs of pregnant women during Hurricane Katrina was eye opening. Many federal agencies and non-governmental organizations sought to address this shortcoming by providing information and guidance on how best to address maternal health care issues in preparation for and in the aftermath of disasters.

http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_02.pdf (providing additional statistics and analysis).

¹⁴ AM. COLL. OF OBSTETRICIANS AND GYNECOLOGISTS, COMM. ON HEALTH CARE FOR UNDERSERVED WOMEN, *supra* note 7, at 69-72. *See also* Xu Xiong et al., *Exposure to Hurricane Katrina, Post-Traumatic Stress Disorder and Birth Outcomes*, 336 AM. J. MED. SCI. 111 (2008) (analyzing the effects of such traumatic experiences).

¹⁵ Xiong et al., *supra* note 14.

¹⁶ Rama Lakshmi, *Group Urges Disaster Planning for Pregnant Women, Babies*, WASH. POST (Aug. 17, 2006), <http://www.washingtonpost.com/wp-dyn/content/article/2006/08/16/AR2006081601516.html>.

¹⁷ *Id.*

¹⁸ *Id.*

ii. Federal Response to Maternal Health Issues in Hurricane Katrina

The CDC's Division of Reproductive Health took the lead on the federal response to the maternal health issues arising out of Hurricane Katrina. The Division of Reproductive Health focused its efforts on working with local, state, and federal partners to develop guides and informational toolkits for addressing the health needs of women for emergency and disaster preparedness and response.¹⁹ Specifically, the Reproductive Health Assessment After Disaster Toolkit was developed in order to assess the reproductive health needs of women affected by natural and man-made disasters.²⁰ The Disaster Toolkit addressed issues such as infant care, health and risk behaviors, and safe motherhood; the data collected was used to promote evidence-based local programs and services for women and their families.²¹ The Division of Reproductive Health also published a guide on identifying "common post-disaster epidemiologic indicators" for pregnant women, post-partum women, and infants.²² Similar to the Disaster Toolkit, this guide was meant to build scientific knowledge through data collection for implementation into programs and services directly addressing the needs of this at-risk community.

iii. NGO Response to Maternal Health Issues in Hurricane Katrina

The White Ribbon Alliance for Safe Motherhood was one of the most vocal non-governmental organizations to shed light on the failure of U.S. emergency preparedness programs to address women's health issues and particularly, the absence of policies regarding maternal health care. In response to the shortcomings exposed during Hurricane Katrina, members of the Alliance conducted an extensive review of state and federal emergency plans existing in 2006 and found a severe lack of attention to the health care needs of women.²³

¹⁹ See *Emergency Preparedness and Response: Pregnant Women and Newborns*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/reproductivehealth/emergency/> (last visited May 20, 2016) (detailing the CDC's Division of Reproductive Health response).

²⁰ See *Reproductive Health Assessment After Disasters: A Toolkit for U.S. Health Departments*, UNC CTR. FOR PUB. HEALTH PREPAREDNESS, <https://nciph.sph.unc.edu/RHAD/> (last visited May 20, 2016) (providing an introduction and history of the kit).

²¹ *Id.*

²² See U.S. CTRS. FOR DISEASE CONTROL & PREVENTION, HEALTH INDICATORS FOR DISASTER-AFFECTED PREGNANT WOMEN, POSTPARTUM WOMEN, AND INFANTS (2014), http://www.cdc.gov/reproductivehealth/Emergency/PDFs/PostDisasterIndicators_final_6162014.pdf.

²³ See NAT'L WORKING GRP. FOR WOMEN & INFANT NEEDS IN EMERGENCIES IN THE U.S., WOMEN AND INFANTS SERVICE PACKAGE (WISP) (2007), http://www.cidrap.umn.edu/sites/default/files/public/php/315/315_recommendations.pdf (finding that authorities do not pay enough

To more adequately address the health care needs of “pregnant women, new mothers, fragile newborns, and infants” during and after a disaster, the White Ribbon Alliance created a guideline known as the Women and Infants Services Package (WISP) to present a framework for the minimum and initial actions needed by federal, state, and local governments, emergency planners and managers, nongovernmental organizations, private groups, and individuals.²⁴

One of the Alliance’s goals was to identify organizations at the national, state, and local level to utilize and implement the recommendations set forth in WISP.²⁵ The WISP guidelines were intended to provide recommendations and to supplement existing emergency plans rather than to serve as a “parallel emergency system.”²⁶ The recommendations included the preparation and storage of Family Readiness kits, emergency home birth kits, Sexual Assault Forensic Examiner kits, and Sexual Assault Nurse Examiner kits. The WISP guidelines also incorporated the March of Dimes’ “6 Key Elements For Every Disaster Plan” scheme, which designates special shelters for pregnant women & families with infants; encourages the accumulation of basic medical, health and hygiene supplies; and supports outreach efforts to the community through educational materials on emergency preparedness specifically related to maternal and child health issues.²⁷

B. The Flint Water Crisis

Although Hurricane Katrina initiated policy reform on the management of maternal health issues, the emergency and disaster management framework was met with a new challenge in the face of the Flint Water Crisis. Flint demonstrates the ongoing concern for policies to adequately address the needs of vulnerable populations. The deficiencies in federal, state, and local government emergency plans to properly address the health needs of pregnant women and mothers after lead contamination from the city of Flint’s main water source has caused uproar in the Michigan community, the political sphere, and across the country.

i. Comparing Hurricane Katrina and the Flint Water Crisis

First, one of the main and obvious differences between Hurricane Katrina and the Flint Water Crisis is in the type of incident that occurred.

attention to the needs of pregnant women and newborns and making recommendations to remedy this).

²⁴ *Id.* at 3.

²⁵ *Id.*

²⁶ *Id.* at 9.

²⁷ *Id.* at 26.

Hurricane Katrina was primarily a natural disaster that led to a public health emergency while the Flint Water Crisis may not strictly fall within the conventional definitions of a “natural” nor a “man-made” emergency or disaster. Second, Hurricane Katrina resulted in a Presidential emergency declaration, Presidential major disaster declaration, and an HHS Secretary public health emergency declaration.²⁸ President Obama has declared the Flint Water Crisis an emergency, but not a disaster; HHS Secretary Burwell has not declared Flint a public health emergency.²⁹ The major difference between a disaster declaration and an emergency declaration is the amount of federal assistance made available to states; a disaster declaration results in the availability of many more forms of financial assistance.³⁰

Despite these differences, Hurricane Katrina and the Flint Water Crisis trigger the same regulatory and legal framework under the Stafford Act. Both require state administered emergency and disaster plans to address the incident first and, if the state becomes overwhelmed, the governor can request federal assistance from the President. The two incidents are also exceptionally comparable in the effect they have had on the vulnerable population of pregnant women, mothers, and children. The Flint Water Crisis in Michigan presents a pivotal case study for the adequacy of current policies governing maternal health care in the emergency and disaster framework because lead contamination can have severe and fatal consequences for pregnant women and their children.

ii. Reaching a Federal Emergency Declaration

Under financial pressures, the city of Flint’s water source was switched from the Detroit Water and Sewerage Department to the Flint River on April 25, 2014.³¹ In August and September of 2014, Flint city officials issued “boil-water advisories” after bacteria was found in the tap water.³² However, the city continued to use the Flint River water source and Flint’s state-appointed

²⁸ SARAH A. LISTER, CONG. RESEARCH SERV., RL33096, HURRICANE KATRINA: THE PUBLIC HEALTH AND MEDICAL RESPONSE 5 (2005).

²⁹ Press Release No. HQ-16-004, U.S. Dep’t of Homeland Sec., Fed. Emergency Mgmt. Agency, President Obama Signs Emergency Declaration for Michigan (Jan. 16, 2016), http://www.fema.gov/news-release/2016/01/16/president-obama-signs-emergency-declaration-michigan?utm_source=hp_promo&utm_medium=web&utm_campaign=femagov_hp (last visited March 17, 2016).

³⁰ HUNTER, *supra* note 1, at 194.

³¹ See STATE OF MICH., FLINT WATER TIMELINE: KEY DATES, http://www.michigan.gov/documents/snyder/FlintWaterTimeline_FINAL_511424_7.pdf?20160119192241 (providing a timeline for the water crisis in Flint, Michigan).

³² Jeremy C.F. Lin et al., *Events That Led to Flint’s Water Crisis*, N.Y. TIMES (Jan. 21, 2016), <http://www.nytimes.com/interactive/2016/01/21/us/flint-lead-water-timeline.html>.

emergency manager, Jerry Ambrose, declined an offer to reconnect the city of Flint to Detroit's water system without paying the \$4 million connection fee.³³

In February 2015, Ms. LeeAnne Walters, a mother of four and Flint resident, notified the Environmental Protection Agency (EPA) of lead contamination found in the drinking water at her home³⁴, Ms. Walters children suffered from rashes, hair loss, and stunted growth.³⁵ In May 2015, "tests reveal[ed] high lead levels in two more homes in Flint."³⁶ In late May 2015, emails between the EPA and Michigan State's Department of Environmental Quality showed concern over the lead levels found at these two homes and Ms. Walters' home.³⁷ Several other tests' results continued to show dangerous levels of lead in Flint's water.³⁸

The Michigan Department of Health and Human Services confirmed the lead problem in October 2015 and urged city residents not to drink the Flint water.³⁹ Two weeks after this announcement, the city of Flint was reconnected to the Detroit Water and Sewerage Department water source.⁴⁰ On December 14, 2015, the city of Flint declared a state of emergency.⁴¹ It was not until January 2016 that Governor Rick Snyder requested FEMA's assistance and the Michigan National Guard was mobilized to assist with water resources distribution.⁴² On January 14, 2016, Governor Snyder requested a Presidential declaration of major disaster and emergency to illicit federal assistance and financial aid.⁴³ On January 16, 2016, President Obama declared a federal state of emergency but denied the request for a declaration of a major disaster.⁴⁴

iii. Maternal Health

Even as funds finally make their way into Flint, the community has suffered the health effects of lead poisoning for over a year. Lead exposure is a major concern for pregnant women and nursing mothers who may suffer health

³³ STATE OF MICH., *supra* note 31.

³⁴ Lin, *supra* note 32.

³⁵ Julia Lurie, *Meet the Mom Who Helped Expose Flint's Toxic Water Nightmare*, MOTHER JONES (Jan. 21, 2016), <http://www.motherjones.com/politics/2016/01/mother-exposed-flint-lead-contamination-water-crisis>.

³⁶ Lin, *supra* note 32.

³⁷ STATE OF MICH., *supra* note 31.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

effects including “[in]fertility, hypertension, and infant neurodevelopment.”⁴⁵ Lead poisoning causes damage to the brain and hinders neurological development in children and fetuses.⁴⁶ Additionally, “because lead persists in bone for decades, as bone stores are mobilized to meet the increased calcium needs of pregnancy and lactation, women and their infants might be exposed to lead long after external sources have been removed.”⁴⁷

III. REDEFINING MATERNAL HEALTH CARE UNDER THE CURRENT DISASTER LAW FRAMEWORK

Under the current disaster law framework, health issues faced by pregnant women in tragedies like Katrina and Flint are typically remedied through state and local government action followed by federal government participation when requested by the state’s governor.⁴⁸ This coordination of immediate medical and health response during the course of emergencies and disasters, i.e. under the “health care classification,”⁴⁹ focuses on individualized delivery of medical care and ensuring prompt access to and delivery of health care. Public health practice differs from health care in that the former “is aimed at decreasing the burden of illness and injury in populations, rather than individuals.”⁵⁰ Although the health issues faced by pregnant women certainly affect women in an individualized manner due to their impact on a woman’s specific health care needs, maternal health care is also a public health issue because it affects the general public and community. Utilizing a “public health classification” would allow the federal government to render the care of pregnant women a federal priority and allow them to initiate response without waiting for a request from state governments. Resolving the gap in disaster preparedness and management for pregnant women is imperative because it simultaneously serves a benefit to society as a whole. When women’s health care needs are taken care of, they are able to contribute more meaningfully to society both socially and economically to empower themselves, their children, and their families.

⁴⁵ Mary Jean Brown et al., *Lead in Drinking Water and Human Blood Lead Levels in the United States*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION MORBIDITY & MORTALITY WEEKLY REP., Aug. 10, 2012, <http://www.cdc.gov/mmwr/pdf/other/su6104.pdf>.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ See generally HUNTER, *supra* note 1.

⁴⁹ The “health care classification” is a term coined by the author of this Comment to describe federal emergency and disaster response to individualized health concerns under the Stafford Act. It is contrasted with the “public health classification” which operates under the Public Health Service Act (PHSA).

⁵⁰ SARAH A. LISTER, CONG. RESEARCH SERV., RL31719, AN OVERVIEW OF THE U.S. PUBLIC HEALTH SYSTEM IN THE CONTEXT OF EMERGENCY PREPAREDNESS 5 (2005).

A. The “Health Care Classification”

The United States disaster law framework is dispersed through a patchwork of statutes, federal government emergency plans and guidelines, and state and local laws. The framework implicates Congressional and Executive powers and the laws operate at the federal, state, and local government level. In particular, the federal government’s role in addressing health care issues is encompassed by the work of multiple federal agencies and the laws appear in many official documents.⁵¹

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act) is the overarching federal statute, which provides for the mechanisms that allow the federal government to interact with states, local governments, and nongovernmental partners when dealing with disaster preparedness, response, and recovery.⁵² Congress intended for the Stafford Act to fulfill a twofold goal: (i) to “provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters” and (ii) to encourage “development of comprehensive disaster preparedness and assistance plans.”⁵³

Under the Stafford Act framework, a state’s governor is responsible for the initial response to a disaster through execution of the state’s emergency plan.⁵⁴ If the state’s resources are “overwhelmed” by the disaster, the governor must certify that the state’s capabilities have been reached and request that the President declare a major disaster or emergency.⁵⁵ The Stafford Act authorizes the President to declare a major disaster or emergency when formally asked by the governor of an affected state.⁵⁶ The President may also declare an emergency without the governor’s request if the emergency involves “federal primary responsibility.”⁵⁷ A formal declaration allows the governor of a state to access both technical and logistical help from the federal government when state and local

⁵¹ See, e.g., PUB. HEALTH L. PROGRAM, CTRS. FOR DISEASE CONTROL & PREVENTION, SELECTED FEDERAL LEGAL AUTHORITIES PERTINENT TO PUBLIC HEALTH EMERGENCIES (2014), <http://www.cdc.gov/phlp/docs/ph-emergencies.pdf>.

⁵² Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. 100-107, 102 Stat. 4689 (1988) (codified as amended at 42 U.S.C. §§ 5121–5207 (2012)).

⁵³ 42 U.S.C. § 5121(b).

⁵⁴ 42 U.S.C. § 5191(a).

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ 42 U.S.C. § 5191(b).

governments are overwhelmed by a disaster or emergency; it also triggers financial assistance from the federal government by allowing the state to unlock specialized pockets of funding available for emergency and disaster response.⁵⁸

While the Stafford Act does not have a specific provision dedicated to health concerns in times of disaster, there are many general references to medical and health matters throughout the statute. Generally, the statute's main provisions are meant to allow the federal government to assist state and local governments "to alleviate the *suffering* and damage which result from such disasters."⁵⁹ Specifically, the Stafford Act authorizes the President to facilitate "professional counseling services, including financial assistance to state or local agencies or private mental health organizations to provide such services or training of disaster workers, to victims of major disasters in order to relieve mental health problems caused or aggravated by such major disaster or its aftermath."⁶⁰ The Stafford Act also authorizes the President to delegate responsibilities and the coordination of services (including medical and health response) to the appropriate government agencies.⁶¹

The President is also authorized to direct a federal agency to utilize its authorities and resources to help and support state and local emergency efforts.⁶² Currently, the federal agency authorized to implement the Stafford Act and to coordinate all disaster relief administration to the states is the Federal Emergency Management Agency (FEMA).⁶³ While FEMA was originally a fully independent federal agency, it lost its independent agency status when it became part of the Department of Homeland Security (DHS) in 2002.⁶⁴ This merger was meant to unify all emergency and disaster

⁵⁸ 42 U.S.C. §§ 5121–5207; SELECTED FEDERAL LEGAL AUTHORITIES PERTINENT TO PUBLIC HEALTH EMERGENCIES, *supra* note 51, at 2.

⁵⁹ 42 U.S.C. § 5121(b) (emphasis added).

⁶⁰ 42 U.S.C. § 5183.

⁶¹ *See, e.g.*, 42 U.S.C. § 5196(b).

⁶² 42 U.S.C. § 5192.

⁶³ *See* 14 DEBORAH F. BUCKMAN, CONSTRUCTION AND APPLICATION OF ROBERT T. STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT (STAFFORD ACT), 42 U.S.C.A. § 5121 ET SEQ., AMERICAN LAW REPORTS § 2 (2d ed. 2006).

⁶⁴ HUNTER, *supra* note 1, at 190 (explaining that the Homeland Security Act of 2002 (HSA) updated the federal process for domestic incident management by creating DHS to unify national leadership in providing efficient and coordinated disaster and emergency preparedness and response; the merger of twenty-two individual agencies and organizations made DHS responsible for carrying out the functions of the transferred entities while acting as the central point of contact for all natural and man-made disasters and emergencies and also directed the Secretary of Homeland Security to be responsible for the nation's emergency preparedness and response capabilities by way of the FEMA director).

management under the direction of one umbrella agency, DHS. However, FEMA remains the primary point of contact for states to trigger the disaster and emergency framework under the Stafford Act; state governors are required to make their request for Presidential declaration through the regional FEMA office, which makes a preliminary assessment of the damage.⁶⁵ FEMA's responsibilities also include supporting state and local efforts to "save lives" and "protect property and public health and safety."⁶⁶

The Department of Health and Human Services (HHS) is responsible for coordinating the federal response in the public health and medical sectors in the aftermath of an emergency or disaster.⁶⁷ This includes assessment of public health and medical needs, patient evacuation and care, public health and medical information gathering, and providing health and medical equipment and supplies.⁶⁸ HHS has been authorized to "develop health and medical survival information programs and a nationwide program to train health and mental health professionals and paraprofessionals in special knowledge and skills that would be useful in national security emergencies."⁶⁹ HHS may request assistance from fourteen designated support agencies and the American Red Cross.⁷⁰

HHS carries out many of its federal public health emergency response tasks with the help of the CDC.⁷¹ The CDC administers cooperative agreement funds provided by Congress to states seeking to strengthen public health preparedness and response practices.⁷² The CDC also administers the Strategic National Stockpile program, which stockpiles and delivers large quantities of medicine and medical supplies to protect the American public in the event of an emergency or disaster.⁷³

As described, the Stafford Act framework charges FEMA, HHS, the CDC, and other federal agencies to work with states in coordinating the immediate medical and health response during the course of emergencies and disasters. It establishes the protocol for the federal government's role and authority in responding to medical issues and ensuring delivery of health care in times of disaster. Maternal health issues in times of disaster fall squarely

⁶⁵ *Id.* at 191-192.

⁶⁶ 42 U.S.C. § 5192(b).

⁶⁷ See LISTER, RL33096, *supra* note 28, at 2.

⁶⁸ *Id.* at 3.

⁶⁹ Exec. Order No. 12,656, 3 C.F.R., 53 FR 47491, 47501 (Nov. 23, 1988), *reprinted as amended* in 42 U.S.C. § 5195 (2012).

⁷⁰ LISTER, RL33096, *supra* note 28, at 3.

⁷¹ *Id.* at 6.

⁷² See SARAH A. LISTER, CONG. RESEARCH SERV., R41646, PUBLIC HEALTH AND MEDICAL EMERGENCY

MANAGEMENT: ISSUES IN THE 112TH CONGRESS 6-7 (2011).

⁷³ *Id.* at 17-18.

within this “health care classification” and the Stafford Act allows the federal government to focus on individualized delivery of care to pregnant women.

B. The “Public Health Classification”

i. Federalism Concerns

Traditionally, states have held primary authority and responsibility to regulate behavior and address public health concerns through a state “police power” granted under the Tenth Amendment.⁷⁴ State power and state government action to regulate public health are rooted in constitutional authority and are supported by public policy reasons. States are presumed to have greater familiarity with the needs of their jurisdiction and to be in a better position to address disparities in their own cities.

Although the federal government does not hold constitutional authority to directly regulate or protect the public health, underlying policy concerns often invite federal government involvement through the means of other constitutional authorities or through legislative and administrative paths. The federal government often utilizes its spending power and Commerce Clause power in order to exert an influence on public health interests.⁷⁵ For example, the federal government can condition a state’s receipt of federal funds on the state’s compliance with certain federal public health policies.⁷⁶ Congress can also rely on the Necessary and Proper Clause to spend money in aid of the general welfare.⁷⁷ In addition, federal laws and regulations may pass muster with Congress if they are aimed at improving the overall health condition of the entire nation.⁷⁸ Because of this vacillating tension between federal and state authorities, public health issues arguably straddle the regulatory and legal divide.

The realm of emergency and disaster management law further complicates the divide because the onset of a disaster or emergency that overwhelms the state’s ability to handle the resulting public health issues can initiate the federal government’s right to involvement in state affairs. While the degree of federal involvement in an incident will depend on specific statutory

⁷⁴ U.S. CONST. amend. X.

⁷⁵ See generally James G. Hodge, Jr., *The Role of New Federalism and Public Health Law*, 12 J. L. & HEALTH 309, 333 (1998).

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ See, e.g., Stephanie Rosenbloom, *Calorie Data to Be Posted at Most Chains*, N.Y. TIMES (Mar. 23, 2010), http://www.nytimes.com/2010/03/24/business/24menu.html?_r=1 (arguing that Congress’ approval of a federal law requiring calorie labels firmly establishes the government’s role in improving the nation’s nutrition).

authority and issues of jurisdiction, there are additional outside factors and policy considerations to examine when determining how involved the federal government can be in a state's incident management. These factors include state and local needs, requests made for external support, the economic ability of the affected area to recover from the incident, the type/location of the incident, and the severity and magnitude of the incident.⁷⁹ Most notably, the need to protect the public health or welfare or the environment is a crucial factor to be considered in determining the level of federal involvement in emergency and disaster management.

ii. Federal Authorities Pertaining Specifically to Public Health

Legal authority for public health emergency and disaster management has been defined through statutes, federal guidance documents, and state and local laws.⁸⁰ It involves many of the same federal agencies, such as HHS and the CDC, that are also tasked with addressing medical and health care needs in times of emergencies and disasters.⁸¹ The Public Health Service Act (PHSA) grants the Secretary of HHS authority to determine and declare that a public health emergency exists.⁸² After such determination is made, the Secretary is authorized "to 'take such action as may be appropriate' and to use funds from the Public Health Emergency Fund (when appropriated)."⁸³ An HHS Secretary declaration allows the Secretary to utilize emergency powers to "provide states with resources and personnel to respond to the emergency and to waive or modify certain legal requirements."⁸⁴

Most notably, in contrast to the Stafford Act framework, the Secretary of HHS may declare a public health emergency without a formal request from the state.⁸⁵ Under Section 319 of the PHSA, "[t]here is no statutory or

⁷⁹ See U.S. DEP'T OF HOMELAND SEC., NATIONAL RESPONSE PLAN 6 (2004), <http://fas.org/irp/agency/dhs/nrp.pdf>.

⁸⁰ See generally SELECTED FEDERAL LEGAL AUTHORITIES PERTINENT TO PUBLIC HEALTH EMERGENCIES, *supra* note 51.

⁸¹ *Id.*

⁸² *Id.* at 3.

⁸³ *Id.*

⁸⁴ *Public Health Service Act, Section 319 Fact Sheet*, ASS'N OF STATE AND TERRITORIAL HEALTH OFFICIALS 2 (2012), http://www.astho.org/uploadedFiles/Programs/Preparedness/Public_Health_Emergency_Law/Emergency_Authority_and_Immunity_Toolkit/12-PH%20Srv%20Act%20FS%20Final%203-12.pdf.

⁸⁵ See 42 U.S.C. § 247d(a) (stating that the Secretary of HHS may declare a public emergency after "consultation with such public health officials as may be necessary" without a formal state request).

regulatory requirement that a state submit a formal request to the secretary for the determination of a public health emergency.”⁸⁶ States may work with the HHS regional office’s emergency coordinators to initiate a declaration by the Secretary of a public health emergency.⁸⁷ “A state declaration of emergency does not affect the [S]ecretary's Section 319 authority to determine that a public health emergency exists. However, the fact that a state has declared an emergency or requested federal assistance in response to an emergency may be relevant to the secretary's consideration of whether a public health emergency exists.”⁸⁸

This is particularly significant for maternal health concerns because the Secretary can facilitate assistance to a state promptly by declaring a public health emergency with regards to the treatment of mothers and pregnant women faced with a natural or man-made emergency or disaster. While the Stafford Act requires state and local government to first expend their own resources and only request a formal declaration from the President when overwhelmed, the Secretary of HHS can intervene immediately to provide assistance to states to help pregnant women. As seen in Hurricane Katrina and Flint, earlier and immediate intervention by the federal government would have been especially valuable in saving the lives of women and children.

IV. EXPANDING THE CURRENT DISASTER LAW FRAMEWORK THROUGH LEGISLATIVE REFORM

In addition to redefining the maternal health scope to encourage the utilization of health care and public health declarations under both statutory frameworks, it is imperative that new legislation shape the way maternal health care issues are addressed in future disasters.

A. Administrative and Legislative Reform Post-Katrina

Hurricane Katrina resulted in a Presidential emergency declaration, a Presidential major disaster declaration, and two days later, an HHS Secretary public health emergency declaration.⁸⁹ While health care and public health

⁸⁶ *Public Health Service Act, Section 319 Fact Sheet*, *supra* note 84, at 2.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ See *Mississippi Hurricane Katrina Major Disaster Declaration, DR-1604*, FED. EMERGENCY MGMT. AGENCY (Aug. 29, 2005), <https://www.fema.gov/disaster/1604> (detailing the declarations of the various bodies); *Mississippi Hurricane Katrina Emergency Declaration, EM-3213*, FED. EMERGENCY MGMT. AGENCY (Aug. 28, 2005), <https://www.fema.gov/disaster/3213> (same). See also LISTER, RL33096, *supra* note 28, at 5.

problems often occur concurrently in an emergency or disaster, public health declarations are not utilized as often. The only prior incident where a federal public health emergency was declared before Hurricane Katrina in 2005 was the September 11th attack in 2001.⁹⁰ However, because of the vast influx of health care and public health problems that arose post-Katrina, Hurricane Katrina served as a catalyst for administrative and legislative reform of the emergency and disaster law framework in the realm of health and public health policy. Katrina shed light on many of the shortcomings of the existing national response plan, leading to a restructuring of the old plan and implementation of new leadership roles into the disaster framework.

Shortly after enactment of the HSA in 2002, President Bush issued Homeland Security Presidential Directive-5 in order to “enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system.”⁹¹ As part of this initiative, Directive-5 required the DHS Secretary to create a unified national response plan.⁹² The National Response Plan was launched by DHS in 2004 and was meant to align all federal coordination structures, capabilities, and resources into a unified management system.⁹³ The National Response Plan faced its “first major test” in the coordination and implementation of a response to Hurricane Katrina.⁹⁴

Implementation of the National Response Plan during Hurricane Katrina resulted in a failure to coordinate the federal, state, and local response effectively.⁹⁵ Since the National Response Plan was launched only eight months prior to Hurricane Katrina, it remained relatively new to many at the federal, state, and local level leading to a general lack of understanding regarding the “national” plan.⁹⁶ The NRP provided a base plan meant to be supplemented through operational plans developed by federal departments and agencies; at the time Hurricane Katrina struck, these supportive operational plans did not yet exist or were in the process of being developed.⁹⁷

⁹⁰ LISTER, RL33096, *supra* note 28, at 5.

⁹¹ Directive on Management of Domestic Incidents, 39 WEEKLY COMP. PRES. DOC. 280 (Feb. 28, 2003). *See also* KEITH BEA, CONG. RESEARCH SERV., RL33729, FEDERAL EMERGENCY MANAGEMENT POLICY CHANGES AFTER HURRICANE KATRINA: A SUMMARY OF STATUTORY PROVISIONS 25 (2007).

⁹² BEA, *supra* note 91, at 25.

⁹³ *See* U.S. DEP'T OF HOMELAND SEC., NATIONAL RESPONSE PLAN, *supra* note 79.

⁹⁴ LISTER, RL33096, *supra* note 28.

⁹⁵ *Chapter 5: Lessons Learned, in THE FEDERAL RESPONSE TO HURRICANE KATRINA: LESSONS LEARNED, THE WHITE HOUSE ARCHIVES* (2006), <http://georgewbushwhitehouse.archives.gov/reports/katrina-lessons-learned/chapter5.html>.

⁹⁶ *Id.*

⁹⁷ *Id.*

In addition, “[b]ecause the National Response Plan did not mandate a single federal point of contact for all assistance and required FEMA to merely coordinate assistance delivery, disaster victims confronted an enormously bureaucratic, inefficient, and frustrating process that failed to effectively meet their needs.”⁹⁸

Statutory and administrative changes were made as a result of the shortcomings revealed under the NRP. The National Response Framework (NRF) was established in 2008 to replace the NRP and serves as the “overarching interagency response coordination structure” for both Stafford Act and non-Stafford Act incidents.⁹⁹ Congruently, the National Disaster Recovery Framework (NDRF), established in 2011, is a companion document to the NRF and serves as the overarching interagency coordination structure for emergency and disaster *recovery*.¹⁰⁰ The NRF and NDRF sought to address some of the past shortcomings in health care and public health management in emergencies and disasters by implementing new structures. The NDRF introduced 6 new Recovery Support Functions including a “Health and Social Services Recovery Support Function.”¹⁰¹ In an attempt to promote overall health of individuals and communities, the Health and Social Services Recovery Support Function uses the term “health” to refer to and include “public health, behavioral health, and medical services” and seeks to establish an operational framework for how federal agencies can support local efforts more effectively.¹⁰² The Health and Social Services Recovery Support Function specifically compensated for the NRP’s failure to mandate a single federal point of contact by establishing “a Federal focal point for coordinating Federal recovery efforts specifically for health and social services needs.”¹⁰³

In addition to the federal administrative changes attained, the debacle of Hurricane Katrina spearheaded statutory reform to the emergency and disaster law framework. The Post-Katrina Emergency Management Reform Act of 2006 (Post-Katrina Act) “establishes new DHS leadership positions, brings additional functions into FEMA, [and] creates and reallocates functions to other components within DHS.”¹⁰⁴ It also “enhances FEMA’s

⁹⁸ *Id.*

⁹⁹ U.S. DEP’T OF HOMELAND SEC., NATIONAL DISASTER RECOVERY FRAMEWORK: STRENGTHENING DISASTER RECOVERY FOR THE NATION 6 (2011), <http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>.

¹⁰⁰ *Id.* at 3.

¹⁰¹ *Id.* at 37, 52.

¹⁰² *Id.* at 52.

¹⁰³ *Id.*

¹⁰⁴ SELECTED FEDERAL LEGAL AUTHORITIES PERTINENT TO PUBLIC HEALTH EMERGENCIES, *supra* note 51, at 2.

responsibilities and its autonomy within DHS.”¹⁰⁵ The Post-Katrina Act also amends the Stafford Act to direct the appointment of a Disability Coordinator who is charged with “providing guidance and coordination on matters related to individuals with disabilities”¹⁰⁶ in emergency preparedness and disaster relief. The Act’s establishment of a Disability Coordinator is notable because it creates a federal leadership position to specifically address the needs of a vulnerable population.

B. The Need for Administrative and Legislative Reform Post-Flint

Despite lessons learned from Hurricane Katrina, current federal and state policies failed to adequately address maternal health care needs in the Flint Water Crisis. Because of the gross systemic failures of the Michigan emergency plans, federal legislation is needed to enforce a legally binding standard establishing minimum requirements for state and local governments to employ in the creation and maintenance of their emergency plans with regards to maternal health care.

i. The (Lack of) Federal Response to Maternal Health Concerns

While the EPA may have had notice of the lead contamination potential in the Flint water source since February 2015, they did not publically begin to acknowledge the problem until November 2015.¹⁰⁷ The EPA encouraged all Flint residents “to either drink bottled water or to drink boiled water that has been already been filtered through an NSF-certified filter rated to remove lead.”¹⁰⁸ It was not until February 2016 that they began warning of maternal health concerns and urging pregnant women to “[u]se only bottled water for water, food and formula given to babies under 1 year old, because [b]ottled water is the safest choice for pregnant or breastfeeding women and kids under 6 years of age.”¹⁰⁹

On February 26, 2015, almost a year before the Presidential emergency declaration was made, emails between the EPA and Department of Environmental Quality discussed high levels of lead found in the Flint River water source being distributed to the entire city of Flint.¹¹⁰ Despite this

¹⁰⁵ *Id.*

¹⁰⁶ 6 U.S.C. § 321b(b)(1) (2012).

¹⁰⁷ *See* STATE OF MICH., *supra* note 31.

¹⁰⁸ Press Release, U.S. Env'tl. Prot. Agency, EPA Statement On Flint Water Main Break, Boil Water Order (Feb. 12, 2016), <https://yosemite.epa.gov/opa/admpress.nsf/0/5B62CBB90C7A891485257F570060BD43> (last visited June 12, 2016).

¹⁰⁹ *Id.*

¹¹⁰ *See* STATE OF MICH., *supra* note 31.

revelation, the HHS Secretary did not declare a public health emergency under the PHSA. An HHS Secretary declaration could have allowed federal intervention at a much earlier stage and saved many pregnant women and children from detrimental lead exposure. The under-utilization of the HHS Secretary federal public health declarations power shows the failure of the existing legal framework to adequately address the health care and public health issues underlying maternal health concerns in an emergency. To this day, the HHS Secretary has not declared a federal health emergency, which could unlock supplementary sources of financial aid and assistance to the city of Flint.¹¹¹

ii. The State Response: Michigan's Failures

The severe delay of state and federal agencies to detect and respond to the lead contamination of the Flint water source led to longer exposure and an increased likelihood of pregnant women and children suffering from potential long-term harms and health consequences of lead contamination. The delay in state and local government response is equally alarming because a Presidential emergency declaration could have been requested and financial assistance initiated at a much earlier stage. Many of the state and local government actions taken even after the emergency declaration are failing to adequately address the specific health care needs of pregnant women. On March 3, 2016, HHS approved Governor Snyder's request for a Medicaid demonstration waiver that would allow those impacted by the Flint Water Crisis to receive Medicaid regardless of income.¹¹² The request, however, would only cover children under the age of 21 and pregnant women for the "duration of the pregnancy and during the two calendar months post-delivery."¹¹³ According to the CDC, lead contamination can remain in the bones of pregnant women, lactating women, and their infants for decades after the external source of lead is removed.¹¹⁴ Women suffering from this disaster should be under long-term care and medical assessment. While at first glance this policy appears to be taking maternal health issues into consideration, it is regrettably inadequate and uninformed. Further

¹¹¹ See *Public Health Emergency Declarations*, U.S. DEP'T OF HEALTH AND HUMAN SERVS., <http://www.phe.gov/emergency/news/healthactions/Lists/Public%20Health%20Emergency%20Declarations/AllItems.aspx> (last visited May 20, 2016) (listing public health emergency declarations).

¹¹² MICH. DEP'T OF HEALTH & HUMAN SERVS., A MEDICAID WAIVER REQUEST TO ASSIST IN ADDRESSING HEALTH IMPACTS FROM POTENTIAL LEAD EXPOSURE IN FLINT, MICHIGAN, PURSUANT TO SECTION 1115 OF THE SOCIAL SECURITY ACT (2016), https://www.michigan.gov/documents/snyder/Flint_waiver_2-13-16_-_FINAL_514637_7.pdf.

¹¹³ *Id.* at 3.

¹¹⁴ Brown et al., *supra* note 45.

review of the state's general emergency and preparedness plans reveals a severe lack of policies addressing maternal health care needs in the face of *any* emergency or disaster.

The Michigan state emergency plans failed to adequately prepare its citizens to address the health care needs of pregnant women in preparation for, during, and in response to any and all emergencies and disasters. The State of Michigan failed to prepare its citizens and provided no mention of any preparation strategies in its Family Preparedness Guide distributed by the Michigan State Police, Emergency Management and Homeland Security Division.¹¹⁵ The Guide provides information on creating a general Emergency Supply Kit, an Automotive Supply Kit, and a Pet Emergency Kit for in-home use before, during, or immediately after a disaster.¹¹⁶ However, no mention is made of anything that resembles a lead-testing kit, Family Readiness kit, emergency home birth kit, Sexual Assault Forensic Examiner kit, or Sexual Assault Nurse Examiner kit as recommended by WISP.

In addition, the Michigan Department of Health and Human Services does not provide health care facilities with any emergency planning resources on the health issues affecting pregnant women in emergency or disaster.¹¹⁷ While there are some resources on working with older Americans and individuals with disabilities,¹¹⁸ there is a lack of guidance to specifically assist health care facilities with the specialized needs of pregnant women. The planning regulation makes an attempt at addressing the needs of some of their vulnerable communities—the elderly and disabled—to the complete detriment of women, who represent half of the population.

Lastly, Michigan failed to enact sufficient policies to address the health care needs of women in its own state administered emergency plan. The Michigan Emergency Management Plan refers to pregnant and nursing women as part of a “Functional Needs Population”¹¹⁹ and acknowledges that they are part of an especially vulnerable population in times of emergency and disaster.

¹¹⁵ See EMERGENCY MGMT. & HOMELAND SEC. DIV., MICH. STATE POLICE, FAMILY PREPAREDNESS GUIDE, https://www.michigan.gov/documents/familypreparedness_color_62898_7.pdf (giving emergency preparedness information).

¹¹⁶ *Id.*

¹¹⁷ See *Long Term Care Disaster Planning Resources*, DIV. OF EMERGENCY PREPAREDNESS & RESPONSE, MICH. DEP'T OF HEALTH & HUMAN SERVS., http://www.michigan.gov/mdhhs/0,5885,7-339-71548_54783_54826_643_77_64378-297773--,00.html#regulations (last visited Feb. 23, 2016) (providing an emergency planning checklist and other tools).

¹¹⁸ *Id.*

¹¹⁹ EMERGENCY MGMT. & HOMELAND SEC. DIV., MICH. STATE POLICE, MSP/EMHSD PUB. 101, MICHIGAN EMERGENCY MANAGEMENT PLAN (MEMP) 12 (2014), http://www.michigan.gov/documents/msp/MEMP_portfolio_for_web_383520_7.pdf (providing emergency management and mass shelter support plan).

Yet, this is the only mention of women's specialized needs in the entire 377-page state emergency plan. The Emergency Management Plan's Evacuation and Mass Shelter Support Plan further elaborates on the "Functional Needs Population" and calls for assessment and reporting of the impact of disaster on these populations but again does not set forth any policies on how to address the needs of those in the functional needs population.¹²⁰

If the Flint Water Crisis had resulted in an evacuation of families from their homes as it did in the Picher, Oklahoma lead contamination¹²¹ or the Love Canal incident in Niagara Falls, New York,¹²² Michigan would have still been unprepared to manage the health care needs of pregnant women. The Michigan State Police Emergency Management and Homeland Security Division's Local Evacuation And Mass Care Planning Handbook includes several worksheets for dealing with members of the "Functional Needs Population."¹²³ These worksheets are meant to promote preplanning for "Functional Needs Support Services" and include planning and operational considerations for individuals with diabetes, the elderly, individuals who are blind or deaf, wheelchair users, individuals suffering from epilepsy, individuals suffering from autism, and those with cultural and religious needs.¹²⁴ Even though the Emergency Management Plan defines pregnant and nursing women as part of the "Functional Needs Population," these women's health care needs are not incorporated into the Handbook's worksheets. Despite the seeming recognition of pregnant women's health care needs as a state priority, the needs of pregnant and nursing women are not actually incorporated into the state's emergency plan in a comprehensive, effective, or practical way.

¹²⁰ EMERGENCY MGMT. & HOMELAND SEC. DIV., MICH. STATE POLICE, MSP/EMHSD PUB. 101b, MICHIGAN EMERGENCY MANAGEMENT PLAN (MEMP) EVACUATION AND MASS SHELTER SUPPORT PLAN (2014), https://www.michigan.gov/documents/msp/MEMP_suppourt_plan_414980_7.pdf.

¹²¹ See *Toxic Apocalypse Site #3*, CATASTROPHEMAP, <http://catastrophemap.org/toxic-apocalypse-picher-oklahoma.html> (last visited May 20, 2016) (describing Picher, Oklahoma as the most toxic place in the country).

¹²² See Eckardt C. Beck, *The Love Canal Tragedy*, 5 EPA J. 17, Jan. 1979 (explaining the Love Canal tragedy, during which pregnant women and infants were "deliberately among the first" to be evacuated from their homes).

¹²³ See EMERGENCY MGMT. & HOMELAND SEC. DIV., MICH. STATE POLICE, MSP/EMHSD PUB. 113, LOCAL EVACUATION AND MASS CARE PLANNING HANDBOOK (2013), https://www.michigan.gov/documents/msp/Local_Evacuation_and_Mass_Care_Planning_Handbook_-_Pub_113_-_Final_Edition_March_2013_420111_7.pdf.

¹²⁴ *Id.* at 230-237.

V. CONCLUSION

As evidenced by the recent management of the Flint Water Crisis, current federal, state, and local policies remain incapable of addressing the needs of pregnant women in preparation for, during, and in response to emergencies and disasters. A combination of new administrative, statutory, and policy reform is needed to incorporate maternal health issues into the emergency and disaster law framework in a more meaningful, effective, and practical manner. First, addressing the needs of pregnant women can be accomplished by working within the current legal framework to redefine maternal health care as a public health priority and encourage more timely declarations under the PHSAs. Second, the needs of pregnant women should be addressed by expanding the disaster law framework through legislation. The Flint Water Crisis, like Hurricane Katrina, should serve as a propeller for legal and policy reform. Policymakers should utilize the current social and political uproar to shed light on the shortcomings of maternal health care management in emergencies and disasters.

Because maternal health care is a niche area that straddles both health care and public health matters, policies should encourage declarations under both the Stafford Act and the PHSAs frameworks. It is imperative that the scope of maternal health issues in times of emergency and disaster be redefined and extended into the public health field. Allowing maternal health to float within and between both definitions allows greater federal involvement. The benefit to addressing maternal health issues under both the Stafford Act and PHSAs frameworks is twofold. First, an issue that is viewed as affecting the population on a grander scale (rather than on an individual basis) heightens public awareness and therefore increases public involvement in preparedness efforts through a “whole of community”¹²⁵ approach. Second, public health emergencies trigger federal statutes outside of the traditional Stafford Act framework.

While individualized health care/medical complications and population-wide public health problems often occur concurrently in an emergency or disaster, there remains a consistent underutilization of federal public health declarations independent of and in conjunction with emergency and major disaster Stafford Act declarations. The most recent public health emergency declaration to date was made as a consequence of Hurricane

¹²⁵ See generally U.S. DEP’T OF HOMELAND SEC., FED. EMERGENCY MGMT. AGENCY, FDOC 104-008-1, A WHOLE COMMUNITY APPROACH TO EMERGENCY MANAGEMENT: PRINCIPLES, THEMES, AND PATHWAYS FOR ACTION (2011) https://www.fema.gov/media-library-data/20130726-1813-25045-0649/whole_community_dec2011__2_.pdf (providing information for community preparedness).

Sandy in 2012.¹²⁶ As yet, HHS Secretary Burwell has not declared the Flint Water Crisis a public health emergency.¹²⁷ This is perplexing since a public health emergency declaration by HHS could initiate disbursement of much-needed federal funds and assistance from the federal government faster, earlier, and without the need for a state request. The PHSA clearly defines HHS' authority to make their own determination that a public health emergency exists, to take such action as may be appropriate and to provide states with resources and personnel to respond to the emergency.¹²⁸ Since legal authority for HHS to exercise its public health declaration powers is unambiguous, rules and regulations should encourage and set guidelines for HHS declarations as a matter of good public policy. In particular, guidelines should be adopted regarding HHS public health declarations in the event of specific health crises affecting vulnerable populations such as pregnant women, who often suffer the most at the hands of a drawn-out or prolonged request from the governor of a state for presidential declaration under the Stafford Act framework.

In addition to redefining maternal health care within the legal structure, it is necessary to expand the current disaster law framework through new legislation. Hurricane Katrina certainly ignited concern about the failure of federal, state, and local emergency disaster plans to address the health care and public health needs of pregnant women. However, most of the responses came from federal agency and NGO guidelines. While these documents were meant to assist local and state governments in their emergency planning and response efforts, they are essentially rendered toothless because they are not legally binding requirements.

Legislation is needed to enforce a legally binding standard establishing minimum requirements for state and local governments to employ in creation and maintenance of their emergency plans. While the emergency and disaster law framework relies on FEMA's underlying concept of a "whole of community" approach that encourages community involvement in preparedness and response, state and local governments must be given the proper guidance to facilitate an emergency plan that addresses and involves the whole community. If the public health and medical needs of pregnant women are placed solely in the hands of individual state and local governments, standards of treatment, priority, and care will vary drastically. Establishing a federal model will improve maternal health care nationwide by setting a minimum precedent for standard of care which states must

¹²⁶ *Public Health Emergency Declarations*, *supra* note 111.

¹²⁷ *Id.*

¹²⁸ See SELECTED FEDERAL LEGAL AUTHORITIES PERTINENT TO PUBLIC HEALTH EMERGENCIES, *supra* note 51.

comply with and which they are free to exceed. The proposed legislation should also mirror the Post-Katrina Act in its creation and appointment of a Disability Coordinator by directing the creation of a federal leadership position to specifically address the needs of another vulnerable population: pregnant women.

As the study of emergency and disaster law in the United States continues to develop and expand through its patchwork of federal, state, and local laws and policies, the framework must be inclusive of the needs of all individuals in the population. Maternal health care needs are a human issue and must be incorporated into disaster and emergency preparedness and response in meaningful ways. Only then can we begin to move closer to the actual realization of a “whole of community” approach to disaster and emergency management.