TOXIC TORT-URING THE PEOPLE OF FLINT, MICHIGAN

By

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I. Abstract

The Flint Water Crisis is a public health crisis that has touched nearly everyone in the Flint, Michigan community for years. Despite the extent of the harm that this crisis has caused, Flint victims have had trouble acquiring legal redress. This paper examines the Flint Water Crisis through the lens of toxic torts to assess the adequacy and accessibility of legal remedies in this area of the law. There are multiple common obstacles that victims of the Flint Water Crisis have encountered while seeking legal remedies, such as sovereign immunity, proving causation, and access to justice. These obstacles have also been encountered in situations similar to the Flint Water Crisis, which puts the issues with the U.S. toxic tort system, more broadly, into perspective. This paper concludes that there are approaches that legal representatives of Flint victims can implement in future lawsuits to avoid encountering these common problems. While these adjustments in approach would theoretically help the people of Flint succeed in their lawsuits, it is also important to note that the Flint community is one of the most impoverished in the regions, which is a difficult obstacle to circumvent and might prevent them from getting legal representation nonetheless.

II. Table of Contents

III. Introduction

In recent years, the people of Flint, Michigan have been experiencing an ongoing water crisis that has severely compromised the quality of the city's water. This water crisis has been linked to severe and life-threatening health issues for those who have consumed water from the city's pipelines. The Flint Water Crisis is a direct result of the actions of several government officials. Many Flint residents have turned to toxic tort law and have tried on numerous occasions to gain legal redress. This, however, has proven to be a difficult task for many, as they have encountered several legal obstacles. Furthermore, there have been numerous cases similar to the Flint Water Crisis that demonstrate issues that they have encountered because of government idleness and the difficulties that they have had gaining legal remedy.

There are multiple toxic tort cases pertaining to the Flint Water Crisis that demonstrate the difficulties that the citizens have had in the process toward legal remedy. These obstacles are evident in cases such as *Melisa Mays, et. al. v. Governor Rick Snyder, et. al., Jan Burgess v. United States,* and *William Thomas v. United States*. The main obstacles to legal redress for Flint victims are immunity, causation, and access to justice. While some of these cases have already been resolved or dismissed, some of them are still pending and lawsuits against Flint and government officials are still being filed. Thus, there are ways that legal representatives of Flint Water Crisis victims can modify their approaches in future toxic tort lawsuits to avoid these obstacles.

IV. Background Information about the Flint Water Crisis

The Flint Water Crisis began in 2014 when Flint officials decided to change the city's drinking water supply from Lake Huron to the Flint River. Before its economic decline, Flint had

been a prosperous city with a steady economy, largely due to the operation of General Motors plants in the city. In the 1980s, GM shut down its plants due to rising oil prices and automobile imports. Many Flint residents relocated, and Flint was left devastated by the sudden change.

To deal with Flint's subsequent $25 million deficit, Michigan Governor Rick Snyder appointed an emergency manager. This manager found a cheaper water alternative for Flint—temporarily pumping water from the Flint River until a new water pipeline from Lake Huron was built, instead of piping treated water from Detroit as they had done in the past. Although the river water was highly corrosive, Flint officials failed to treat it, and lead leached out from aging pipes into thousands of homes (Denchak 3-4).

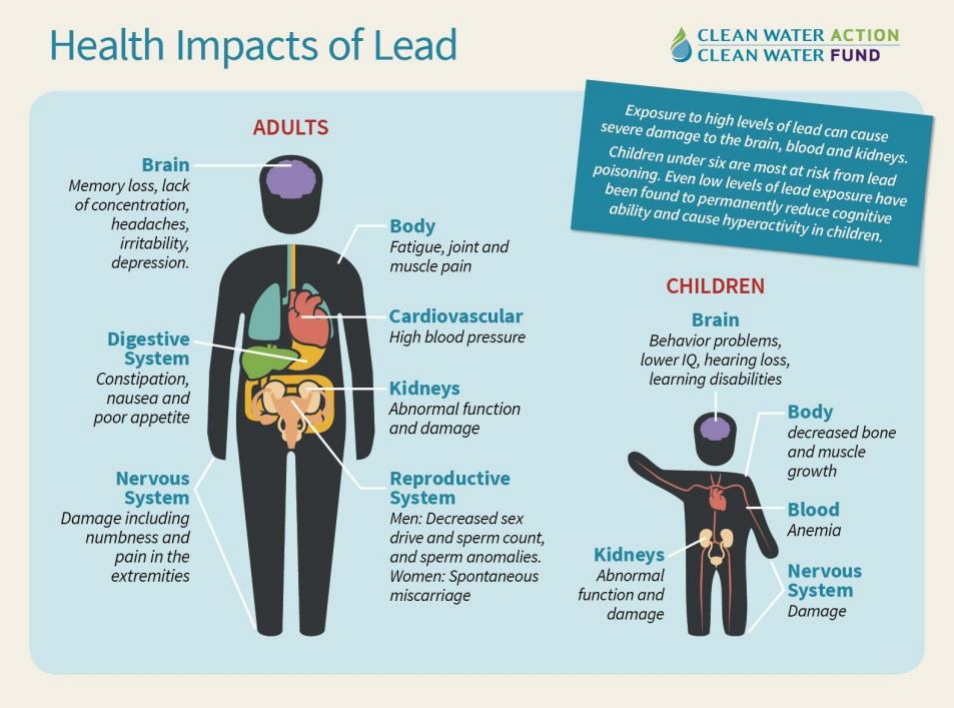

Fig. 1: Health Impacts of Lead on Adults and Children; "Health Impacts of Lead"; *Clean Water Fund*, n.d., https://www.cleanwateraction.org/features/lead-and-drinking-water.

When the lead-contaminated water first made its way into the homes of Flint residents, there were many reports of "off-tasting water" that caused skin rashes, hair loss, and itchy skin (Denchak 1). These are some of the symptoms of lead exposure and lead poisoning, which can have much more severe effects, such as neurological problems—including decreased cognitive performance, —comas, organ failure, reproductive issues, convulsions, and even death ("Lead Toxicity What Are Possible Health Effects from Lead Exposure?" 4-7). *Fig. 1* further outlines the risk of exposure to lead in adults and children, with children being at a higher risk of lead poisoning. These complaints by Flint residents, however, were ultimately ignored by government officials who claimed that the water was safe.

According to Dr. Mona Hanna-Attisha, however, this change had very serious health consequences, especially for children, since they are also at risk of developmental problems. Lead has a plethora of adverse effects on children because it "inhibits the bodies of growing children from absorbing iron, zinc, and calcium, minerals essential to proper brain and nerve development" ("Lead Toxicity What Are Possible Health Effects from Lead Exposure?" 3). This can result in reduced physical and neurological function as adults, including a wide range of behavioral issues.

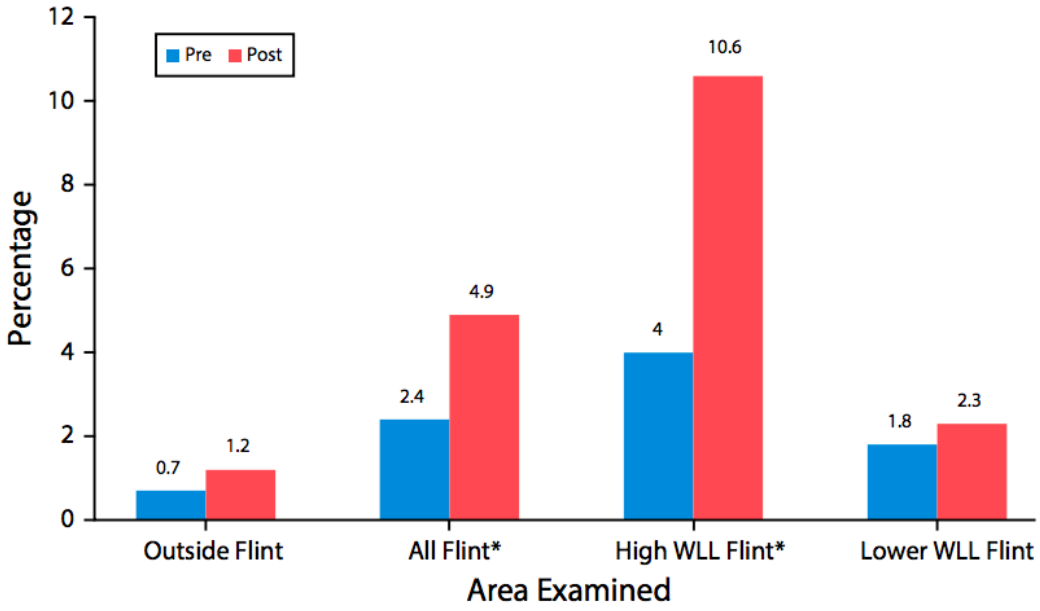

Fig. 2: Comparison of Elevated Blood Lead Level Percentage Before and After Water Source Change from Detroit-Supplied Lake Huron Water to the Flint River: Flint, MI 2013 and 2015; "Elevated Blood Lead Levels in Children…"; *AJPH Research*, Feb 2016, https://ajph.aphapublications.org/doi/pdfplus/10.2105/AJPH.2015.303003.

Dr. Mona Hanna-Attisha researched the blood lead levels of Flint children before and after the city changed water sources and concluded that the blood lead levels were significantly higher, *see Fig. 2* (Hanna-Attisha 286). As the first blue and red bars on the left indicate, the blood lead level percentage *outside* of the Flint area was *not* significantly different before and after the city of Flint switched their water source to the Flint River. The next two bars show the blood lead levels of people living within Flint. The two subsequent pairs of bars demonstrate wards of Flint with high and low lead levels before and after the water source switch. Both measurements show that the blood lead level increased significantly after the change to the Flint River.

The research done by Dr. Mona Hanna-Attisha helps confirm the link between elevated blood levels in Flint, which caused residents to experience many health issues, and the change in water source (Hanna-Attisha 288). Her research reveals that it is very likely that the elevated blood levels were caused by the change in water source from the Huron Lake to the Flint River because elevated blood lead levels and water lead levels inside Flint correspond with the water source change. This is further supported by the fact that the blood lead levels of those living outside of Flint, where there were no increased water lead levels, did not change, as indicated by the first pair of bars in *Fig. 2*.

Furthermore, the elevated blood lead levels in Flint were not likely to have been caused by any other phenomenon. The reason for this is that there is no record of any other possible source, besides lead in the water, which could have caused an increased presence of lead in the blood at this time. This, coupled with the fact that there was a lack of attention placed on corrosion-control by government officials, makes the water source change a probable cause of the elevated blood levels that resulted in the abject effects felt by the people of Flint (Hanna-Attisha 286).

V. Background Information about Toxic Tort Law

A toxic tort is a personal injury that occurs as a result of exposure to toxic materials or chemicals (Michon 1-6). This exposure to toxic substances can come in many forms—exposure in the workplace, through products, negligent exposure to toxic substances, or water sources. Toxic tort lawsuits can come in the form of individual suits or class action lawsuits, in which a group of people come together to allege similar injuries as a result of the same exposure. Toxic

tort law is particularly useful when analyzing the Flint Water Crisis because it captures a common route that counsel for Flint victims are taking for legal redress, but are having trouble

This area of the law applies to the Flint Water Crisis because the citizens of Flint were exposed to harmful substances—primarily lead—through their water source and have consequently suffered adverse effects. The most relevant toxic tort claim, which many legal representatives for Flint victims are asserting, is negligence. To prove negligence, victims of the crisis must prove that the defendant had a duty of care to them or the general public, that the defendants breached that duty of care, that this breach caused their injuries, and that they were injured (Michon 1-6).

An example of a past toxic tort case that demonstrates why toxic tort law is appropriate to apply to Flint cases is *Adinolfe v. United Techs. Corp*. In *Adinolfe v. United Techs Corp*., residential property owners in Palm Beach County, Florida sued United Technologies Corporation—an aircraft and rocket engine manufacturer—for damages resulting from groundwater contamination ("Adinolfe v. United Technologies Corporation"). The plaintiffs alleged that the aircraft and rocket engine manufacturer discharged various toxic chemicals into the soil and groundwater near the owners' properties in Palm Beach County ("Adinolfe v. United Technologies Corporation"). The plaintiffs in this case asserted negligence. The court decided that United Techs. Corp had acted negligently ("Adinolfe v. United Technologies Corporation" sec. 5C).

The circumstances in *Adinolfe* are very similar to the situation in Flint. For example, many Flint victims have asserted negligence, like the Flint victims in their lawsuits. Another similarity between the two cases is that *people* were injured, as opposed to property or property value, which is typical of toxic tort cases ("Causation in Environmental Law Lessons from Toxic

Torts" 2256). One key difference, however, is that the defendant in Flint cases is usually the U.S. government or a government official, posing a new obstacle. The similarities between these two cases imply that the obstacles observed in Flint make a toxic tort analysis relevant.

Although toxic torts and environmental law overlap in many ways, and some toxic tort suits may be considered environmental law cases, examining the Flint Water Crisis in this way is appropriate for several reasons. First, causation is treated differently in environmental law cases and toxic tort cases. According to scholars, "dismissal of a toxic tort case for lack of causation is typically based on whether the plaintiffs have presented sufficient evidence on causation, after standing has been established" ("Causation in Environmental Law Lessons from Toxic Torts" 2257). Causation in environmental suits, on the other hand, "is typically analyzed as a component of Article III standing, a jurisdictional inquiry that precedes any other aspect of the case" ("Causation in Environmental Law Lessons from Toxic Torts" 2257). A toxic tort suit is appropriate because many Flint cases have been dismissed for insufficient evidence when proving causation, suggesting that this is an area of the law that can be improved.

Second, toxic tort suits "refer to personal injury cases that allege harm, generally a physical injury, due to exposure to a toxic substance… environmental suits, in contrast, refer to cases that allege an injury to plaintiffs' interests due to harm to the environment or a violation of an environmental statute" ("Causation in Environmental Law Lessons from Toxic Torts" 2256). In most cases, the victims' injuries in Flint, Michigan fit the mold of toxic tort law because of their extensive personal injuries.

An analysis through the lens of toxic torts kind is useful because many Flint victims have already struggled to get past barriers characteristic of tort law. Thus, viewing the Flint Water Crisis in this way helps pinpoint the deficiencies in this particular area of the law. Although the

Flint Water Crisis is both a toxic tort and environmental law phenomenon, it is appropriate to examine it as a toxic tort because it reveals how the law is failing Flint victims and what can be done in future lawsuits to avoid the obstacles posed by toxic tort law.

VI. Similar Water Crises Before Flint

Citizens from other U.S. cities have been experiencing water crises similar to the one in Flint, Michigan, and have been seeking aid and ways to condemn the government for their inaction. Incidents similar to Flint have occurred in at least 33 cities across the U.S. in the past decade (Milman and Glenza 1). Examining these cases help demonstrate the deficiencies in the legal system pertaining to toxic torts in the United States more broadly.

In St. Joseph, Louisiana in 2016, citizens had a drinking water emergency that led to a public health emergency. The water in St. Joseph was contaminated with lead and iron due to a deteriorating water distribution system (Hersher 1-3). After testing the water in households, the city of St. Joseph declared a public health emergency due to elevated lead levels in tap water (Dennis 1). The government's actions, however, were severely delayed, as St. Joseph citizens had been reporting unclean looking water coming out of their taps for over a decade. And, even after the water was finally tested, the people of St. Joseph went without safe drinking and tap water for more than a year, putting their health at risk (Dennis 1-2).

Although there were no reported illnesses from the lead and iron exposure, the health of St. Joseph citizens was put at risk (Yan and Carletta 2). Exposure to lead can cause more silent long-term effects, and iron may also have adverse effects. For example, lead exposure could put people at "risk for high blood pressure, heart disease, kidney disease, and reduced fertility" ("Health Problems Caused by Lead" 1-2). Similarly, large doses of iron can be lethal ("Iron in

Drinking-water" 3). The communities that have been affected in St. Joseph are predominantly poor and have been unable to seek legal help for the damages that they suffered (Dennis 4). Research shows that there were no lawsuits filed by St. Joseph victims, likely because no one was reported to have gotten sick from the water (Yan and Carletta 2).

Another example of a city with a water crisis that has brought to light deficiencies in the legal system is Philadelphia in 2016. In Philadelphia, the city government had been inadequately testing the city's water and conducting city projects that compromised the integrity of lead pipes, which ultimately caused the city's citizens to be exposed to several water contaminants and put them at risk of lead poisoning. Subsequently, the citizens of Philadelphia filed a class action lawsuit against the city of Philadelphia, *Delopoulos v. City of Philadelphia*, for their inadequate and outdated water testing practices, as well as other actions that put the citizens at risk (Gordon 2).

In *Delopoulos v. City of Philadelphia*, the citizens alleged negligence against the city government, among other things. The citizens of Philadelphia asserted that the government had been manipulating the results of water tests and do not follow proper EPA guidelines (Bedigian 1-3). The citizens also contended that the government knew that their construction activities had broken water pipes, possibly contaminating drinking water. This case was closed after a motion to discontinue, however ("Delopoulos v. City of Philadelphia"). Nonetheless, the people of Philadelphia encountered numerous complications obstructing their access to legal remedies, much like Flint residents.

VII. Obstacles and Suggestions

Some of the main obstacles to legal redress for Flint victims are access to justice, immunity, and causation. While immunity and causation are key obstacles once lawsuits have been commenced, access to justice explains why Flint victims have a difficult time using the legal system to resolve their concerns. Some of these other obstacles even exacerbate the access to justice problem, such as sovereign immunity and causation.

Although getting past obstacles can be challenging, there are several approaches that legal representatives of Flint victims can try in order to circumvent these barriers and make future Flint lawsuits more successful. These approaches highlight deficiencies in the law because victims who have been harmed are having to take circuitous measures to access legal remedies.

a. *Access to Justice*

Access to justice refers to access to the legal justice system, which is limited to numerous groups of people in different situations. Access to justice has been unattainable in many circumstances and is not unique to toxic torts—people are not getting access to justice for divorces, property disputes, childcare disputes, and other civil legal needs. In fact, about four-fifths of the civil legal needs of impoverished U.S. citizens are unmet (Rhode 3). Furthermore, national spending on legal aid has been cut in recent decades, and even more restrictions have been placed on clients and causes that the government can represent. The increasingly severe limits on access to justice have been especially detrimental to those who face *health* issues and are unable to attain remedies through the justice system, such as the victims of the Flint Water Crisis.

Flint, Michigan is severely impoverished, and its people are amongst the poorest in the region, which was also the reason behind the initial water source change (Sim 4). Today, 41.6% of the Flint population lives in extreme poverty and 57% of its residents are African American,

suggesting that those who were affected by the Flint Water Crisis were at a socioeconomic disadvantage (Sim 93). The poverty that exists in Flint is one of the reasons that Flint victims have been unable to attain legal redress. Although the victims of the Flint Water Crisis face severe health issues both now and in the future, many do not have the funds to commence legal actions. Therefore, poverty has blocked their access to justice.

According to Stuart A. Smith, an environmental lawyer in New Orleans, cases such as those are difficult to win because "besides passion, knowing the law and how to fight in court, the lawyers will need deep pockets, a team of recognized experts, and a solid understanding of chemistry and toxicology" (Smith 3). "Deep pockets" are precisely the type of resource that Flint victims do not have access to, as per the statistics of Flint residents above. Therefore, for many Flint victims, lawsuits are not a viable avenue for them to turn to, at least not without financial assistance. Therefore, Flint victims are left without the means to initiate a lawsuit on their own to hold the wrongdoers accountable, even though they have been wronged and injured.

There are several possible solutions to the limited access to justice of Flint victims because of their financial status. One of the ways to overcome this obstacle is by filing class action lawsuits. Class action lawsuits are much cheaper than filing individual lawsuits, often because one attorney representing many plaintiffs is cheaper than each plaintiff hiring a separate lawyer (Bonner 4-5). This reduced cost of litigation allows plaintiffs who would not normally be able to afford legal counsel to have access to restitution.

Another possible solution to make justice more accessible to Flint victims is for attorneys to offer their services pro-bono in situations such as these. In these cases, lawyers would extend their services to victims such as those of the Flint Water Crisis without charge. This solution, however, is contingent upon lawyers agreeing to offer their services free of charge, which might

be unlikely because of all of the other obstacles hindering legal success, lowering the incentive for lawyers to take these kinds of cases on, although not impossible.

b. *Immunity*

Sovereign immunity is a legal doctrine that "shields federal and state government officials acting in their official capacities from tort liability" (Weiss 1042). The doctrine of sovereign immunity originates from British common law and the idea that "the king could do no wrong" ("Sovereign Immunity"). This doctrine exists in the United States because it was adopted from British common law. In context of the Flint Water Crisis, sovereign immunity is an issue because, due to the nature of the crisis, it is mainly government officials who are at the root of the problem. Thus, citizens have had an especially difficult time holding them accountable for their actions. Furthermore, this is a particularly difficult obstacle to overcome because there are only a few narrow exceptions to this protection.

One of the first Flint, Michigan cases that faced complications due to sovereign immunity was *Melisa Mays, et. al. v. Governor Rick Snyder, et. al*. In this case, four families alleged that government officials, such as Governor Rick Snyder had been negligent by leading the families to believe that the water was safe. The families complained that "for more than 18 months, state and local government officials ignored irrefutable evidence that the water pumped from the Flint River exposed the Plaintiffs and the Plaintiff Class to extreme toxicity, causing serious and dire injury and health hazards, and property damage to the Flint water users" ("Melisa Mays, et. al. vs. Governor Rick Snyder, et. al." 1).

This case was dismissed in 2017, and sovereign immunity was a major factor that hindered the Flint victims' access to legal redress. The families were unable to get past sovereign immunity because they implicated Governor Snyder, a government official who was acting in his

official capacities. Some of the personal injuries that the plaintiffs claimed were high levels of lead and copper in their bloodstream, and other symptoms of lead exposure, such as convulsions, "brain fog," skin lesions, and hair loss. ("Melisa Mays, et. al. vs. Governor Rick Snyder, et. al.").

Before the plaintiffs in *Melisa Mays, et. al. v. Governor Rick Snyder, et. al*. filed their complaints, they had a difficult time finding an attorney to represent them. Several lawyers said that they were wary to take the case on because of the potential defendants—the State of Michigan, the city of Flint, and other government officials. The lawyers were reluctant because governments and employees engaged in their official duties are shielded from most private lawsuits by sovereign immunity (Pierson 6). So, long before immunity became an obstacle for Flint victims, access to justice posed a significant problem. Sovereign immunity contributes to limited access to justice because legal representatives are reluctant to take on cases that could face serious problems where they could potentially lose.

There are several approaches that legal representatives of Flint victims can take in order to circumvent the sovereign immunity obstacle. In order to overcome the obstacle of sovereign immunity, plaintiffs can allege and prove gross negligence instead of negligence against government officials. The difference between negligence and gross negligence is that if a government official was grossly negligent or acting intentionally, they are not subject to immunity because they were not acting in good faith (Gostin 5-6). Gross negligence is different from regular negligence in that it is "an extreme disregard for the safety of others" and is an action that is 'likely to cause foreseeable harm'" ("What is the Difference Between Ordinary Negligence Vs. Gross Negligence?" 2-3). For example, negligence is when a driver fails to stop at a stop sign. Gross negligence, however, is when a driver fails to make a stop at a stop sign

where many pedestrians are crossing the street. A barrier to asserting gross negligence, however, is that plaintiffs are required to prove that the government officials acted intentionally.

A second approach to circumventing the immunity barrier, however, is alleging a due process violation, also known as a section 1983 claim. The logic behind this is that Flint victims, who have suffered in numerous forms—health and the loss of a functioning home and community—can allege that the government is taking away life, liberty, or property without due process (Bernstein and Dennis 1-2). Furthermore, in Flint cases, the right to clean water is being taken away, which is especially problematic because many of the city's citizens pay for it. By taking this route, the plaintiffs in Flint and other similar cases can avoid sovereign immunity and the restrictions that it produces.

Jan Burgess v. United States is an example of a case where the plaintiffs successfully avoided the immunity barrier. In this case, the plaintiffs, a group of Flint citizens alleged that the Environmental Protection Agency was negligent in its response to the Flint Water Crisis because they did not enforce their regulations, especially when it had the authority to do so under the Safe Drinking Water Act (SDWA). Under the SWDA, the Environmental Protection Agency had a duty to intervene, investigate, obtain compliance, and warn Flint residents of the health risks posed by the water. The plaintiffs in this case were able to circumvent sovereign immunity because under the Federal Tort Claims Act, sovereign immunity is waived "to the extent that state-law would impose liability on a 'private individual in similar circumstances'" ("Jan Burgess v. United States" 41). In this case, a Michigan law was applicable—the Good Samaritan doctrine. The judge concluded that the plaintiffs "plead facts sufficient to hold the government liable under the FTCA for its response to the Flint Water Crisis" ("Jan Burgess v. United States" 44).

In *William Thomas v. United States*, however, the plaintiff sued the United States government for negligently reacting to the water crisis in Flint, Michigan. On the merits, sovereign immunity was applicable in this case because the plaintiffs sued a government official. As this case was going on, however, another case, *Guertin v. Michigan*, succeeded in circumventing sovereign immunity. The federal judge refused to let the federal government appeal to the Sixth Circuit to argue that it had immunity from claims brought by thousands of residents of Flint, Michigan (Bailey 1). Furthermore, as of January 2020, the Supreme Court has decided that Flint officials and the City of Flint, Michigan are not entitled to sovereign immunity (Woschkolup 2-3). Therefore, a potential way to avoid immunity as an obstacle relies entirely on outside influences to decide, such as federal courts of the Supreme Court, but it important to note that this is an opportunity for Flint victims to come forth and bring their claims against the government (Chambers 1-2).

c. *Causation*

Another obstacle that Flint victims have encountered while trying to acquire legal redress is causation. Even if Flint plaintiffs are able to acquire legal counsel and circumvent sovereign immunity, they must also prove *specific* causation. This is especially difficult because "the behavioral and cognitive impairments caused by lead may be attributed to many other causes" (Weiss 1042). While many plaintiffs may be able to establish *general* causation, because lead is without a doubt capable of causing health complications, specific causation is a difficult hurdle to overcome.

Another way that causation could be an obstacle for Flint victims is that many of the long-term effects of exposure to lead may not have manifested yet. While exposure to very high levels of lead may lead to death, exposure to more moderate and lower levels can have severe

effects on health, but may not be as sudden. For example, exposure to moderate levels of lead can cause kidney failure, reproductive issues, and cognitive issues ("Lead Toxicity What Are Possible Health Effects from Lead Exposure?" 4-7). Cases that are based on effects that may or may not happen are not very likely to be successful in court because there is no certainty that any ill effects were caused.

Yet another issue with causation is that while lead exposure could prevent class certification in class action lawsuits, or lawsuits where multiple plaintiffs group together because they have suffered similar injuries because of a defendant's actions (Bonner 4-5). This is because causation can take many forms—maybe one plaintiff bathed in lead-contaminated water, but one drank water with high lead levels. Although exposure to lead through water may ultimately be the cause of the plaintiffs' injuries, the different characteristics surrounding each person's situation may be too different or affected by too many different factors for a judge to certify them as a class (Bernstein and Dennis 1-2). Furthermore, there is causal ambiguity, oftentimes in the dose rate, that makes it difficult for judges to relate certain plaintiffs to one another (Sanders and Machal-Fulks 110).

In order to prove causation, one of the things that the Flint plaintiffs can do in the future is to avoid class action lawsuits, only if they can afford individual lawsuits, however. One of the problems with class action lawsuits is that not all of the victims were affected in the same way. Different class members were exposed to different amounts of lead, for different amounts of time, in different ways, and over different periods; Some suffer no physical injury, while others suffer from significant cognitive, behavioral, or physical problems (Weiss 1041). Therefore, it is difficult to prove causation if all of the injuries and levels of exposure are different. It is unlikely

that many Flint victims will be able to afford the monetary costs of bringing individual lawsuits, however, because the Flint community is severely impoverished (Sim 4).

In order to overcome the causation obstacle, there are several approaches that legal representatives could take in the future. For example, to help prove general causation, legal representatives could present epidemiological studies as evidence. Part of the study of epidemiology deals with studying the determinants of disease in humans and there are several ways to conduct these studies, all suited to slightly different purposes (Dintzer and Mosher 222). Although epidemiological studies cannot *directly* prove the cause of injuries or diseases, they can help establish whether there is a causal relationship that a court can then use (Dintzer & Mosher 268).

In addition to epidemiological studies, a possible solution to the causation obstacle would be to present differential diagnosis testimony to prove causation (Sanders and Machal-Fulks 111). A differential diagnosis is a process where a plaintiff's expert purports to implicate various potential causes for the plaintiff's illness and then to exclude alternative causes until only one cause remains (Hopp et al. 6). Both epidemiological studies and differential diagnosis testimony *together* could help Flint victims prove causation.

Admissibility standards, however, could hinder the use of both epidemiological studies and differential diagnosis testimony in court. After the case *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, presenting epidemiological or differential diagnosis evidence does not automatically turn any study into reliable science. Judges must "decide whether the methodology underlying expert testimony is both reliable and relevant" (Ackers and Scott 1). Proving causation is a notoriously difficult task because it is challenging to prove that a particular substance caused a specific effect due to disaccord from the scientific community. For this

reason, expert testimony must reach a certain threshold before it is admissible in court. Many factors might influence the admissibility of this kind of evidence, but if used properly, it can have a large effect on plaintiffs' ability to prove causation.

Key Cases in the Flint Water Crisis						
Name of Case	Date Filed	Plaintiff(s)	Key Defendant (s)	Relevant Toxic Tort Claims	Status	Key Obstacle
Melisa Mays, et. al. vs. Governor Rick Snyder, et. al	Nov. 13, 2015	Four families in Flint, Michigan	Governor Rick Snyder and thirteen other city and state officials	Negligence	Dismissed. (Immunity)	Immunity; Access to justice
Jan Burgess v. United States	Apr. 25, 2016	Jan Burgess, and all 2,959 individuals identified in the Burgess FTCA administrative Complaint	U.S. Environmental Protection Agency	Negligence	Pending.	Immunity
William Thomas v. United States	Aug. 29, 2016	William Thomas, and all 1,923 individuals identified in the Thomas FTCA administrative complaint	U.S. Environmental Protection Agency	Negligence	Pending.	Immunity
Update January 4, 2019: A Michigan federal judge refused to let the federal government go to the Sixth Circuit to argue it had immunity from claims brought by thousands of residents of Flint, Michigan (Bailey 1). **Update Jan. 21, 2020: SCOTUS determined the City of Flint, MI is not entitled to sovereign immunity (Woschkolup 1).**						

VIII. Conclusion

Although the Flint Water Crisis began in 2014, the people in Flint, Michigan are still feeling its effects. When Flint officials switched the city's water for economic reasons, Flint citizens were exposed to high levels of lead because of the acidic water corroding the pipes. After the residents of Flint began to complain about the off-tasting water, government officials still claimed that the water was safe to use. Shortly after, it was discovered that the citizens of Flint had high levels of lead in their blood. Flint citizens brought suit against government officials for their injuries.

Tort law and claims, such as negligence, are especially well-suited to the Flint Water Crisis, in theory, because the victims were personally injured by the government's negligent response to the crisis. Various obstacles in achieving legal redress, however, demonstrate that this area of the law is inadequate and inaccessible for victims, such as those in Flint. Some of the obstacles that the people of Flint encountered are sovereign immunity and proving causation.

Moving forward, as the American legal system struggles with toxic torts and water pollution cases, there are some adjustments that the legal representatives of the people of Flint can make in their approaches in the future to ensure that the victims they represent receive legal redress. To avoid immunity as an obstacle, legal representatives can try suing other entities that are not the government or government officials, such as the EPA. Plaintiffs can also try alleging gross negligence instead of negligence against government officials, which essentially voids immunity. Also, in the case of Flint victims, a federal judge and, more recently, the Supreme Court have determined that the City of Flint did not have sovereign immunity, which is an

opportunity for Flint victims to come forth with their concerns. This is also a possibility for other cities in the United States.

To avoid causation as an obstacle, toxic tort and Flint victims have several options. For example, victims can avoid class action lawsuits, because it is difficult to prove that the same thing caused a large group of people's injuries. This only works if access to justice is not an issue and they can afford an individual lawsuit. Legal representatives can also try presenting different kinds of evidence, such as epidemiological evidence or diagnosis testimony to prove causation. The problem with these solutions, however, is that they might be unattainable for some victims because they can be more expensive, which can be detrimental in a poor community such as Flint.

Even if Flint citizens were able to overcome these obstacles, there are still ways in which the law is lacking. Furthermore, even initiating the path to legal redress can be difficult, as it is often poorer communities that are affected by water crises and failing infrastructure, as illustrated in St. Joseph, Louisiana. Therefore, although there are certain loopholes to obstacles that future legal counsel can exploit, there are inevitable deficiencies in the system that make it difficult for victims of toxic torts, such as those in Flint, Michigan, to have access to legal remedies.

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