We the People of Detroit Community Research Collective (WPD CRC) is a collaboration between community activists, academics, researchers and designers. Our research is produced with and for the citizens of Detroit. This research has been used in a wide range of settings, from community organizing to legal and legislative work. We hope that our work will be of further use to Detroiters in their efforts to build a more democratic city.
A study from Michigan State University shows that the number of Americans who will be unable to afford their water bills could reach 35.6% by 2022, triple what it was just 3 years ago.
State Water Shutoff Moratoria Amidst COVID-19 Outbreak

During the COVID-19 outbreak, 34 states have issued some form of water shutoff moratorium. Moratorium orders have varied, ranging from a statewide moratorium with water service restoration to a partial moratorium with no service restoration. As of June 22, 2020, shutoff moratorium orders have expired in six states.

Data Source:
Food and Water Watch "Emergency-State Water Shutoff Moratoria Amidst Coronavirus" 
https://docs.google.com/presentation?d=1V2Agv9k4gsSUJqP6oB2lZ6ZnHxjwBw&usp=sharing
Accessed 6/23/2020
Regional Water Supply System
Detroit Water and Sewerage Department

Data Sources:

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Water Shutoffs, Emergency Management, the Removal of Flint from DWSD System, and the Great Lakes Water Authority

Data Sources:
Water Shutoffs: Detroit Water and Sewerage Department.
Detroit Water and Sewerage Department
- Operates regional water and wastewater infrastructure
- Sets all water rates
- Sells water to Detroit customers at retail rates
- Sells water to suburban water authorities at wholesale rates

Great Lakes Water Authority
- Leases regional water and wastewater infrastructure from the City of Detroit
- Operates regional water and wastewater infrastructure
- Sets all water rates
- Sells water to all customers at retail rates
WATER SHUTOFFS IMPACT PUBLIC HEALTH

A new study by Henry Ford Health System, in collaboration with We the People of Detroit Community Research Collective, shows a correlation between water shutoffs water-related illnesses.

Kyle Moxley, ABD, Alexander Plum, MPH, CHES, Marcus Zervos, MD
In collaboration with We the People of Detroit Community Research Collective
Even when taking into account the effects of socioeconomic status and poverty, the study showed a significant relationship between water-related illnesses and shutoffs:

1. Patients admitted to Henry Ford Hospital with water-related illnesses were significantly more likely to live on a block that has experienced water shutoffs. Patients diagnosed with skin and soft tissue diseases were **1.48 times more likely** to live on a block that has experienced water shutoffs.

2. Living on a block that has experienced water shutoffs **increases the likelihood** that the patient will be diagnosed with a water-related illness.

3. Patients who are most likely to experience water-related illnesses resulting from water shutoffs are **also the most socially vulnerable**, according to the Center for Disease Control’s “Social Vulnerability Index.”
THREE WATERBORNE OUTBREAKS IN DETROIT
(2016 & 2017)
George Gaines, MSW, MPH

The morbidity data from Michigan Community Health and the Detroit Department of Health show several disease outbreaks during the last two years. This paper will describe the increases and offer a view at the etiological factors that were involved.
Community Assessment for Public Health Emergency Response (CASPER) Toolkit

Second Edition
Census Blocks Surveyed for CASPER Study and Detroit Water Shutoffs, 2015

Shutoffs source:
Detroit Water and Sewerage Department

We the People of Detroit Community Research Collective
5% of households surveyed were without water at the time of contact.

17% of households were or had been shut off from water.

26.4% of households had been shut off or were currently at risk of being shut off (Given notice).

The average length of time residents stayed without water was 10.5 days.

The average water bill – including homes with zero balance -- was $371.

26% of Detroit residents are always or usually stressed about affording their water bills.
Shutoff Moratorium
On August 23, 2016, Authority Health released a statement calling for a moratorium on water shutoffs for select vulnerable groups.

Based on their recommendations and our study, more than 82% of households would be ineligible for shutoff on health exemption criteria alone.

The following are non-redundant counts:
• Infants and children under the age of 18: **51%**
• Seniors age 62 and above: **31%**
• Persons with mental illness: **6%**
• Persons with disabilities: **25%**
• Expectant and/or breastfeeding mothers (needs further study)
• Persons dealing with chronic diseases: **63%** (excluding disabilities and mental health)
* Persons otherwise in need of critical and/or medical care: **25%**
Table 2: Water-related stress and safety behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>% “yes”</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drank water you thought might be unsafe for your health?</td>
<td>85.7%</td>
<td>21</td>
</tr>
<tr>
<td>Collected water from an undesirable or dirty source?</td>
<td>33.3%</td>
<td>6</td>
</tr>
<tr>
<td>Worried you would not have enough water to meet your needs?</td>
<td>82.4%</td>
<td>17</td>
</tr>
<tr>
<td>Borrowed or shared water with a neighbor, friend or relative?</td>
<td>80.0%</td>
<td>20</td>
</tr>
<tr>
<td>Argued with someone in your house over water?</td>
<td>75.0%</td>
<td>12</td>
</tr>
<tr>
<td>Re-used water to do household tasks?</td>
<td>58.3%</td>
<td>12</td>
</tr>
<tr>
<td>Worried about the removal of a child from your home due to shutoff?</td>
<td>75.0%</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 3: Water insecurity and psychological distress

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Psychological distress</th>
<th>Psychological distress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>Std. err.</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.25</td>
<td>0.70</td>
</tr>
<tr>
<td>Water status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>off</td>
<td>0.20</td>
<td>0.61</td>
</tr>
<tr>
<td>reconnected</td>
<td>0.99</td>
<td>0.40</td>
</tr>
<tr>
<td>received notice</td>
<td>2.31</td>
<td>0.29</td>
</tr>
<tr>
<td>Water bill amount</td>
<td>-0.31</td>
<td>0.21</td>
</tr>
<tr>
<td>Perceived water bill affordability</td>
<td>0.30</td>
<td>0.15</td>
</tr>
<tr>
<td>Sewer floods</td>
<td>0.18</td>
<td>0.45</td>
</tr>
<tr>
<td>Cut back on essentials</td>
<td>0.41</td>
<td>0.58</td>
</tr>
<tr>
<td>Monthly income</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Housing situation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>homeowner</td>
<td>-0.16</td>
<td>0.58</td>
</tr>
<tr>
<td>live with family</td>
<td>-0.03</td>
<td>0.78</td>
</tr>
<tr>
<td>housing insecure</td>
<td>1.55</td>
<td>0.77</td>
</tr>
<tr>
<td>No. household members</td>
<td>-0.07</td>
<td>0.19</td>
</tr>
<tr>
<td>Have children under 2</td>
<td>-0.42</td>
<td>0.79</td>
</tr>
<tr>
<td>Have teenagers</td>
<td>0.07</td>
<td>0.64</td>
</tr>
<tr>
<td>Black/African American</td>
<td>1.74</td>
<td>0.97</td>
</tr>
<tr>
<td>Female</td>
<td>-0.03</td>
<td>0.71</td>
</tr>
</tbody>
</table>

R²: 0.41              0.65
Observations: 42       36

Notes: Huber-White standard errors, robust to heteroscedasticity;
*** significant at p < 0.01; ** significant at p < 0.05; * significant at p < 0.10.
After Detroit shut off water to 48,000 homes in two years,* we asked 100 low-income women: “In the past two years, have you ever...”

- Drank water you thought might be unsafe for your health?
- Collected water from an undesirable or dirty source?
- Worried you would not have enough water to meet your needs?
- Borrowed or shared water with a neighbor, friend or relative?
- Argued with someone in your house over water?
- Re-used water to do household tasks?
- Worried about the removal of a child from your home due to shutoff?

Since 2010, Detroit has shut off water to almost 170,000 homes.*
NEXT STEPS

What should happen next?
1. The City of Detroit must institute an immediate moratorium on all water shutoffs.
2. The City of Detroit must institute a water affordability plan based on a resident’s ability to pay.
3. The City of Detroit must release water shutoff data necessary to complete a more thorough study of the impact of water shutoffs on public health, with an analysis as to how these conditions further contribute to racial health inequities.

How can I protect my family from these water-related illnesses?
1. Use bottled water for drinking or try to get water from a neighbor, ESPECIALLY for vulnerable populations.
2. Be careful not to reach hands into an open source (bucket/jug) of water. This can contaminate the water.
3. If the toilet cannot be flushed and human waste is sitting in it, periodically pour a bucket of water directly into the bowl to manually flush it; gravity will do the trick and send it to the sewer.
4. You can use rubbing alcohol to clean hands and wounds as much as possible. Consider asking neighbors or friends to come use their shower to bathe yourself and your family.
5. Once your water is reconnected, let it run for a little while (at least 5 minutes) before you drink it. This can help discharge any contaminants that might have settled in the pipes while it was shut off.

My water is shut off or at risk of being shut off. What should I do?
Call We the People of Detroit’s water rights hotline at 1-844-42WATER (1-844-429-2837). Our volunteers can assist Detroiters with locating emergency water and making payment arrangements with DWSD. We can also assist with finding and navigating the various water resources that are currently available.
www.wethepeopleofdetroit.org
Get Involved

Mapping the Water Crisis

$15 Donation
Could be put toward our operations and research costs.

$30 Donation
Will cover 3 days worth of emergency water for a resident whose water has been shut off.

$150 Donation
Will cover a week’s stipend for our youth social justice interns.