



Community Preparedness: An Assessment of the Georgia Ave-Petworth Community

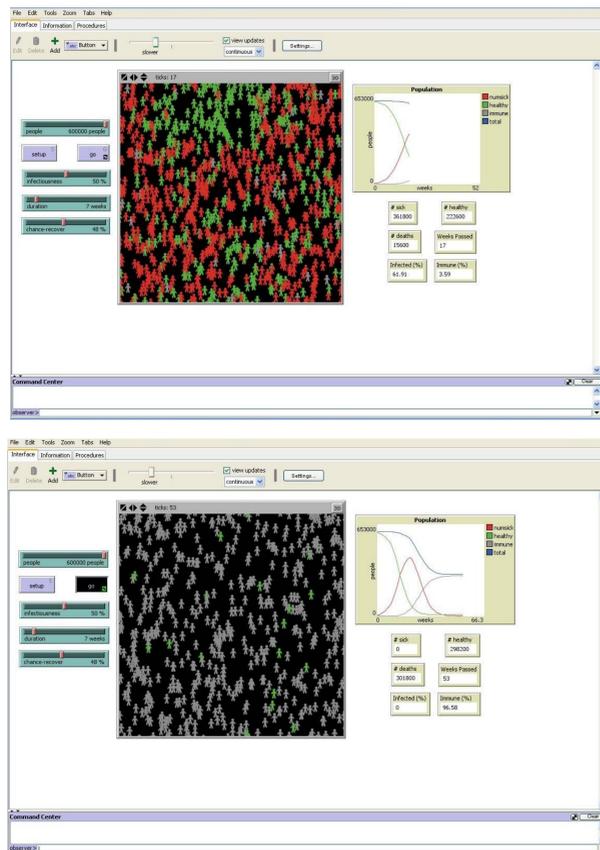
Etaba Assigana, Philip Dubois, Caleb Laster, and Yolanda Long

Background

During the 1990s, terrorist actions using biological weapons and the fear that rogue states possessed such weapons placed bioterrorism on the political agenda, which created a policy window widened by the September 11 attacks. Advocates for improving the U.S. public health infrastructure attempted to use this window to obtain the resources necessary for modernization. By defining bioterrorism as a security rather than a public health issue, health policy mobilizers squander the opportunity to institute broad based reforms that would improve not only the ability to manage a terrorist incident, but also meet other public health needs. The existence of bioterrorism as a public health issue brings clear notice of communicable viruses such as orthopoxvirus, better known as Smallpox. Smallpox can pose a severe threat to homeland security. Collectively, our group wants to discover what, or if any, social distancing demographics correlate with elevated/depreciated levels of resiliency in a particular area (Petworth) of Washington, DC.

NetLogo

We used NetLogo to model the possible spread of smallpox in the District of Columbia.



Methods

We began our research by modeling smallpox using the NetLogo multi agent. We then completed a historical analysis and social disorganization of the Georgia Avenue Petworth Community. Our research also involved creating a community preparedness assessment. In this assessment we asked questions about providing shelter, food, medical supplies, and awareness of the DC Response Plan. The assessment also included open-ended questions that asked about how the individuals in question would handle a power outage and what type of involvement they have with the community. After acquiring a list of schools and community centers from the DC government website, and a list of churches in the community from Google, we conducted phone interviews using our assessment.

Figure 1. Preparedness Survey

COMMUNITY PREPAREDNESS ASSESSMENT

1) Do you have the capacity to provide shelter in the event of an emergency?
 Yes No
 If so, 1b) How many people can you safely house? ___
 1c) How many showers and restrooms do you have?
 Showers ___ Restrooms ___

2) Do you have emergency rations, (i.e. food and water)?
 Yes No
 If so, 2b) How many people can you sustain and for how long?
 Capacity ___ Duration ___

3) Does your shelter prioritize based on gender or age?
 Yes No
 If yes, 3b) then who is prioritized or limited(e.x. children vs. adults vs. seniors)? ___

4) Does your facility have medical supplies?
 Yes No

5) Are you handicap accessible?
 Yes No

6) Are you familiar with the DC Preparedness Plan, and how it specifically applies to you?
 Yes No

7) Do any of your members or associates possess any certifications such as CPR or EMT?
 Yes No
 If yes, 7b) what certifications? ___

8) How prepared are you to handle a power outage? (backup generator??)

9) In a few words, please explain how involved you are with the community?

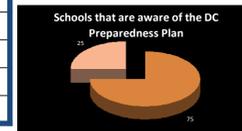
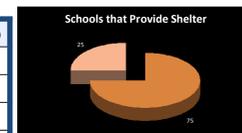
The information obtained in this survey will only be used by the University of the District of Columbia's HS-STEM's research team for educational purposes.

Data

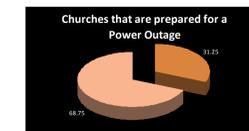
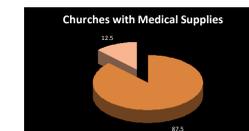
Community Centers	
George Ferris Jr. Clubhouse (Boys & Girls Club)	801 Shepherd St. NW (20011) (202) 576-3407
Petworth Recreation Center	801 Taylor St. NW (20011) (202) 576-6850
Raymond Recreation Center	915 Spring Rd. NW (20010) (202) 576-6856
Schools	
Barnard Elementary School	430 Decatur St. NW (20011) (202) 576-1100
MacFarland Middle School	4400 Iowa Ave. NW (20011) (202) 576-6207
Powell Elementary School	1350 Upshur St. NW (20011) (202) 671-6270
Raymond Education Campus	915 Spring Rd. NW (20011) (202) 576-6236
Roosevelt High School	4301 13 th St. NW (20011) (202) 576-6130
Churches (Too many to list)	

Community Preparedness Assessment			
	Total #	Total Responses	Percent Responded
Schools	5	4	80%
Church	49	16	33%
Community Center	3	3	100%
Totals	57	23	40%

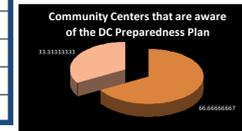
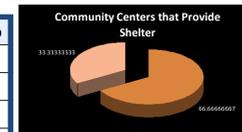
Schools	Yes	No
Provide Shelter	3	1
Emergency Rations	1	3
Medical Supplies	4	0
Handicap Accessible	4	0
DC Preparedness Plan	3	1
CPR / EMT	4	0
Power Outage	3	1
Community Involvement	3	1



Churches	Yes	No
Provide Shelter	11	5
Emergency Rations	8	8
Medical Supplies	14	2
Handicap Accessible	14	2
DC Preparedness Plan	6	10
CPR / EMT	15	1
Power Outage	5	11
Community Involvement	14	2



Community Centers	Yes	No
Provide Shelter	2	1
Emergency Rations	0	3
Medical Supplies	3	0
Handicap Accessible	3	0
DC Preparedness Plan	2	1
CPR / EMT	3	0
Power Outage	3	0
Community Involvement	3	0



Results

There are five schools listed in the Georgia Avenue Petworth Area. Of the five schools, we received responses from four. Most assessments were completed by the principal or administrator. Based on their responses, the majority of the schools can provide shelter, have medical supplies, are familiar with the DC response plan, can handle a power outage, and are involved in the community. Their shelter space is very limited, and their medical supplies are only that which is kept in the nurse's office. To handle a power outage, they have back up generators. Overall, the school seems prepared; however, the schools do not have food and water, which would lead to the starvation of those taking shelter there.

In addition to schools, we contacted forty-nine churches. Of the forty-nine, only sixteen responded. We found that about eighty percent of the churches have minimal medical supplies and are involved with the community. Seventy percent have the capacity to provide shelter. Less than fifty percent have food and water, are aware of the DC Response Plan, and can handle a power outage. Although the churches are less prepared than the schools, they are the only group that can provide food and water.

We also contacted and received responses from the three community centers in the area. All of the centers have basic medical supplies such as first aid kits. They are all prepared for a power outage and are very involved in the community. Two of the three provide shelter, and are aware of the DC Response Plan. When asked about food and water, they all replied with a, "no." Similar to the schools, if someone was to take shelter in a community center, its probable to say they would starve.

After looking at the preparedness, we were able to assess the resiliency of the community. Our research concluded that the Georgia Avenue/Petworth Community would not be resilient in the event of a natural disaster. They would have shelter and in most cases power but do not possess the capability to "bounce back". The public school system, local churches, and community centers have a lot of work to do.

Discussion & Conclusions

Through the examination of social disorganization, we were able to depict certain variations that have occurred in the Petworth/Georgia Avenue area over the past few years due to the major effects of gentrification. Due to actively participating in survey distribution among churches, community centers, and schools, we feel that our high response rate allowed us to observe the preparedness and resiliency of the community. Our research shows that in the event of a natural or manmade disaster, the Georgia Avenue-Petworth community generally is not prepared.

