

## **Do Focusing Events and Narratives Drive Pharma Rent-seeking: Evidence from Disease Outbreaks**

**Feler Bose**  
**Indiana University, East**

**Joseph Moran**  
**Anderson University**

*Kingdon argues that for an issue to gain agenda status, three “streams” have to come together. When these independent stream meet, a window of opportunity is created for a policy change to occur. Various factors can cause the window of opportunity to occur and one of them is a focusing event or in our case a disease outbreak (Kingdon, 1995). We hypothesize that when disease outbreaks occur pharmaceutical and related companies use this as an opportunity to seek rents. Congress passes funding when focusing events and narratives provide the opportunity to payback different pharmaceutical companies who have contributed to politicians. We use ProQuest News to track the media narratives during six different disease outbreaks and use Google Trends News to see how people interact with the narratives. We find that for five outbreaks there is support for our hypothesis, and the sixth outbreak provides a constraint on our hypothesis.*

### **INTRODUCTION**

When a terrorist attack occurs, or when a major disaster strikes, policy is one of the first areas that people seek to change. Events such as terrorist attacks and natural disasters can be driving forces for policy because they expose the flaws within the current policy. A shooting in a school raises the hopes of gun control interest groups to pass stronger gun laws; however, pro-gun interest groups may simultaneously use the occasion to persuade gun enthusiasts to let their voices be heard to oppose any legislation limiting their rights. Hence, it is important for any discussion on policy creation to consider the impact of competing interest groups in a particular policy area. Environmental disasters has been shown to result in the passage of climate change laws and regulations at the state level in the United States (Bose & Pandey, 2015). Economic crises like the 2008 Great Recession was used to pass bailouts, and can also result in new economic theories to develop due to the inability of old theories to explain the crisis (Christodoulakis, 2012).

Major man-made disasters, terrorist attacks, natural disasters, disease outbreaks can be categorized as focusing events. In the policy literature, focusing events provide a rather short “window of opportunity” (Kingdon, 1995) for policy change; we can also think of this window as opening for social and cultural change. The impact that the media has on focusing events is critical. Focusing events need news media coverage to move policy (Baumgartner & Jones, 1993; Cobb & Elder, 1972). Without sufficient media

coverage, environmental disasters do not result in passage of state level green building policies (Bose & Brower, 2018). If media coverage is heightened over a certain focusing event, it draws more public attention and gives interest groups a chance to turn the public's want for policy change into a need for policy change benefitting the interest group.

The term narrative is described by Shiller as, "...a simple story or easily expressed explanation of events that many people want to bring up in conversation or on news or social media because it can be used to stir others' concerns or emotions, and/or because it appears to advance self-interest" (2017). Narratives are also a way of "structuring and communicating our understanding of the world" (Shanahan, Jones, & McBeth, 2011). It is possible that narratives can explain a more root cause as to why people feel a certain way towards different focusing events. Narratives maybe nonfactual and may mutate with time. Narratives tell a story and narratives exist before an event has even occurred. Narratives have created the pre-existing beliefs and notions within people which will go on to influence how they view a focusing event when it arises. Media narratives play a large part in the push for policy change and narratives have been shaping the way people view events and policy for years. From this we can define narrative economics as the "study of the spread and dynamics of popular narratives, the stories, particularly those of human interest and emotion, and how these change through time, to understand economic fluctuations" (Shiller, 2017) or in our paper we define narrative economics as how narratives impact public policy. While narratives scholars consider narratives in terms of content and form (structure), we will focus on the quantity/volume of narratives (Shanahan, Jones, McBeth, & Radaelli, 2018).

We hypothesize that Congress passes legislation due to focusing events (disease outbreaks) and the pressure from the narratives and people's interaction with it, to payback pharmaceutical companies and other health care related industries who have contributed to the reelection efforts of politicians. Further, due to legislative lag, we expect the actual date of legislation passage to occur after the peak narrative. A corollary hypothesis is that once funding is passed, the narratives and people's interaction with it will subside even though the disease threat likely has not changed. To do our research, we primarily use Google Trends News<sup>1</sup> and ProQuest News to track the volume of media coverage of different events coinciding with when the government passes legislation dealing with disease outbreaks.

Section 2 goes over the policy theory literature. Section 3 discusses the data and analyzes the data. Section 4 concludes.

## **POLICY THEORY**

Policy creation can be a lengthy process from inception to completion. Downs (1972) proposed an "issue-attention cycle", which explains the evolution of public perception and drive toward fixing the problems that catch the public's attention. There are five stages. The cycle begins with the pre-problem stage, where an undesirable social condition exists, but has not captured high public attention outside of some experts and interest groups who may already be alarmed. The second stage is the alarmed discovery and blind enthusiasm, where a focusing event brings attention to the problem, and the public calls out for solutions feeling very confident in their ability to resolve the issue.

In the third stage, the realization eventually spreads that the costs of solving the problem requires great sacrifice across a large section of society. If solving the problem requires personal cost, fewer people will find themselves motivated to continue working to solve the problem. The fourth stage shows a large decline in public interest as people feel discouraged, bored, or even threatened by proposals to solve the issue. Further, another problem is usually entering the second stage and exerting a fresh claim on public attention. In the final stage, the issue falls back into a sort of limbo, occasionally and erratically catching some interest as new events remind people that the issue is not completely resolved. While public attention is at its lowest in this stage, new institutions and policies may have been created at earlier stages that can continue to have an impact (Downs, 1972).

In his *Multiple Streams Theory*, Kingdon argues that for an issue to gain agenda status, three "streams" have to come together. The three streams are the political stream, the policy stream, and the problem stream. The political stream encompasses public opinion, interest group pressure, ideological

distribution of the legislative body, etc. The policy stream involves bureaucrats, interest groups, researchers, academics, etc., that are involved in providing solutions to potential problems. The problem stream focuses on the issue that needs to be solved and whether the problem has caught people's attention or not possibly through a focusing event. Further, the issue is whether the problem is getting worse or better, and whether the problem is solvable within the existing status quo. The three streams are independent of each other and the moment they meet, a window of opportunity is created for a policy change to occur. Various factors can cause the window of opportunity to occur, they can include focusing events, a change in legislative body, and a change in solution to the problem (Kingdon, 1995).

During a policy window, policy entrepreneurs try to gain an advantage for pushing their own agendas through the legislative process. Policy windows provide an opportunity for policy entrepreneurs to push their policy solution forward and create attention to their problem that they seek to fix. When a particular policy problem arises, policy entrepreneurs take action to fight for a certain resolution to the policy problem. Policy entrepreneurs can be lobbyists, firms (profit or non-profit), and academics. In order for policy entrepreneurs to get on the agenda they need to be in good position with policy makers and have plenty of resources such as time, money, etc. Policy solutions are driven by the self-interest of the policy entrepreneurs and hence many such solutions to problems would be focused on seeking rents.

Policy windows are generally short in time but can be easily predicted in some cases such as when the government addresses the national budget, however it can also be unpredictable such as with a focusing event. Policy entrepreneurs use this window of opportunity to strategically manipulate information to provide "meaning, clarification, and identity," making it easier for policy makers to make up their minds on an option (Zahariadis, 2007, p. 69). The information that is manipulated is not necessarily meant to have a malicious meaning and includes labels and symbols "with specific cognitive and emotional impacts" (Andraka-Christou, 2015, p. 283)

Focusing events are important in moving an agenda forward. Focusing events allow for interest groups to raise money to lobby for change in the legislation (Sabatier, 1988). Focusing events need news media coverage to move policy (Baumgartner & Jones, 1993; Cobb & Elder, 1972). Furthermore, focusing events help in overcoming the limited carrying capacity restriction for media coverage. Focusing events also help motivate people to mobilize and lobby for change and can also result in counter mobilization of groups to maintain the status quo. The scope of the focusing event is important in determining the attention it garners and the ability it holds to shift policy from the status quo (Birkland, 1997).

Focusing events are publicly known events that expose failed policy in a very symbolic and dire way. Through focusing events, the attention of interest groups is gained. These interest groups then become policy entrepreneurs as they advocate for certain fixes to the exposed, and flawed policy. However, focusing events do not always sustain the attention of policymakers for a long enough time to find a place on the agenda because policymakers are often busy dealing with many policy issues at once (Downs, 1972). That being the case, interest groups have been known to use many different strategies to keep their event in focus. Such strategies might include; lobbying government, educating the public, mobilizing the public (letter, phone calls, protests, etc.), and engaging in election activities.

The extent of interest groups' and policy makers' response to a focusing event depends on what the features are of the event itself (such as magnitude) and on the causal story of the event (what caused it) (Birkland & Warnement, 2013). The causal story exists to tell us how the harm came about and whether to blame a certain person or group of people. Further, the issue of whether the focusing event was caused intentionally (purposeful action and intended effect), inadvertently (purposeful action and unintended effect), accidentally (unguided action and unintended effect), or mechanically (unguided action and intended effect) becomes a big part in the policy solution (Stone, 1989, p. 285). If the focusing event resulted in negative consequences and was intentionally caused, then the public will perceive political victims and oppressors and a need for a solution. The causal story might also suggest a fix to the problem. For example, if the causal story of a natural disaster was immature response policy, then the implied solution to the problem is a more mature and effective policy to fall back on in response to a similar scenario in the future.

In rare instances, a focusing event might be powerful enough to put itself in the policy maker's agenda without the need of a policy entrepreneur (Andraka-Christou, 2015, p. 284). An example of this would be an event such as the 9/11 terrorist attacks or Hurricane Katrina in the United States. Those events had a large enough impact to gain all of the policymakers' attention. The impact a focusing event can be measured by analyzing where the event is discussed, searched, and presented throughout the media and internet. Further, in order to obtain an accurate analysis, the focusing event must be looked at within the context of other events.

According to OpenSecrets (a project of the Center for Responsive Politics), from 1998-2017 the pharmaceutical/health products industry spent a total of \$3,591,294,472 lobbying. This is nearly 50% higher than the insurance industry which ranks second behind the pharmaceutical/health products industry, lobbying for a total of \$2,466,173,140<sup>2</sup>. Further, many firms in the insurance category are health care related and hence the health care sector has a large influence in our policy<sup>3</sup>. Based on this information, we can conclude that pharmaceutical companies will lobby for policy change to collect rents when a window of opportunity is created by a focusing events like the H1N1 pandemic. Pharmaceutical and health groups can be seen as "advantaged" groups or deserving groups since they are "important in the political and social hierarchy" (Ingram, Schneider, & deLeon, 2007, p. 101). Further, supporting these deserving groups "generates considerable political capital for policy makers" who are seen as pursuing the national good, but, in fact the policy benefits only certain groups (Ingram et al., 2007, p. 102).

Additionally, if we just look at the pharmaceutical industry, the industry spent over \$6 billion in advertising their products in 2016 in TV, in newspapers, etc., (Horovitz & Appleby, 2017). This provides the incentive for TV and newspapers to cover disease outbreaks in an exaggerated manner such that further advertising revenue is made available from the sponsoring firms.

## DATA AND ANALYSIS

To conduct our research, we used Google Trends and ProQuest database. Google Trends tracks key word searches and produces a trend line that shows search interest over time. For example, if the word entered into Google Trends is "Ebola," then Google Trends provides a trend line of how many times that word appeared in their search selections during a certain time period. The results can then be filtered into specific sub categories: News, Images, Videos, Books, and More. For our use of Google Trends, we tracked the number of searches that fell specifically in the News category. Using the News category allowed us to see the impact that media narratives on certain focusing events had on society by tracking the interest an event gained over a period of time. The Google Trends data points are normalized between 0 and 100 with 100 being the maximum search interest for the time and location selected. Google Trends also shows spikes in the data which can be seen as a sudden acceleration of search interest in a topic, when compared to usual search volume. The Google Trends data is plotted in the primary y axis with the x-axis showing the date. Furthermore, the data we collected from Google Trends was filtered geographically to the United States, as we were looking to see the impact that such events had on policy in the U.S.

ProQuest is a database that collects and keeps track of the number of documents such as articles, trade journals, scholarly journals, newspapers, wire feeds, magazines, reports, blogs/websites, and thesis that are submitted over a specific time period and provides them to the researcher. We used ProQuest to track how many of these documents were published on a week by week basis. Collecting this data allowed us to see how primarily the media narrative changes in terms of volume over time and what type of impact that the volume of the narratives has on policy change. The ProQuest data was plotted on the secondary y-axis. Having access to this information also allowed us to see the interplay of media narratives on the popularity of events among people which we tracked with Google Trends. If the disease outbreak was primarily U.S. based, we limited ProQuest data to U.S. based sources.

The diseases and viruses we plan to discuss are Zika (2016), Ebola (2014-2016), Measles (2014-2015), West Nile Virus (2012), H1N1 Pandemic flu (2009), and the Avian Influenza (2005-2006). The

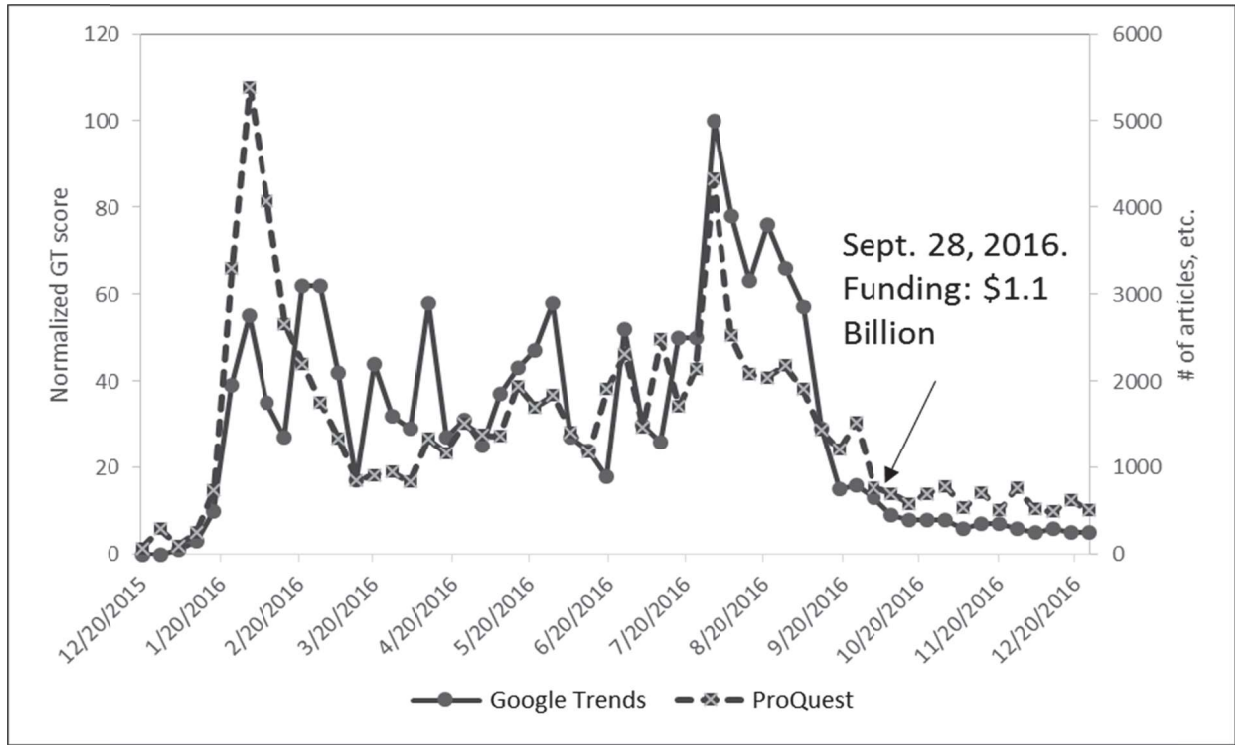
number was limited due to the length of data available from Google Trends (2008 for the news searches and 2004 for search engine results). The goal behind our research was to uncover information that would help us determine why events like disease outbreaks (focusing events) often lead to policy change, and congressional funding for pharmaceutical and health care companies.

### **Zika (2016)**

Zika is the most recent outbreak to gain national, as well as international attention. According to the CDC (Centers for Disease Control), Zika is a mosquito-borne disease that was first identified in 1947, and recently broke out in the Americas starting in 2015. Zika is not a very life-threatening illness, as there has only been one documented death within the United States, along with one other reported death in Puerto Rico. That death in the US was recorded of an elderly Utah resident, and according to Sifferlin, the person had an underlying health condition (2016). However, Zika symptoms can be harmful, especially in the situation of a pregnant mother passing on the disease to her child. Infected fetuses have been known to become physically deformed, with babies having smaller heads hence supporting our hypothesis.

On September 28, 2016, after eight months after the initial funding request from the White House, Congress passed legislation granting \$1.1 Billion to Zika research and prevention efforts. From using Google Trends and ProQuest data, we were able to pinpoint a time as to when the public was most interested in Zika. Figure 1 shows the Google Trends data and ProQuest data for Zika. According to Google Trends, Zika was at its peak popularity in August of 2016. In this situation, interest groups were able to use the media coverage and create a general need in the public for policy change, resulting in a \$1.1 billion-dollar payoff to combat Zika in September. We also see that the media narratives substantially decline once it is clear that funding will be passed by Congress, hence supporting our hypothesis<sup>5</sup>. With lobbying by pharmaceutical and health related companies being at an all-time high, the funding passed by congress is one way to pay off these rent seekers. According to OpenSecrets<sup>6</sup>, the Pharmaceutical/Health Products industry lobbied for a total of \$ 244,095,383 giving them a return on lobbying (ROL) of 347%<sup>7</sup>. This was considered one of the top 10 lobbying victories by *The Hill* in 2016 by the health care industry (Wilson, 2016). Table 1 provides additional details about the disease.

**FIGURE 1**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN**  
**MEDIA NARRATIVES AND PEOPLE’S INTEREST IN THE ZIKA OUTBREAK IN THE U.S.**  
**AND WHEN FUNDING WAS PASSED.**



**TABLE 1**  
**INFORMATION ON THE ZIKA OUTBREAK ITS CAUSES, CONSEQUENCES, AND EXTENT**

Timeframe	April 2015 - November 2016
Where the outbreak occurred	South America, Mexico, North America, The Pacific Islands, Singapore, Cape Verde, Central America, Puerto Rico, Dominican Republic, The Bahamas.
How it spreads	Transmission through mosquito bites, pregnant woman to fetus, sex, blood transfusion.
Total Cases (US & Territories)	43,327
Total Deaths (US & Territories)	1 known death in the states
Symptoms	Fever, rash, joint pain, conjunctivitis
Treatment Options	No vaccine. Treat with fluids, rest, fever reducers.
Funding	September 28, 2016. \$1.1 Billion

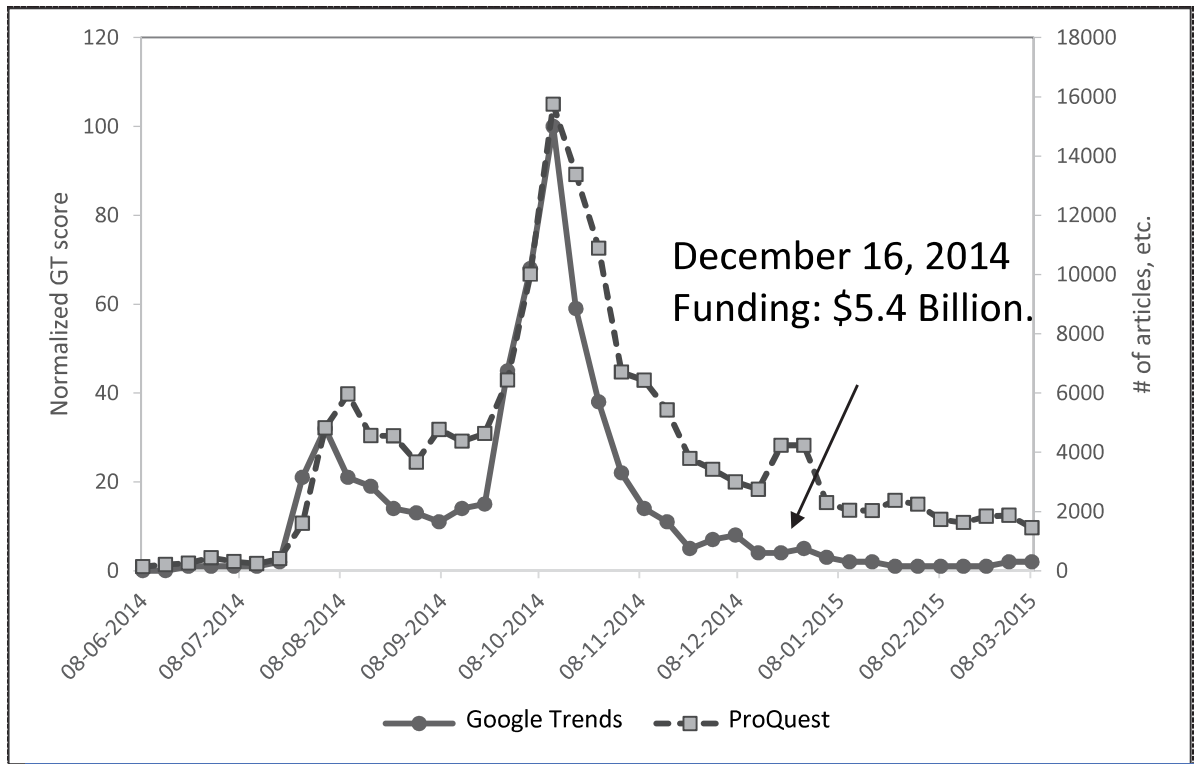
<https://www.cdc.gov/mmwr/volumes/65/wr/mm6503e1.htm>  
<https://www.cdc.gov/zika/transmission/index.html>  
<https://www.cdc.gov/zika/reporting/case-counts.html>  
<https://www.cdc.gov/zika/symptoms/treatment.html>  
<http://www.nbcnews.com/storyline/zika-virus-outbreak/congress-finally-passes-zika-funding-bill-n656866>  
 Dates accessed April 2, 2017.

**Ebola (2014-2016)**

The Ebola outbreak starting in 2014 was centralized in the Western African countries of Guinea, Sierra Leone, and Liberia. Ebola came on the scene and started to wreak havoc right away. Ebola proved to be much deadlier than any other prior international disease outbreak, killing thousands of people in Western Africa. Google Trends shows us that Ebola was searched for the most the week of October 12-18, 2014. Funding for Ebola was passed soon after on December 16, 2014, handing out \$5.4 billion to the fight against Ebola. According to OpenSecrets, the pharmaceutical/health products industry spent \$229,616,238 lobbying congress in 2014<sup>8</sup>. This gives the lobbyists an ROL of 2252%.

We see the same thing happen here as we did with Zika outbreak. Once the outbreak occurs, interest groups such as pharmaceutical companies take initiative to push their agenda, resulting in policy makers passing congressional funding. According to the CDC, there was four total cases of Ebola in the United States and only one death during this outbreak. The result of congress spending \$5.4 billion seems to be more than to just help prevent Ebola. Even after all that money was handed down to different organizations such as the USAID and the CDC<sup>9</sup>, there is still no vaccination or proven treatment for Ebola. More importantly, like Zika, once funding is passed, the disease quickly disappears from the media narratives indicating support for our hypothesis. One study suggests that the reason for the media narrative was due to the mid-term elections in the U.S. with Fox News, a right of center network, focusing on Ebola more than MSNBC, a left of center network (Greer & Singer, 2016). This was done to drive up election turnout on issues tied to fears of immigration etc. While this explanation is possible, we believe the funding story provides a more plausible explanation. Figure 2 shows the Google Trends and ProQuest data for Ebola where we can see people interact with media narratives which are used to obtain funding from congress by pharmaceutical/medical interest groups. Table 2 provides details about Ebola.

**FIGURE 2**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN**  
**MEDIA NARRATIVES AND PEOPLE’S INTEREST IN THE EBOLA OUTBREAK IN THE U.S.**





**TABLE 2**  
**INFORMATION ON THE EBOLA OUTBREAK ITS CAUSES,**  
**CONSEQUENCES, AND EXTENT**

Timeframe	2014-2016
Where the outbreak occurred	The outbreak was centralized in Western Africa. Guinea, Sierra Leone, Liberia.
How it spreads	Human to human transmission.
Total Cases (Suspected, Probable, and Confirmed)	Guinea: 3,814 Sierra Leone: 14,124 Liberia: 10,678 United States: 4
Total Deaths	Guinea: 2,544 Sierra Leone: 3,956 Liberia: 4,810 United States: 1
Symptoms	Fever, headache, muscle pains, possible internal bleeding leading to vomiting and coughing blood.
Treatment Options	No vaccine or proven treatment is available yet.
Funding	December 16, 2014. \$5.4 billion

<https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html> Accessed March 14, 2017  
<http://www.kff.org/global-health-policy/issue-brief/the-u-s-response-to-ebola-status-of-the-fy2015-emergency-ebola-appropriation/> Accessed January 27, 2017  
<https://www.cdc.gov/vhf/ebola/symptoms/index.html> Accessed March 14, 2017  
<https://www.cdc.gov/vhf/ebola/treatment/index.html> Accessed March 14, 2017

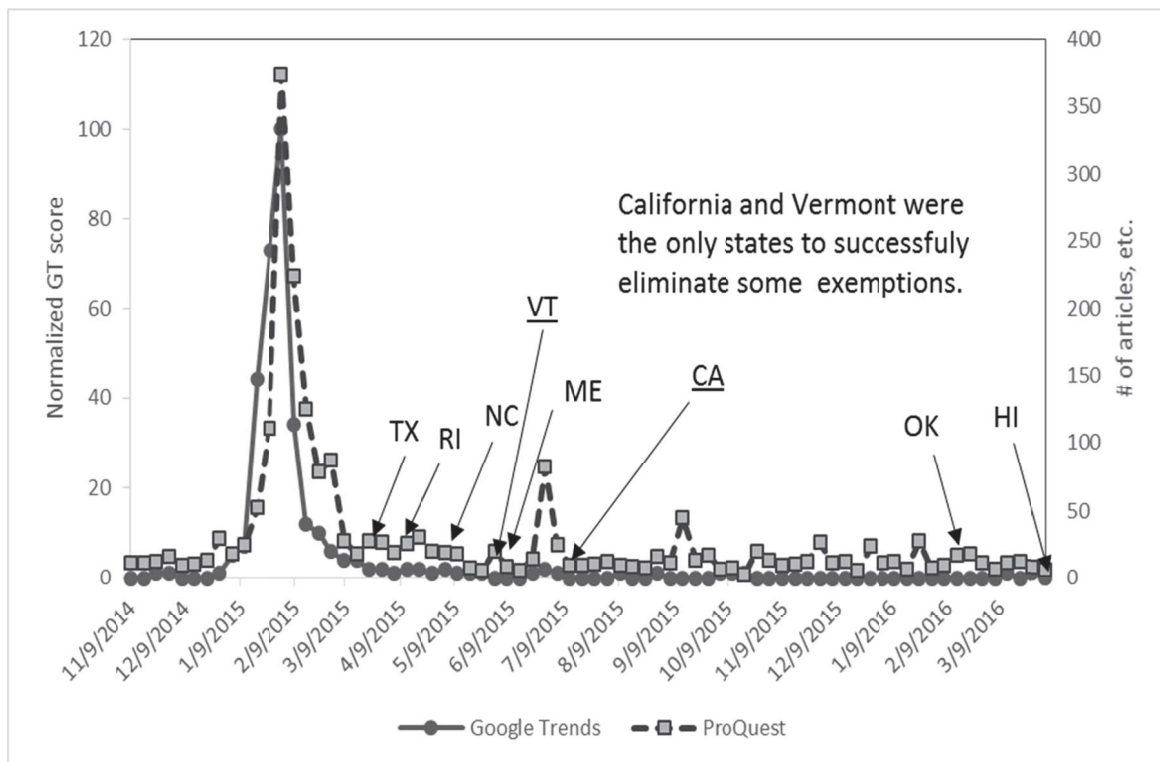
**Measles (2014-2015)**

There was a measles outbreak that happened in Disney at California that got some attention from quite a few people. The outbreak was not very large but it had an unintended impact on shifts in policy that were unrelated to direct funding from the state<sup>10</sup>. There was a total of 125 measles cases with rash occurring during the time of the outbreak from December 28, 2014 to February 8, 2015. Among the 125 total cases, 110 of those were California patients. The CDC also gives some interesting information regarding whether or not the patients had received vaccinations or not: Among the 110 California patients, 49 (45%) were unvaccinated; five (5%) had 1 dose of measles-containing vaccine, seven (6%) had 2 doses, one (1%) had 3 doses, 47 (43%) had unknown or undocumented vaccination status, and one (1%) had immunoglobulin G seropositivity. A large percentage of the vaccine eligible patients who were unvaccinated were intentionally unvaccinated because of personal beliefs<sup>11</sup> as many believe MMR vaccines are unsafe<sup>12</sup>. This information might lead one to believe that if the people who did not receive the vaccination due to personal beliefs actually got the vaccination, the outbreak would have not been as severe.

In California, immediately following the measles outbreak there was a law introduced and later passed that eliminated the option to avoid vaccinations due to any sort of exemption, whether that be religious or philosophical. The law was signed by Governor Brown on June 30, 2015. Vermont eliminated the philosophical exemption on May 28, 2015. Prior to the Measles outbreak, we were unable to find any legislation seeking to completely void vaccine exemptions over the year 2014. However,

during 2014 there was an attempt in California at making exemptions harder to get by requiring a health care worker to sign the exemption, but in New Jersey an attempt was made to expand exemptions (conscientious exemption)<sup>13</sup>. Many people question the rationale behind the decision to get rid of the exemption option towards medical vaccinations. The question that needs to be answered, is who or what was the driving force behind this legislation. It could be that pharmaceutical companies were pushing for this law because it brings in more revenues for them because it would force more people to get vaccinated. Figure 3 shows the Google Trends and ProQuest data for Measles and when states tried to change the vaccine exemptions. We note that at the state level, legislatures take a long time after the event to introduce legislation because most state legislatures are part-time legislatures<sup>14</sup> and hence legislation passed in a year are usually based on events from the previous and not the current year. We used only U.S. based information as the outbreak that we elected to study occurred in the United States. Table 3 provides additional information on Measles.

**FIGURE 3**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN MEDIA NARRATIVES AND PEOPLE’S INTEREST IN THE MEASLES OUTBREAK IN THE U.S. ARROWS INDICATE STATES INTRODUCING LEGISLATION TO VOID VACCINE EXEMPTIONS, HOWEVER THE ARROWS FOR VT AND CA, THEY INDICATE THE SUCCESSFUL COMPLETION OF THE LEGISLATIVE PROCESS VOIDING EXEMPTIONS**



**TABLE 3**  
**INFORMATION ON THE MEASLES OUTBREAK ITS CAUSES,**  
**CONSEQUENCES, AND EXTENT**

Timeframe	December 2014 - February 2015
Where the outbreak occurred	California, US
How it spreads	Spreads through transmission of germs via coughing and sneezing
Total Cases (Suspected, Probable, and Confirmed) in US	125
Total Deaths	0
Symptoms	High fever, runny nose, red/watery eyes, cough, rash.
Treatment Options	Vaccination
Funding	N/A

<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6406a5.htm> Accessed June 5, 2017

<https://www.cdc.gov/measles/about/transmission.html> Accessed June 5, 2017

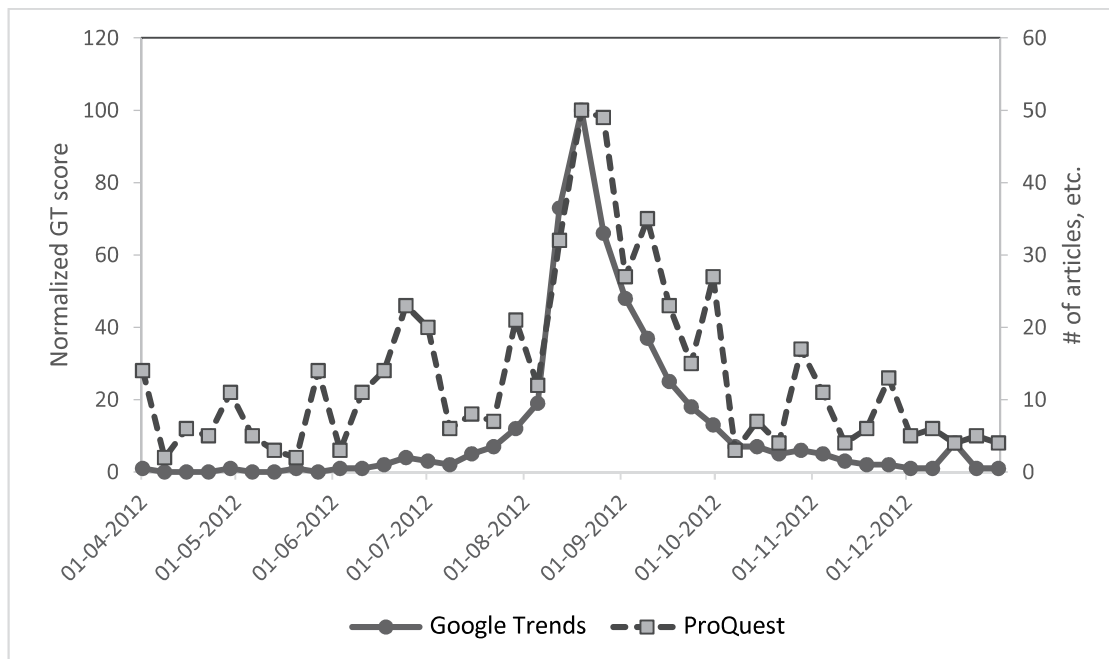
<https://www.cdc.gov/measles/about/signs-symptoms.html> Accessed June 5, 2017

### **West Nile (2012)**

The West Nile outbreak of 2012 was a serious outbreak for the U.S. There was a total of 5,674 cases reported during the 2012 outbreak and 286 deaths came as a result of it<sup>15</sup>. Even with the severity of this certain outbreak, there was no congressional funding that was passed to combat the situation. This certain focusing event does not go in line with our hypothesis, as even though this outbreak provided an opportunity for interest groups to push for funding, nothing came of it. In most of our other outbreaks that we studied, we saw a pattern in how an event increased in popularity and then proceeded to receive some sort of congressional funding or policy change. However, this is not the case for the 2012 West Nile outbreak.

There could be many reasons as to why this outbreak did not receive funding that that the other outbreaks received. The primary reason is that the volume of narratives hit only 50 during one-week period. This indicates a very weak narrative hence barely catching anyone's attention. Further, West Nile is a seasonal disease that seems to come back every summer and it just so happened that in 2012 the disease turned into an outbreak. The year 2012 was also a presidential election year so that could have very well caused for a shift in focus to the election campaigns that were going on, though the Zika outbreak in 2016 did not seem to be affected by the elections. Another complication was the federal budget sequestration of 2013 which was negotiated during the Budget Control Act of 2011 which slowed spending in health care related industries (Hartman, Martin, Lassman, Catline, & Team, 2015). This would have made it extremely difficult for Interest groups to obtain funding for a disease outbreak. Even though this event does not directly prove our hypothesis, it clear that the volume of narratives is important, not just the graphical pattern. Figure 4 shows the Google Trends and ProQuest data for West Nile while table 4 shows provides details on the West Nile outbreak.

**FIGURE 4**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN**  
**MEDIA NARRATIVES AND PEOPLE’S INTEREST IN THE WEST NILE OUTBREAK IN THE**  
**U.S. PROQUEST DATA WAS LIMITED TO THE U.S**



**TABLE 4**  
**INFORMATION ON THE WEST NILE OUTBREAK ITS CAUSES,**  
**CONSEQUENCES, AND EXTENT**

Timeframe	2012
Where the outbreak occurred	United States
How it spreads	Mosquito-borne. Can spread through blood transfusions, pregnancies, etc.
Total Cases	United States: 5,674
Total Deaths	United States: 286
Symptoms	Fever with other symptoms such as headache, body aches, joint pains, vomiting, diarrhea, or rash.
Treatment Options	No vaccine or specific antiviral treatments for West Nile virus infection are available
Funding	No congressional funding found.

[www.cdc.gov](http://www.cdc.gov)

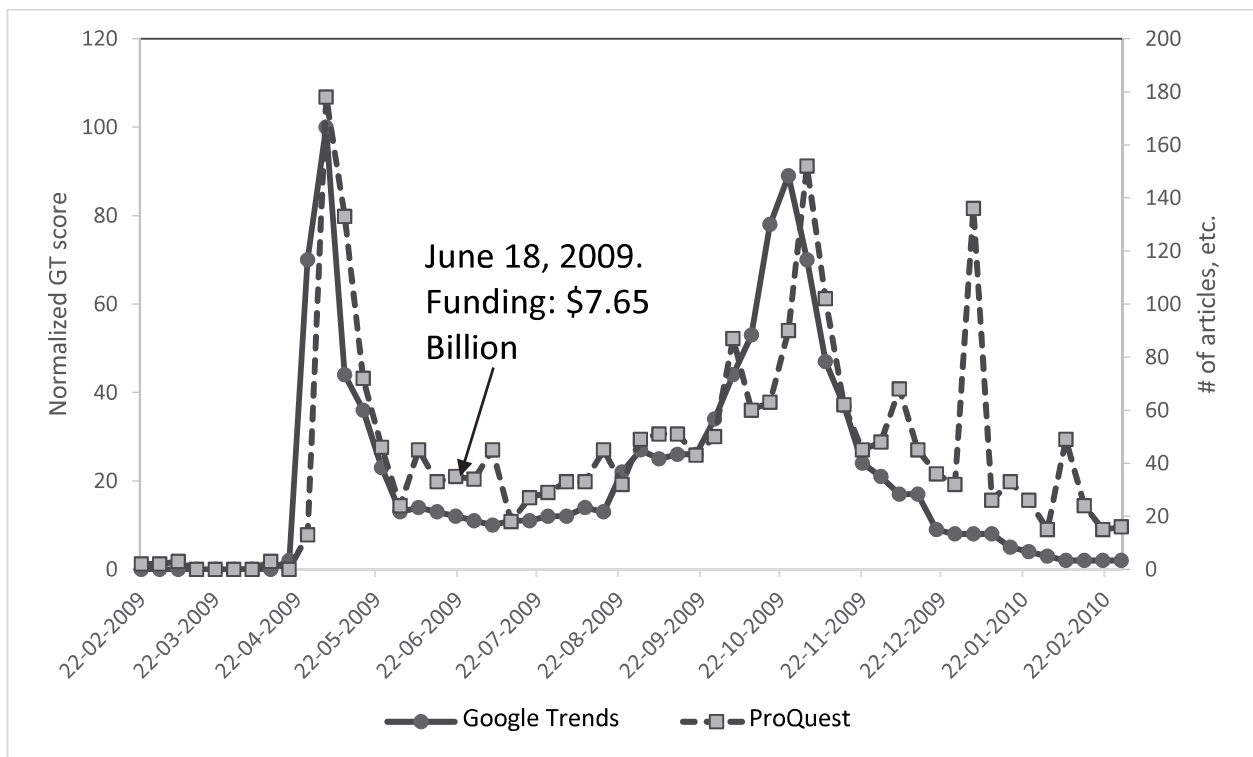
<http://www.cutshurt.org/years-of-divestment-erode-west-nile-virus-infrastructure/> Accessed June 5, 2017

## H1N1 (2009)

The H1N1, “Swine Flu” Virus first appeared in or around April of 2009. The H1N1 virus was new and very dangerous because this specific strain of flu is a combination of a strain of bird, swine, and human flu virus, hence the reason it was also referred to as “swine flu.” H1N1 proved to be the most lethal and contagious outbreak that we studied, reaching 60.8 million total reported cases and over 12,000 deaths in the United States alone (Shrestha et al., 2011) however, the mortality numbers could be mixed with regular flu deaths and the actual number of deaths is less than 1000<sup>16</sup>. The discrepancy in the number of deaths could be due to a strategic manipulation of information to create a false narrative. Because of the perceived intensity of the H1N1 flu virus, it provided lobbyists with an opportunity to really push their own agendas. When an epidemic like this takes place, fear tends to overwhelm the majority of the public, and according to the *Multiple Streams Theory*, fear can be a catalyst for change. At this point in time where fear is heightened, it is a perfect chance for policy entrepreneurs to push for funding to be passed so they can find a “cure” to solve the existing problem.

In 2009, OpenSecrets shows that businesses in the pharmaceutical and health products industry lobbied for a total of \$274,214,917 which currently holds the record for most money spent lobbying in a year in that specific industry. The intensity of this focusing event really drove interest groups to push for more funding and change to existing policy, and we see the effects of it with the passing of legislation in June of 2009, giving \$7.65 billion to the fight against the H1N1 Pandemic with a ROL of 2690% (Roos, 2009). Figure 5 shows the Google Trends and ProQuest data for H1N1. Once funding looks like it will pass, the narrative dies down (supporting our hypothesis), however, it rises again a few months later in the Fall but additional funding is not passed and this is likely due to the large funding already passed in June. Table 5 provides additional details about the outbreak.

**FIGURE 5**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN**  
**MEDIA NARRATIVES AND PEOPLE’S INTEREST IN THE H1N1 OUTBREAK IN THE U.S.**  
**WE LIMIT THE PROQUEST DATA TO THE U.S.**



**TABLE 5**  
**INFORMATION ON THE H1N1 OUTBREAK ITS CAUSES,**  
**CONSEQUENCES, AND EXTENT**

Timeframe	2009-2010
Where the outbreak occurred	United States
How it spreads	Person to person. Coughing, sneezing, etc.
Total Cases in US	60.8 million
Total Deaths in US	12,469
Symptoms	Fever, cough, sore throat, headache, chills, fatigue.
Treatment Options	Vaccination
Funding	June 18, 2009. \$7.65 Billion

<https://www.ncbi.nlm.nih.gov/pubmed/21342903> Accessed March 7, 2017

<https://www.cdc.gov/h1n1flu/sick.htm> Accessed March 7, 2017

<http://www.cidrap.umn.edu/news-perspective/2009/06/congress-approves-765-billion-pandemic-flu-response>

Accessed February 16, 2017 <https://www.cdc.gov/h1n1flu/qa.htm>) Accessed March 7, 2017

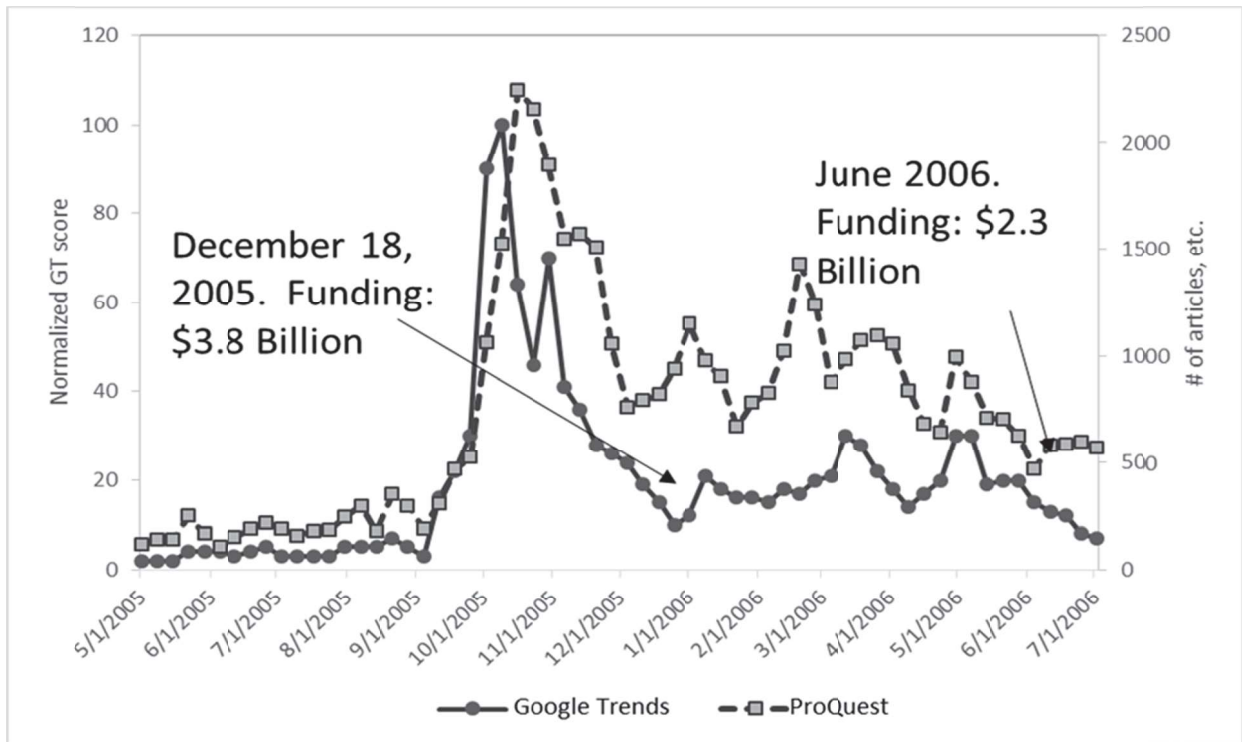
#### **Avian Influenza (Bird Flu) (2005-2006)**

The avian influenza outbreak that we decided to conduct our research on took place in 2005 and was centered in Southeast Asia. In December of 2005, while the Bush administration requested \$7.1 billion, there was legislation that passed through Congress giving \$3.8 billion to help aid against the spread of avian flu. Additionally, in June 2006 another \$2.3 billion was passed (Lister, 2007). What is interesting about this disease is that the media narrative sustains itself for many months even after funding is passed. This suggests that an issue can stay in the second and third stage for a long time (Downs, 1972). The second funding was possible because the narrative was sustained at a high level for a long time (see figure 6) forcing Congress to pass the amount close to what the President requested. And according to OpenSecrets, lobbyists in the pharmaceutical/health products industry gave a total of \$166,820,556 to congress in 2005. This gives the industry an ROL of 3557%.

There had also previously been an outbreak amongst 7,000 chickens in Texas earlier in 2004, but there were no reported cases of the flu strain in humans at that time. Since this certain outbreak of the bird flu happened before 2008, we were not able to use Google Trends News data but used Google Trends search engine data instead. ProQuest showed us that there was a rather large amount of newspapers (21,989), wire feeds (9,145), trade journals (7,506), scholarly journals (1,009), and magazines (907) along with many other documents that were produced worldwide in the time period of the outbreak that discussed Avian Flu.

From accessing this data, we can understand the impact that narratives have on society. We can see what people are reading and interacting with the media narratives. Table 6 provides details about Avian Influenza.

**FIGURE 6**  
**GOOGLE TRENDS AND PROQUEST DATA SHOWING THE INTERACTION BETWEEN**  
**MEDIA NARRATIVES AND PEOPLE'S INTEREST IN THE AVIAN FLU**  
**OUTBREAK IN THE U.S.**



**TABLE 6**  
**INFORMATION ON THE AVIAN INFLUENZA OUTBREAK ITS CAUSES, CONSEQUENCES,**  
**AND EXTENT**

Timeframe	2005-2006
Where the outbreak occurred	Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, Turkey, Vietnam.
How it spreads	Human contact with infected poultry.
Total Cases	213
Total Deaths	122
Symptoms	Fever, cough, sore throat, muscle aches, severe respiratory illness.
Treatment Options	Antiviral drugs. The CDC recommends oseltamivir, peramivir, or zanamivir for treating avian flu.
Funding	Dec. 2005 \$3.8 Billion, June 2006 2.3 Billion

[http://www.who.int/influenza/human\\_animal\\_interface/EN\\_GIP\\_201503031cumulativeNumberH5N1cases.pdf](http://www.who.int/influenza/human_animal_interface/EN_GIP_201503031cumulativeNumberH5N1cases.pdf)  
 Accessed July 12, 2017  
<https://www.cdc.gov/flu/avianflu/prevention.htm> Accessed July 12, 2017

## CONCLUSION

In the paper, we hypothesized that Congress would pass legislation when narratives and people's interaction with narratives occur around disease outbreaks. This is done to payback pharmaceutical and healthcare related companies who have funded legislators. We have shown that these media narratives and people's interaction with them die down once funding is passed indicating that we are dealing with more than just combatting a disease threat. From conducting our research on Ebola, Zika, Avian Flu, West Nile, H1N1, and Measles we were able to confirm our hypothesis in at least four cases. For the case of Measles, we showed confirmation of our hypothesis occurred via limiting vaccine exemptions. Only West Nile failed to support our hypothesis and that was primarily due to the low count in the narratives. People respond to narratives because they are contagious, just like diseases spread, narratives spread very quickly. Narratives can be altered by powerful interest groups to pass legislation granting money towards this disease. The power of narratives must be taken seriously when critically analyzing focusing events. Table 7 summarizes the rent seeking efforts of pharmaceutical companies over the past 10 years.

Building off this research project, we plan to further our studies and gain more knowledge in the areas of policy change, as we continue to study the impact of focusing events on policy. Another area of study is to further understand why after funding is passed there is a decline in the narrative. It is unlikely that the disease disappears with the approval of funding. Our plan also includes keeping in touch with new and trendy focusing events related to the pharmaceutical/health industry to see how policy might continue to evolve through the efforts of policy entrepreneurs.

If disease outbreaks occur on an almost annual basis, the question arises why Congress has not setup a permanent fund to deal with the outbreaks. It is possible Congress is seeking to extract rents from pharmaceutical companies on an annual basis as elections occur every two years and this would require appropriations on an outbreak by outbreak basis. A permanent fund would be ideal for the rent seekers in pharmaceutical companies but would require a large outlay up front.



**TABLE 7**  
**SUMMARIZES THE RENT SEEKING DATA FROM THE 6 OUTBREAKS FOR PHARMACEUTICAL/HEALTH PRODUCTS COMPANIES. IF WE INCLUDE THE FULL HEALTH CARE SECTOR AND IF WE ASSUME NOT ALL FUNDING GOES TOWARDS THE PHARMACEUTICAL SECTORS THE RETURN ON LOBBYING (ROLS) WILL BE SMALLER**

<b>Disease (Date)</b>	<b>Pharmaceutical Lobbying</b>	<b>Congressional Funding</b>	<b>ROL</b>
Zika (2016)	\$244,095,383	\$1.1 Billion	347%
Ebola (2014-16)	\$229,616,238	\$5.4 Billion	2252%
Measles (2014-15)	\$240,651,911	N/A	N/A
West Nile (2012)	\$236,225,389	N/A	N/A
H1N1 (2009)	\$274,214,917	\$7.65 Billion	2690%
Avian Flu (2005-06)	\$166,820,556	\$6.1 Billion	3557%

**ENDNOTES**

1. Google Trends News starts from 2008, however, for one of our disease outbreaks (Avian Flu) we use Google Trends Search engine results which starts from 2004.
2. <https://www.opensecrets.org/lobby/top.php?indexType=i> (accessed May 14, 2017).
3. Other categories related to health care in the OpenSecrets database include “Hospitals/Nursing Homes”, “Health Professionals”, and “Health Services/HMOs” indicating that the influence of the Health Care sector is much larger when taken together.
4. Conversely, recent news reports show the initial fears were overblown. This could be a case of strategic manipulation of information to obtain funding. (<https://www.newsmax.com/Health-News/Zika-risk-lower-pregnant/2017/05/10/id/789255/> accessed May 11, 2017).
5. Due to legislative lag caused by the legislative process, it takes time for funding to pass after the peak narrative volume.
6. <https://www.opensecrets.org/industries/lobbying.php?cycle=2016&ind=H04> (accessed May 11, 2017).
7. The ROL here and the rest of the paper assume all the funding goes to the pharmaceutical & health care related industries. This is not true as funds are also given to bureaucracies, local governments, and international governments. Under this circumstance, the ROL would be lower.
8. <https://www.opensecrets.org/industries/lobbying.php?cycle=2016&ind=H04> (accessed May 11, 2017).
9. Much of these funds are then distributed to the health care industry.
10. Since a vaccine already existed, it would have been hard to lobby for federal funding like for Zika and Ebola.
11. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6406a5.htm> (accessed July 1, 2017).
12. The insert from the MMR vaccine indicates the following adverse reactions such as: headache, dizziness, diabetes mellitus, angioneurotic edema, arthritis, encephalitis, etc. ([https://www.merck.com/product/usa/pi\\_circulars/m/mmr\\_ii/mmr\\_ii\\_pi.pdf](https://www.merck.com/product/usa/pi_circulars/m/mmr_ii/mmr_ii_pi.pdf) accessed May 9, 2017).
13. <http://www.nvic.org/> (accessed May 11, 2017).
14. Only 10 states are considered full time legislatures (meet all year round). Source: <http://www.ncsl.org/research/about-state-legislatures/full-and-part-time-legislatures.aspx> (accessed October 11, 2013).
15. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6153a1.htm> (accessed July 1, 2017).
16. [https://www.newswithviews.com/guest\\_opinion/guest159.htm](https://www.newswithviews.com/guest_opinion/guest159.htm) (accessed June 28, 2017).

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