

## Implementing Effective Hand-Hygiene Messaging: Final Outcomes Analysis and Best Practices for Successful Outreach



Kyle Foerst, MS, Emergency Response Planner, St. Louis County Department of Public Health

### Overview

Saint Louis County, Missouri, has a population of just over one million people, with an additional 315,000 people in the neighboring City of St. Louis. In Saint Louis County alone, between September 2015 and May 2016, there were 2,291 confirmed cases of influenza reported via sentinel surveillance of hospital emergency departments, urgent care centers, and pediatric departments. Additionally, in late 2016, there were increases in both Pertussis and Shigella cases within middle schools or daycare centers, as compared to the median number of cases within the previous five years.<sup>1</sup> All of these are illnesses for which proper hand-hygiene is an effective prevention measure.

In order to increase public education and overall awareness on the importance of hand-washing as a method for disease prevention, the Saint Louis County Department of Public Health (DPH) began planning a public health messaging campaign in January 2016, designed for deployment within Lambert-Saint Louis International Airport and the Bi-State Metro Transit Organization.

DPH's overall goals were to increase education through visits to the webpage, increase hand-hygiene practices in higher-risk groups, decrease seasonal influenza rates per year, and to make a substantial contribution in preventing the spread of disease.

### Methods

The idea for the campaign was to design visually striking public health marketing materials to be displayed within Lambert-Saint Louis International Airport, on Metro-Transit buses and trains, and in transit stations throughout Saint Louis County. DPH, along with Saint Louis University's Heartland Centers for Public Health (SLU HC) developed a series of four graphic designs:



These designs were focused on attracting the attention of children, a high risk group for illness<sup>2</sup> with the intended purpose of the child pointing them out to their parents. The hand images would be the focal point of the posters, with a brief tagline (i.e., “Prevent Illness – Wash often with soap and water”) to communicate the key message. DPH and SLU HC then designed an informative website as a quick and easy portal for information on the campaign, as well as illnesses that can be prevented through hand-washing, additional resources, and a section to download the posters for personal use. This would allow for parents and busy adults to see the initial message and have an easy-to-remember website address to retrieve additional information later.

## Results

As a method of tracking the success of the campaign, DPH monitored hits to the webpage using Google Analytics. This allowed them to see how many unique visits the website received per day, as well as in real-time. It also allowed them to track the location for each hit by city, state, and country. Additionally, they were able to track demographics, such as hits by gender or age range.



Since inception of the campaign in October 2016, the website has had a total of 8,123 sessions (unique visits that involve actual interaction with the site), and 9,630 page views (visits that include returns) with new visitors at 6,633 (82%), and returning visitors at 1,490 (18.3%) as of July 25, 2017. The site has reached all 50 states, and over 95 countries to date, with highest country counts in the United States, Russia, the United Kingdom, Canada, and India. Highest state counts include: Missouri, Illinois, Texas, Kansas, California, Georgia, North Carolina, New York, Pennsylvania, Colorado, and Florida. Females accounted for 65% of website visits versus males, which accounted for 35%. Most visits by age were in the 25-34 year range (23%) and the 35-44 year range (22%).

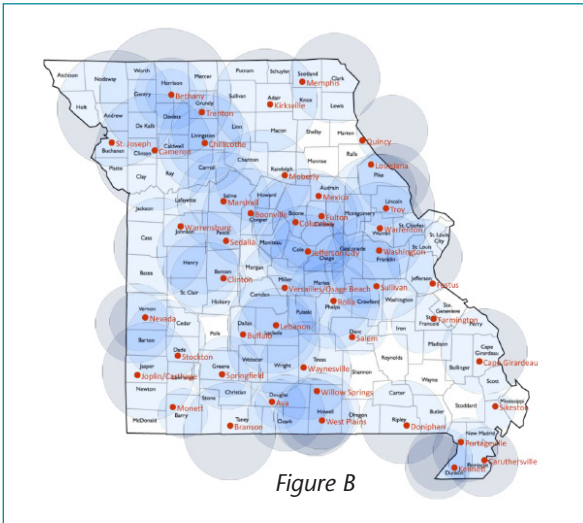
## Key Stakeholders and Promotional Assistance

- Centers for Disease Control and Prevention (CDC)
- Clear Channel Airports
- Currant Design Group
- Direct Media USA
- Global Public-Private Partnership for Handwashing
- Lambert-Saint Louis International Airport
- Learfield Communications, Inc.
- MetroLink Transit Organization
- Missouri Department of Health and Senior Services (MODHSS)
- Missouri State Emergency Management Agency (SEMA)
- National Association of County and City Health Officials (NACCHO)
- National Association for School Nurses (NASN)
- The Nyberg Group
- Saint Louis University – Heartland Centers for Public Health Preparedness

A majority of these statistics were due, in part, to state involvement. In April of 2017, the Missouri State Emergency Management Agency (SEMA), along with the Missouri Department of Health and Senior Services (MODHSS), decided to carry the campaign state-wide and further collaborated with DPH to create a series of advertisement opportunities, including:

- Over 20 billboards throughout the state of Missouri (Figure A, below);
- Three different creative radio advertisements airing on over 70 different radio stations throughout the state (Figure B, next page);





## Lessons Learned and Best Practices

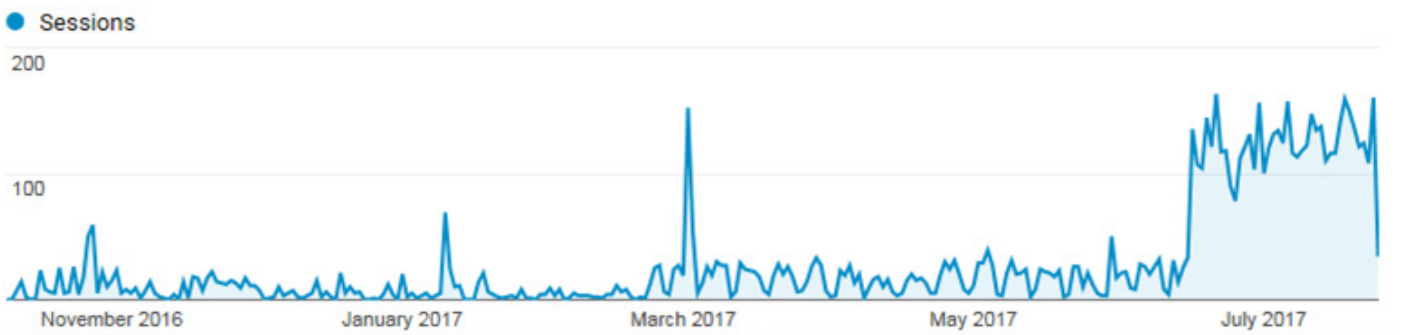
DPH found that a number of different factors contributed to the success of this campaign; however, it is not only important to be able to conduct effective outreach to target agencies, but also to ensure the message is effective, and tailored to that specific group. Therefore, DPH utilized the following methods, which ultimately contributed to best practices:

**Cold-Calling.** One of the most effective means of conducting outreach is by simply calling or e-mailing agencies on a local, state, and federal level to encourage them to take a look at your work. Some of the agencies called included:

- Local Public Health Agencies (LPHAs). Most of DPH’s neighboring jurisdictions were happy to spread new and innovative public health messaging for no other reason than the greater good of community well-being. After all, public information will assist in decreasing illness rates within their areas, too.
- National Association of County and City Health Officials (NACCHO). NACCHO is here to support local and state efforts across the U.S. By reaching out to NACCHO, DPH was able to secure several feature blog posts, social media advertising through Facebook and Twitter, and a chance to speak about their efforts at the 2017 NACCHO Annual meeting in Pittsburgh.
- World Health Organization (WHO)/Pan American Health Organization (PAHO). DPH was able to locate several e-mail contacts within the health promotions departments through a Google search. This led to contact with the Global Public-Private Partnership for Handwashing (GPPPHW) in Washington, D.C., which promoted the campaign through another blog post, as well as an offer to speak during a cold and flu webinar for its organization.

- Four creative video advertisements to be played via social media and at Missouri State High School Activities Association (MSHSAA) half-time games.
- Over 4,000 mirror clings for bathrooms in 900 MSHSAA schools.
- Airport and Metro transit advertisements, expanded to include all major airports within the state of Missouri (St. Louis, Kansas City, Springfield, and Columbia).
- YouTube, Google, Facebook, and Instagram advertisements.

Since the MODHSS and SEMA sponsorship of the campaign, hits to the website have catapulted, with a record-breaking count of 163 views on June 21, as compared to 152 views on March 2. Since the end of June, the website has consistently received more than 100 hits per day (Figure C, below).





# [REPORT]

December 2017



- Centers for Disease Control and Prevention (CDC). Securing a spot on the CDC's resource webpage was a huge step for the campaign. Shortly after DPH was listed, the website encountered the first largest spike in views since inception, with a total of 152 sessions in a single day.

**State and Partner Involvement.** It is highly encouraged to invite any partners that you have worked with on your project, as well as your state counterparts, to any event that features your work. DPH was able to carry its campaign even further, simply by inviting the state to join them when they launched their artwork at Lambert-Saint Louis International Airport. The Missouri State Emergency Management Agency (SEMA), along with the Missouri Department of Health and Senior Services (MODHSS) subsequently decided to continue these efforts as part of a collaborative statewide campaign.

**School Districts.** DPH is fortunate to have in-house printing services, so it was able to print off multiple sets of 11x14-sized poster prints of each design. They sent a total of 96 posters (four each) to all lead nurses of all 24 school districts within Saint Louis County. A letter accompanied each set of posters that were sent out, requesting that schools visit the webpage, and contact DPH if they were

interested in requesting more. This was conducted for roughly two months, and received 13 additional requests for posters, totaling 120 additional sets (480 posters) within less than a month alone.

**Word-of-Mouth.** Another successful method for which outreach was conducted was through word-of-mouth. Generally, for most of the meetings, conferences, workshops, and seminars that were attended, DPH made sure to mention the campaign efforts and network with other agencies that could help spread the word. They also took the time to pass out samples of posters to encourage other partners and agencies to visit the webpage.

**Product Branding (Hand Sanitizers).** While the budget was limited, DPH managed to have enough left over to supplement their efforts for the campaign. They wanted to find something that could be branded as part of the campaign and that coincided with the message. DPH found a relatively inexpensive company that mass produces hand sanitizers in different sizes. 1,300 2oz. bottles were ordered with each design on the front, followed by an additional 1,400 bottles. These were handed out to partners, immunization clinics, local public events, and during conferences, meetings, and health fairs.

## References

<sup>1</sup> Saint Louis County Department of Public Health (2017, July 3). Summary Surveillance CDCS Monthly Report. Retrieved from: [http://www.stlouisco.com/Portals/8/docs/health/CCDR/Monthly\\_Report\\_June2017\\_correct.pdf](http://www.stlouisco.com/Portals/8/docs/health/CCDR/Monthly_Report_June2017_correct.pdf)

<sup>2</sup> Centers for Disease Control and Prevention (CDC). (2016, May 25). Seasonal Influenza (Flu): Information for Specific Groups. Retrieved from: <https://www.cdc.gov/flu/groups.htm>

# NACCHO

National Association of County & City Health Officials

The National Connection for Local Public Health



The mission of the National Association of County and City Health Officials (NACCHO) is to be a leader, partner, catalyst, and voice with local health departments.

1201 Eye Street, NW, Suite 400 Washington, DC 20005

P 202-783-5550 F 202-783-1583

© 2017. National Association of County and City Health Officials.

[www.naccho.org](http://www.naccho.org)