



NJ Communi- CABLE

Summer 2018 Quarterly Newsletter

Communicable Disease Service Mission Statement

Our mission is to prevent communicable disease among all citizens of New Jersey, and to promote the knowledge and use of healthy lifestyles to maximize the health and well-being of New Jerseyans.

We will accomplish our mission through our leadership, collaborative partnerships, and advocacy for communicable disease surveillance, research, education, treatment, prevention and control.

Phil Murphy, Governor
Sheila Oliver, Lt. Governor
Shereef Elnahal, M.D., M.B.A.
Commissioner

COMMUNICABLE DISEASE SERVICE

Christina Tan, MD, MPH
State Epidemiologist/
Assistant Commissioner
Gary Ludwig, MS, Director
Suzanne Miro, MPH, MCHES
Editor, Research Scientist

Winner of the New Jersey 2017-2018 College & University Flu Challenge Announced

Seton Hall University was recently announced as the winner of the inaugural New Jersey College & University Flu Challenge!

Getting the flu vaccine every year is the best method of flu prevention, yet state and national estimates show that few young adults are choosing to get vaccinated. According to the National Immunization Survey and the Behavioral Risk Factor Surveillance System, only 33.4% of New Jersey adults 18-49 years old received the flu vaccine during the 2016-17 flu season. National coverage is 33.6% for the same age group.

Unfortunately, vaccination coverage, both nationally and in New Jersey, is well below the Healthy People 2020 target of 70%. To address these low immunization rates, the New Jersey Department of Health (NJDOH), Vaccine Preventable Disease Program launched the New Jersey College & University Flu Challenge in an effort to increase flu awareness and vaccination rates during the 2017-2018 academic year.

In the Challenge's first year, there



were eight participating schools from across the state (*Centenary, County College of Morris, Kean, Monmouth, Rider, Rowan, Rutgers-Camden, and Seton Hall*). The Challenge encouraged each school to develop an awareness campaign and to circulate an online survey link to collect student self-reported vaccination information. Many of the participating schools hosted on-campus clinics at various times

Continued on page 12





Summer 2018



Get more information at
<http://nj.gov/health/cd/handwashing.shtml>.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>.

CDC Warns of “Nightmare Bacteria”

The Centers for Disease Control and Prevention (CDC) held a teleconference on April 3, 2018 to present findings on a critical health issue that was the focus of a recent “Vital Signs” publication. The topic for the month of April was “Containing Unusual Resistance.” Anne Schuchat, MD, Principal Deputy Director of CDC, spoke on a report that summarized findings from the first few months of improved laboratory testing by CDC’s antibiotic resistance lab network. The term “nightmare bacteria” has been used to describe especially rare antibiotic resistant genes.

In the first nine months of testing, all state and Puerto Rico health departments in the AR lab network tested 5,776 samples of highly resistant germs that carry the genes which make the bacteria highly resistant to antibiotics. There were 221 instances of an especially rare resistance gene. According to Dr. Schuchat, “The bottom line is that resistance genes with the capacity to turn regular germs into nightmare bacteria have been introduced into many states. But, with an aggressive response, we have been able to stomp

Vitalsigns[™] CDC
#vitalsigns APR. 2018

221 New nationwide testing in 2017 uncovered 221 instances of unusual resistance genes in “nightmare bacteria.”

1 in 10 11% of screening tests, in people with no symptoms, found a hard-to-treat germ that spreads easily.

1st The Containment Strategy keeps new threats from spreading. Launch at the first sign of unusual resistance.

Containing Unusual Resistance
Early, aggressive action can prevent spread

More than 23,000 Americans die each year from infections caused by germs resistant to antibiotics. While antibiotic resistance (AR) threats vary nationwide, AR has been found in every state. And unusual resistance germs, which are resistant to all or most antibiotics tested and are uncommon or carry special resistance genes, are constantly developing and spreading. Lab tests uncovered unusual resistance more than 200 times in 2017 in “nightmare bacteria” alone. With new resources nationwide, early and aggressive action—when even a single case is found—can keep germs with unusual resistance from spreading in health care facilities and causing hard-to-treat or even untreatable infections. For example, CDC estimates show that this aggressive approach could prevent 1,600 cases of CRE* in one state over three years. Health departments can lead the Containment Strategy and act swiftly with health care facilities and CDC at the first sign of unusual resistance.

State and local health departments can:

- Make sure all health care facilities know what state and local lab support is available and what isolates (pure samples of a germ) to send for testing. Develop a plan to respond rapidly to unusual genes and germs when they first occur.
- Assess the quality and consistency of infection control in health care facilities across the state. Help improve practices.
- Coordinate with affected health care facilities, the new AR Lab Network regional labs, and CDC for every case of unusual resistance. Investigations should include onsite infection control assessments and colonization screenings for people who might have been exposed. They could spread it to others. Continue until spread is controlled.
- Provide timely lab results and recommendations to affected health care facilities and providers. If the patient came from or was transferred to another facility, alert that facility.

Want to learn more?
Visit: www.cdc.gov/vitalsigns/containing-unusual-resistance

*CRE is carbapenem-resistant Enterobacteriaceae.

CDC Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

them out promptly and stop their spread between people, between facilities and between other germs.” CDC’s containment strategy calls for quickly identifying unusual resistance in patients, assessing infection control and the facility if unusual resistance is found. The complete transcript from the telebriefing can be found at <https://www.cdc.gov/media/releases/2018/t0403-antibiotic-resistant-germs.html> and the “Vital Signs” issue is located at <https://www.cdc.gov/vitalsigns/pdf/2018-04-vitalsigns.pdf>. 🇺🇸



The A, B, Cs of Hepatitis

First established by the Centers for Disease Control and Prevention (CDC) in 2001, May has been designated Hepatitis Awareness Month in the United States, and May 19th is Hepatitis Testing Day. The New Jersey Department of Health (NJDOH) Communicable Disease Service (CDS) is promoting this campaign to raise awareness about viral hepatitis. The CDC estimates viral hepatitis affects more than five million people in the United States, many of whom have no idea that they are infected. The three most common types of viral hepatitis are hepatitis A (HAV), hepatitis B (HBV), and hepatitis C (HCV).

HAV is found in the stool of infected people. People become infected with HAV by swallowing the virus. This can happen when infected people do not wash their hands properly after using the bathroom and then touch food that is eaten by someone else.

Transmission can also occur from touching an object contaminated from feces, or from eating food contaminated during growth/production. There is no specific medication to treat HAV and most people recover on their own. HAV can be prevented with a vaccine. The HAV vaccine is recommended for all children at one year of age and for adults at risk for acquiring the infection.

HBV is spread by contact with infected people's blood, semen, or other body fluids. Anyone can get HBV, but some people are at higher risk. These people include: infants born to mothers with HBV, those who have contact with blood and body fluids, and those who are from, or travel to, areas of the world where HBV is common. For some people, HBV is an acute, short-term illness but, for others it can become a long-term, chronic infection. Acute HBV is one of the most commonly reported vaccine

Continued on page 8



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>

Keeping the Focus on Infection Prevention!

Over the past three years, the Infection Control Assessment and Response (ICAR) team has worked diligently alongside health care facilities, governmental entities, and professional organizations to promote the reduction of health care-associated infections (HAIs) through outreach, education, and partnership. Fortunately, this work has not gone unnoticed. Due to the tremendous efforts of the ICAR team and its partners, the Centers for Disease Control and Prevention (CDC) have agreed to continue to support ICAR activities for an additional year!

The ICAR team, comprised of epidemiologists and infection preventionists, has conducted over 100 voluntary, non-regulatory assessments of basic infection prevention practices in New Jersey health care facilities. With an additional year, the ICAR team anticipates a renewed focus on educational activities and continued collaboration with health care facilities to perform site assessments. The team has been overwhelmed with the positive responses they have received thus far, but more importantly, the impact they have made. Data collected six months following an ICAR assessment have revealed that health care personnel report an overall

improvement in their infection prevention programs. Several health care personnel attributed these improvements to their experience with the team and some infection preventionists even described a renewed confidence in instituting changes in their facilities post-assessment.

The meaningful changes the team has facilitated across the health care continuum would not have been possible without the overwhelming support the ICAR team has received from all of its partners. Infection prevention is a “team sport,” involving a multitude of disciplines both inside and outside a health care facility’s walls. The ICAR approach is collaborative, consultative, and multidisciplinary – not unlike the world of infection prevention. Perhaps the best inter-departmental collaboration the ICAR team has facilitated is exemplified in the relationship

Continued on page 10



ICAR team members demonstrate Glo Germ™, a fluorescent marker, with environmental service staff.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>

INJECTION SAFETY CHECKLIST

The following Injection Safety checklist items are a subset of items that can be found in the *CDC Infection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care*.

The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare personnel to safe injection practices. (Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.)

Injection Safety	Practice Performed?	If answer is No, document plan for remediation
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment	Yes No	
Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens)	Yes No	
The rubber septum on a medication vial is disinfected with alcohol prior to piercing	Yes No	
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient	Yes No	
Single dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient	Yes No	
Medication administration tubing and connectors are used for only one patient	Yes No	
Multi-dose vials are dated by HCP when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial. <small>Note: This is different from the expiration date printed on the vial.</small>	Yes No	
Multi-dose vials are dedicated to individual patients whenever possible.	Yes No	
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle) <small>Note: If multi-dose vials enter the immediate patient treatment area they should be dedicated for single-patient use and discarded immediately after use.</small>	Yes No	

RESOURCES

Checklist: <http://www.cdc.gov/HAI/pdfs/guidelines/ambulatory-care-checklist-07-2011.pdf>

Guide to Infection Prevention for Outpatient Settings: *Minimum Expectations for Safe Care*:

<http://www.cdc.gov/HAI/pdfs/guidelines/standatds-of-ambulatory-care-7-2011.pdf>



www.oneandonlycampaign.org

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>



Summer 2018

NJDOH Hand Hygiene Goes Global!

A supply of hand sanitizers and hand washing educational materials were provided by the Communicable Disease Service to Amy Holmes, a graduating senior from Stockton University, to bring with her on an international public health service trip to El Codito outside of Bogota, Colombia. Amy used the materials as part of her public health communications project to emphasize the importance of clean hands in this impoverished area. According to Ms. Holmes, "The 40,000 impoverished residents of the invasion community of El

Codito will soon be solely reliant on this volunteer run clinic as the Colombian government will be closing all of the government run clinics. Hepatitis B is a health problem in that area, and since the community's literacy level was unknown before going, I chose to use an image-based instruction card on healthy hand washing practices." An invasion community refers to land that is owned and occupied illegally. The tiny homes are constructed illegally, are tightly spaced against the hillside, and are not recognized by the government. 🇺🇸



Clinic patrons receive personal care items, including NJDOH hand sanitizers.



An invasion community in El Codito.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

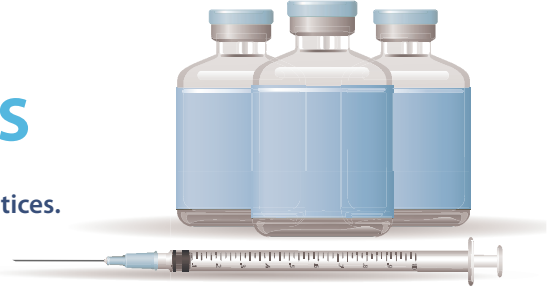
We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>



DANGEROUS MISPERCEPTIONS

Here are some examples of dangerous misperceptions about safe injection practices.



Myth	Truth
Changing the needle makes a syringe safe for reuse.	Once they are used, both the needle and syringe are contaminated and must be discarded. A new sterile needle and a new sterile syringe should always be used for each patient and to access medication vials.
Syringes can be reused as long as an injection is administered through an intervening length of IV tubing.	Everything from the medication bag to the patient's IV catheter is a single interconnected unit. Distance from the patient, gravity, or even infusion pressure do not ensure that small amounts of blood won't contaminate the syringe once it has been connected to the unit. Syringes should never be reused for more than one patient or to access medication vials.
If you don't see blood in the IV tubing or syringe, it means that those supplies are safe for reuse.	Pathogens including hepatitis C virus, hepatitis B virus, and HIV can be present in sufficient quantities to produce infection without any visible blood.
Single-dose vials with large volumes that appear to contain multiple doses can be used for more than one patient.	Single-dose vials should not be used for more than one patient regardless of the vial size.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>

Injection Safety is Every Provider's Responsibility!

www.oneandonlycampaign.org





Summer 2018

A, B, Cs of Hepatitis, continued from page 3

preventable diseases. The best way to prevent HBV is by getting vaccinated.

HCV is spread by contact with an infected person's blood. People at greatest risk are those who share drug needles, have multiple sex partners and didn't use condoms, have been on kidney dialysis, received a blood transfusion or organ transplant before July 1992, and health care workers who have unprotected contact with blood, such as from an accidental needlestick. There is no vaccine for HCV so prevention measures and testing to identify and treat illness are critical. Recent developments have resulted in an increase in the number and types of medications used to treat HCV. Until a few years ago, there were only two drugs approved by the FDA for HCV treatment. The treatment regimen included injections with significant side effects that made it difficult for many people to complete the therapy. Treatment regimens can now be shorter in duration, easier to tolerate and more effective than before.

NJDOH has observed that between 2011-2015, rates of acute HBV increased by 135% and acute HCV by 150%. People with HBV or HCV may not become aware of their infections for decades after becoming infected when complications arise. Chronic hepatitis is a leading cause of liver cancer and liver transplants in the United States. The CDC

recommends that baby boomers, those born between 1945-1965, be tested for HCV as 75% of HCV infections are among people born during that period.

People with HIV infection are disproportionately affected by viral hepatitis. Approximately 44% of HIV-infected people in New Jersey are also infected with HCV. HCV infection progresses more rapidly to liver damage in HIV infected people and may impact the course and management of HIV infection.

Current or former injection drug use is a major risk factor for HCV. The rise in incidence of acute HCV nationally and in New Jersey parallels the rise in admissions to treatment facilities for substance use disorders related to opioid use. Nationally, the increases are most dramatic among people aged 18-29. For that age group, HCV rates increased by 400% and admissions for opioid treatment increased by 622% during the years 2004-2014.

The NJDOH recognized Hepatitis Awareness Month by issuing a proclamation to shed light on this hidden epidemic and to encourage those at risk, and those in the recommended age group to get tested. The only way to definitively know if you are infected with viral hepatitis is to be tested. The New Jersey Viral Hepatitis Resource Guide can be found on the NJDOH Viral Hepatitis page. The guide provides information about free or

Continued on page 9

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>





Summer 2018

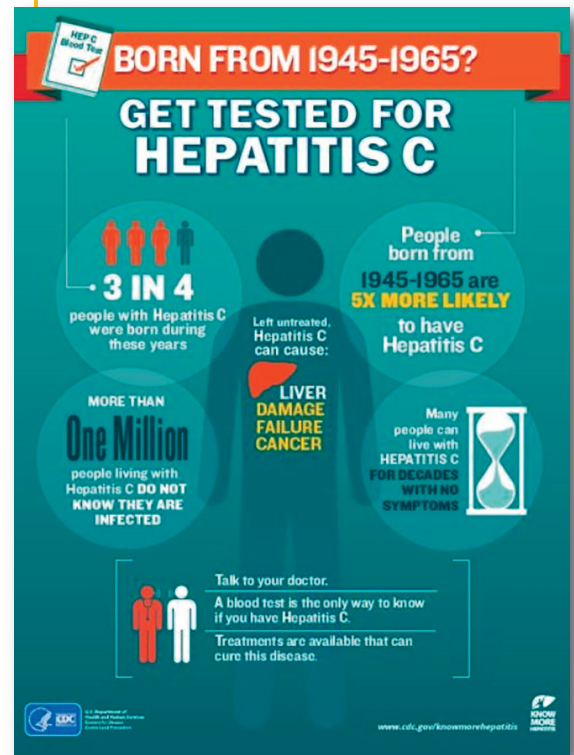
A, B, Cs of Hepatitis, continued from page 8

low-cost vaccination and screening sites, clinical treatment resources, clinical trials, addiction resources, and hepatitis support groups.

The HBV page, <http://www.nj.gov/health/cd/topics/hepatitisb.shtml>, has new updated educational materials to be used when investigating cases. These materials are available in five languages (English, Spanish, Portuguese, Haitian Creole, Chinese). Copies can be printed from the website.

The HCV page, <http://www.nj.gov/health/cd/topics/hepatitisc.shtml>, has recently been updated to include the new guidance document for classifying cases and a link to the HCV webinar and slides. The NJDOH Regional

Epidemiology Program (REP) is now offering HCV trainings about new case definitions. Please reach out to your REP to find out how to arrange for a training. 📍



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>.

Hepatitis C Roadshow

Bernice Carr, MPH, MS, Hepatitis C Epidemiologist, was the featured presenter on a recent webinar which outlined the changes in case reporting, case classification, and investigation priority groups. The webinar is posted to the New Jersey Department of Health, CDS website on the hepatitis C webpage at <http://nj.gov/health/cd/topics/hepatitisc.shtml>. Also posted, is the new guidance document which provides more information. After the well-received webinar, local disease investigators requested more information and as a

result, the “Hepatitis C Roadshow” was created.

“The Hepatitis C Roadshow” was developed by the CDS Regional Epidemiology Program (REP) and the hepatitis C subject matter expert in response to the new case definitions and new case classifications, including perinatal hepatitis C. The interactive training is being presented by the REP. If you and your colleagues would like to participate in a training, please contact your regional epidemiologist. 📍





Summer 2018

Infection Prevention, continued from page 4

between infection prevention and environmental services. Environmental services staff can sometimes be taken for granted in health care delivery, but each person plays an integral part in the prevention of disease transmission.

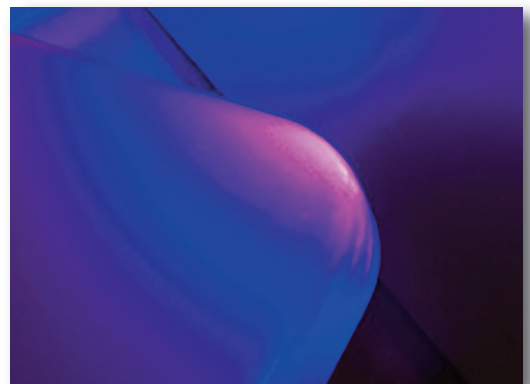
The ICAR team highlights the importance of this relationship through direct communication with environmental services staff, the sharing of resources and recommendations, and reinforcing their vital contributions to patient safety and infection prevention. If the opportunity arises, environmental service staff are given demonstrations using Glo Germ™, a fluorescent marker. Glo Germ is a visual tool for teaching handwashing, aseptic techniques, and general infection control. Kits come with liquid or powder that contains simulated germs that are visible under a UV light.

Participants can apply the substance to their hands, or environmental surfaces, then wash their hands or clean the surface as normal. A UV light is used to illuminate the simulated germs that are left behind. At the completion of the ICAR assessment, the facility receives a bag of resources, including a Glo Germ™ kit that is especially beneficial to use for educating environmental service staff. Glo Germ™ demonstrations can be eye-opening for clinical staff too, to emphasize the importance of environmental services and the role each staff member plays in reducing HAIs.

Through these site assessments, the ICAR team has also identified multiple opportunities for improvement in health care settings to strengthen the relationship between infection prevention and environmental services. Some of these opportunities include:

- Conducting weekly rounds together
- Including environmental service leadership in infection prevention committee meetings
- Highlighting environmental services (for example, using audit data) at meetings
- Ensuring environmental service staff can provide input on cleaning products
- Sharing infection prevention updates with environmental staff
- Recognizing excellent environmental staff members

If you're interested in learning more about ICAR or its educational initiatives, contact the ICAR team via email at CDS.ICAR@doh.nj.gov, via phone at (609) 826-5964, or visit the ICAR team's website at www.nj.gov/health/cd/topics/hai.shtml.



A table marked with Glo Germ™ fluoresces under a black light during an ICAR demonstration.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>





Summer 2018

CDS Welcomes New Staff!

Brett Nance – Brett has joined the Regional Epidemiology Program as a new epidemiologist for the southern region. She joins the CDS from the Freehold Area Health Department working as a communicable disease investigator and coordinator for both the Health Improvement Coalition of Monmouth County and Freehold Borough. In her new role, Brett will serve as the epidemiologist for Camden, Gloucester, Salem, and Cumberland counties, providing communicable disease consultation and assistance to

local health departments. Brett earned her Master of Public Health degree in Epidemiology and Health Education from Rutgers University.

Mayur Banjara – Mayur joins the Regional Epidemiology Program providing epidemiology support to the southern region of the state including Burlington, Atlantic and Cape May counties. He received a Master of Public Health degree from Nova Southeastern University and was previously an HIV/AIDS surveillance coordinator.

Congratulations!

Suzanne Miro Senior Health Communication Specialist was recently inducted into The College of New Jersey's "Wall of Fame" for the Health and Exercise Science department for career achievement and leadership. She is the first public health professional to receive this distinguished honor.



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>

Flu Challenge, continued from page 1

to accommodate busy student class schedules. For the 2017-18 Challenge, Seton Hall reported the highest flu vaccination coverage among their undergraduate student population based on the survey data.

The NJDOH also launched a second flu initiative this year, the *New Jersey Influenza Honor Roll* which recognizes institutions and businesses that actively promote flu prevention. Educational institutions, businesses, and other community partners can participate by hosting flu prevention campaigns, flu vaccination clinics, and/or by partnering with local stakeholders to promote flu awareness and prevention activities. In this first year, **19** institutions were added to the New Jersey Influenza Honor Roll.



Both campaigns will recommence in August 2018. For more information, visit <http://nj.gov/health/cd/topics/flu.shtml> or contact Erika Lobe at erika.lobe@doh.nj.gov.



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Regional Epidemiology Program (REP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: <http://www.nj.gov/health/cd/statistics/pub/>.

Infectious Disease Fact

Vibrio outbreaks

Rising sea temperatures due to global warming are responsible for *Vibrio* outbreaks in unexpected places. Recent warming of the Baltic Sea showed that a one degree increase in the water temperature tripled the *Vibrio* population. This corresponded with an unusual increase in *Vibrio* infections in the region.

(Stone, J. (7/30/2015). Retrieved 4/17/2018 from www.forbes.com)





TICK SAFETY TIPS

Check out the new
tick safety video.



**The NJDOH Communicable
Disease Service includes:**

Infectious and Zoonotic Disease
Program (IZDP): 609-826-5964

Regional Epidemiology
Program (REP): 609-826-5964

Vaccine Preventable Disease
Program (VPDP): 609-826-4860

We're on the Web!
www.nj.gov/health/cd

Past issues of the New Jersey
Communi-CABLE are available online at:
<http://www.nj.gov/health/cd/statistics/pub/>.