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Bucks County Commissioners

Charles H. Martin, Chairman
Robert G. Loughery, Vice-Chairman
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Preparedness Program Highlights

- **Fall Flu Clinics Update**

The County Commissioners and the Bucks County Department of Health helped fight the flu again this year by providing a total of 1,793 free flu shots at three clinic locations. Our Levittown Clinic had the largest turnout with 806 individuals receiving the vaccine. Our Doylestown and Quakertown Clinics respectively provided an additional 600 and 387 vaccines. Thanks to our skillful staff, we were able to provide the vaccine to each person in only three minutes. In addition to helping fight the flu, these clinics play a critical role in preparing for public health emergencies by allowing the health department to test and practice mass-vaccination procedures.

- **New Trainings**

Over the last year, we have been working hard on revamping our training program. We offered a number of new training opportunities this year, including: Epidemiology 101, Gauntlet of Champions (a.k.a. MRC refresher), Active Shooter Preparedness and Response, Responder Health and Safety, and Reaching Across Barriers: A Workshop on Creative Community Engagement. Our Reaching Across Barriers workshop was also the first joint training offered by the Montgomery County Health Department and Bucks County Health Departments, with MRC volunteers from both units in attendance. In the coming year we are looking forward to continuing the relationship with our partner in Montgomery County and will be working on a full slate of combined training offerings.

Starting this year, we have begun converting a number of our trainings into an animated video format. These videos will be available “on-demand” allowing individuals to participate in these trainings at their leisure. This will allow us to continue to develop and provide new in-person trainings while providing us with the opportunity to open up our animated trainings to an expanded audience.
A fever followed by rose colored spots, it’s not too hard to guess how roseola (infantum) gained its name. Other diseases borrow their names from the geographic regions (Ebola from the Ebola River, Lyme disease from Lyme, Connecticut) where they were first discovered. Others pull their names from the person who discovered them (Parkinson’s disease named after Dr. James Parkinson), while still others have more idiosyncratic origins.

Influenza: Blame the stars, or Spain

One of the most common ailments has a celestial origin: influenza originates from the Latin word “influential” which was used with an astrological connotation meaning the “influence of the stars.” The word influence is derived from the Medieval Latin word “īnfluēns” meaning “flowing in.” At the time when human affairs were believed to be governed by the stars, epidemics were believed to “flow in” from the stars. The first modern usage of the name “influenza” came in 1743 during an outbreak in Europe; however, the use of influenza as a generic descriptor for ailments goes back to at least 1504. The word disaster has a similar origin, emanating from the Italian word “disastro” meaning “ill-starred” (“dis” -a negative pejorative and “astro” –meaning “star”).

The 1918 Spanish Flu was not only the worst influenza on record, but remains the worst epidemic in history. Despite its name, the Spanish Flu did not originate nor have any special impact in Spain. Instead, this name is an artifact of the wartime environment. While most nations were engrossed in World War One, Spain remained neutral. As the Spanish press was not constrained by potential negative impacts on the war effort, they had a greater level of freedom in their publications. That resulted in them being the most prominent country to report on the flu.

Hanta Virus: The Virus without a Name

Rather than being a single virus, Hantaviruses are actually a group of at least 20 species of viruses. When Americans think of Hantavirus they are typically thinking of the particular strain of Hantavirus named Sin Nombre, which causes a serious disease in humans known as Hantavirus Pulmonary Syndrome. This specific virus captured headlines across the world when an outbreak occurred, of what was then an unknown ailment, in the southwest of the United States in 1993. The larger group of Hantaviruses gained their name after a large outbreak in Korea near the Hantaan River, which led to the eventual discovery (isolation) of the first Hantavirus in 1978. The history of the name behind the infamous Sin Nombre strain of the virus is not nearly as straightforward.

Naming the virus responsible for the 1993 outbreak in the southwestern United States initially followed the typical practice of naming the virus after the location where the first outbreak occurred, with the Sin Nombre virus originally being given the name the Muerto Canyon Virus. However, this name had an immediate issue: the outbreak was predominantly impacting the local Navajo population, and as part of Navajo tradition, you don’t mention death or the dead. Problematically, Canyon del Muerto translates to “canyon of death” and was near the site of a deadly battle and eventual surrender of the Navajo. Thus, in respect to cultural traditions the virus was subsequently called the Four Corners virus. But, this too drew objections as local authorities voiced concerns over the name’s potential to stigmatize the region, hence harming both tourism and the already resident vulnerable population. Finally, a small creek near the origin of the outbreak called Sin Nombre was chosen to give a name to the newly identified virus. “Sin Nombre” translates to “nameless” or “without a name” in Spanish.

Malaria: and the Origin of the Gin and Tonic

Long before germ theory was discovered, it was generally accepted that illnesses were cause by bad air. The Romans were particularly troubled by a specific illness that they had associated with the noxious swamp fumes, and thus, an ancient disease gained the lasting moniker, “mala aira” meaning “bad air” in Medieval Italian.

Continued on pg. 3
If you so happen to be sipping on a gin and tonic while reading this article, you are in fact sipping on a storied medication created as a treatment for malaria. In the 17th century, the Spanish found that the indigenous Quechua people (which included the Inca), were using a specific tree bark to treat various “fevers.” This bark, which was stripped from the cinchona tree, was found to be both effective in not only treating malaria, but also preventing the illness. This bark, with its active ingredient quinine, quickly became the treatment of choice for malaria. The British Empire came to rely on 700 tons of Quechua Bark, refined to quinine powder, each year in order to maintain their colonial rule in India. The quinine powder by itself has a very unpleasant, extremely bitter taste. To make it more palatable, the British officials stationed abroad in tropical regions began mixing it with soda water, sugar, and at times, lime. At some point a colonial official added gin to the concoction, resulting in the inception of the gin and tonic. This led Winston Churchill to the assertion that “The Gin and Tonic has saved more Englishmen’s lives, and minds, than all the doctors in the Empire.”

**Botulism: It’s the Wurst**

In December of 1895, 34 musicians ate a meal at an inn in Ellezellesin, Belgium after playing at a funeral. Over the next week, a number of the musicians fell ill and three of them died. Ham eaten by the musicians was sent to a professor of microbiology named Emile-Pierre-Marie Van Ermengem. Not long after, Van Ermengem for the first time isolated the bacteria responsible for Botulism poisoning. Seventy-five years prior to the botulism bacteria being first identified, a young German poet and physician, Justinus Kerner, published of the first accurate description of the symptoms of food-borne botulism. In the late 1790’s into the early 1800’s southern Germany was experiencing a rash of foodborne illnesses linked to preserved meats. This lead Kerner to accurately link the causative agent of these illness to preserved meats; labeling the unidentified agent as “sausage poison” or “fatty poison.” When Van Ermengem finally isolated the bacteria, he kept to this tradition and honored Kerner’s work by naming his discovery after the Latin word for sausages, “botulus.”

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### Upcoming Training Offerings

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Training</th>
<th>Open To</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 10th</td>
<td>6:30 pm to 8:30 pm</td>
<td>Neshaminy Manor Center 1282 Almhouse Rd, Doylestown, PA 18901</td>
<td>Medical Reserve Corps Orientation</td>
<td>Open to all community members</td>
</tr>
<tr>
<td>February 13th</td>
<td>6:30 pm to 8:30 pm</td>
<td>Union Library Hatboro 243 S York Rd, Hatboro, PA 19040</td>
<td>Points of Dispensing Introduction</td>
<td>Open to all community members</td>
</tr>
<tr>
<td>February 27th</td>
<td>6:30 pm to 8:30 pm</td>
<td>Neshaminy Manor Center 1282 Almhouse Rd, Doylestown, PA 18901</td>
<td>Introduction to Disaster Preparedness</td>
<td>Open to all community members</td>
</tr>
<tr>
<td>March 10th</td>
<td>9:00 am to 11:00 am</td>
<td>Neshaminy Manor Center 1282 Almhouse Rd, Doylestown, PA 18901</td>
<td>First Aid, CPR &amp; AED Certification</td>
<td>MRC Volunteers Only</td>
</tr>
</tbody>
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These trainings are presented as part of the Medical Reserve Corps ongoing training series. To learn more about the Medical Reserve Corps or to join the MRC follow this link: [http://www.buckscounty.org/medicalreservecorps](http://www.buckscounty.org/medicalreservecorps) or contact the MRC at hdbcmrc@buckscounty.org

*Trainings are subject to change*
In the waning hours of November 17, a fire rapidly tore through the Barclay Friends senior living center, taking the lives of four individuals and forcing 160 residents into the brisk fall night as firefighters fought to contain the fire. As the individuals who lost their lives are mourned, both authorities and families of survivors are somberly celebrating the deft and heroic response by hundreds of responders, including dedicated community members, who saved many more lives. Considering the size and the rapid spread of the extensive fire, Tom Hogan, the District Attorney of Chester County, indicated that they would have expected to “lose 40 to 50 people in a fire like this.”

This event comes in a year with numerous emergencies impacting long-term care facilities (nursing homes), and unfortunately, many of these other events have resulted in accusations of nonfeasance (legally, the failure to take action resulting in injury). The most notable of these disasters was the events that transpired at The Rehabilitation Center at Hollywood Hills in the wake of Hurricane Irma. On September 10th of 2017 the long-term care facility lost power. Without air conditioning, temperatures in the facility rose to sweltering levels. Before residents began to be evacuated on September 18th, eight residents of the facility had perished. By early October, an additional five fatalities would be attributed to the temperatures in the facility bringing the total number of deaths up to 13. Investigators continue to examine the details of the days preceding the deaths, including why the staff failed to call 911 and why they failed to evacuate the facility despite one of the state’s largest hospitals being across the street.

Additional events that occurred in Texas during Hurricane Harvey and in California throughout the wildfires over the last months have further added to questions and concerns as to how nursing homes ensure the safety of their residents. Beyond the confines of nursing homes, California fires underscored the elderly as a particular risk group with the preliminary reports indicating the average age of victims in the fires being upwards of 79. This number is far from remarkable with the elderly disproportionately represented in disaster fatalities world-wide.

Even before this sobering year, long-term care facilities had been identified as an area of particular concern during emergencies. The ever-present concern over clients in long-term care during emergencies led to the federal government to implementing preparedness standards via facilities that participate in Medicare and Medicaid. The Centers for Medicare & Medicaid Services (CMS) published these new preparedness regulations on November 16th of 2016; however, the effective date for facilities to meet these regulations was not until November 15th of this year.

The CMS preparedness rules require facilities to conduct risk assessment planning, including the development of an emergency plan that is updated at least annually. Facilities must also have plans and procedures for evacuating, sheltering in place, and tracking patients and staff during emergencies. Facilities are required to have communications plans that allow them to coordinate with various state agencies, including the Department of Health and the Emergency Management Agency. Additionally, the preparedness rules require facilities to engage in drills and exercises testing the plans and procedure they create.

The Bucks County Emergency Management Agency, the Hospital Association of Pennsylvania, and the Public Health Preparedness Program have been diligently working to make sure that all extended care facilities in our county are prepared for the new CMS requirements. Together we are exhaustively working to make sure that all of these facilities are exceedingly prepared for emergencies.

From 2006 to 2015, individuals over the age of 65 were over 2.5 times more likely to die in a fire as compared to the overall population. Individuals over the age of 80 were over 4 times as likely to die in a fire.
The Eponymist
Eponym (noun): A person after whom a discovery, invention, place, etc., is named or thought to be named; a name or noun formed after a person. Check in to the second half of this podcast as the 99% Invisible team tackles the ongoing debate in the medical community surrounding eponyms and their usage in reference to medical conditions.

https://99percentinvisible.org/episode/the-eponymist/

Influenza Vaccine and Susceptibility
Join Stacey Schultz-Cherry as she explains the selection process to choose the influenza virus strains to include in the annual influenza vaccine. Schultz-Cherry also discusses her research on the influence of obesity on the course of disease and vaccine efficacy. This dense podcast is well worth the listen.

https://www.asm.org/index.php/podcasts/meet-the-microbiologist/item/6966-influenza-vaccine-and-

How the Flu Works
Join the hosts of the Stuff You Should Know podcast as they provide an overview of the flu virus. This podcast provides a lighter conversation than the interview from the podcast above while still covering some great content.

https://www.stuffyoushouldknow.com/podcasts/flu.htm

Out Loud: Public Health Podcasts to Stimulate Your Day

Be Ready! Winter Weather

*https://www.cdc.gov/disasters/winter/index.html
Source: Centers for Disease Control and Prevention
Organization Spotlight:
Medecins Sans Frontiers

**Doctors Without Borders/Médecins Sans Frontières (MSF)** is a private, international association. The association is made up mainly of doctors and health sector workers and is also open to all other professions which might help in achieving its aims. MSF was officially created on December 22, 1971. At the time, 300 volunteers made up the organization: doctors, nurses, and other staff, including the 13 founding doctors and journalists. Since its founding, MSF has treated over a hundred million patients—with 8.25 million outpatient consultations being carried out in 2014 alone. MSF was created on the belief that all people have the right to medical care regardless of gender, race, religion, creed, or political affiliation, and that the needs of these people outweigh respect for national boundaries. In 1999 the Nobel Peace Prize was awarded to MSF "in recognition of the organization's pioneering humanitarian work on several continents."

**MSF is guided by five key principles:**

**Medical Ethics**
MSF’s actions are first and foremost medical. We carry out our work with respect for the rules of medical ethics, in particular the duty to provide care without causing harm to individuals or groups. We respect patients’ autonomy, patient confidentiality, and their right to informed consent. We treat our patients with dignity, and with respect for their cultural and religious beliefs. In accordance with these principles, MSF endeavors to provide high-quality medical care to all patients.

**Independence**
Our decision to offer assistance in any country or crisis is based on an independent assessment of people’s needs. We strive to ensure that we have the power to freely evaluate medical needs, to access populations without restriction, and to directly control the aid we provide. Our independence is facilitated by our policy to allow only a marginal portion of our funds to come from governments and intergovernmental organizations.

**Impartiality and Neutrality**
MSF offers assistance to people based on need and irrespective of race, religion, gender, or political affiliation. We give priority to those in the most serious and immediate danger. Our decisions are not based on political, economic, or religious interests. MSF does not take sides or intervene according to the demands of governments or warring parties.

**Bearing Witness**
The principles of impartiality and neutrality are not synonymous with silence. When MSF witnesses extreme acts of violence against individuals or groups, the organization may speak out publicly. We may seek to bring attention to extreme need and unacceptable suffering when access to lifesaving medical care is hindered, when medical facilities come under threat, when crises are neglected, or when the provision of aid is inadequate or abused.

**Accountability**
MSF is committed to regularly evaluating the effects of its activities. We assume the responsibility of accounting for our actions to our patients and donors.

To find out more about Doctors Without Borders/Médecins Sans Frontières visit: http://www.msf.org/en
For questions or to update your contact information, please contact:

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