FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

August 2017

Florida Department of Health in Pinellas County
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Division of Disease Control and Health Protection

Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932

Fax: (727) 820-4270 (excluding HIV/AIDS)

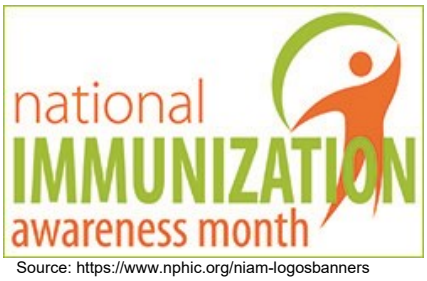
To report HIV/AIDS by mail:

Surveillance Room 3-138
205 Dr. MLK Jr St. N.
St. Petersburg, FL 33701

Possible Rabies Exposure/ Animal Bite Reports:

Phone: (727) 524-4410 x7665

Healthy People 2020 Immunization Midcourse Review



Source: https://www.nphic.org/niam-logosbanners

August is National Immunization Awareness Month which highlights the significant role immunizations play in the prevention of infectious diseases. For this reason, immunizations are heavily incorporated into the Healthy People 2020 (HP2020) goals for the prevention of infectious diseases. Healthy People 2020 is a 10-year national initiative for the improvement of American health through the empowerment of individuals towards making informed health decisions and taking preventative measures. To accomplish this mission, HP2020 has established goals to tackle factors affecting American health such as diabetes, cancer, tobacco use, environmental health and infectious diseases.[1] In 2017, the midcourse review was published by the Centers for Disease Control and Prevention with an overview of the objectives and progress since the beginning of the initiative. The immunization goals established for 2020 are to increase immunization rates and reduce preventable infectious dieases.[2] To accomplish this goal, 67 objectives were set addressing vaccination rates, and incidence of vaccine-preventable diseases.[3]

Vaccine coverage objectives were based on vaccine recommendations for children, adolescents and adults. One of the HP2020 objectives is to increase the percentage of children ages 19-35 months "who receive 4 or more doses of diphtheria, tetanus, and pertussis vaccine (IID-7.1)" from 82.5% to 90% by 2020. As of 2014, 84.2% of the children met this objective. Another goal, set for adolescent males and females between 13 and 15 years, is to increase the vaccination rates for the human papillomavirus vaccine (IID-11.4 and IID-11.5). At baseline, the vaccination rate for females was 28.1% and for males 6.9%. The national goal is to reach an average of an 80% vaccination rate. As of 2014, females reached a 34.4% coverage rate and males a 20.6% coverage. Finally, one example of an objective targeting adults is increasing the proportion of "adults vaccinated against seasonal influenza (IID-12.12)" from 38.1% to 70%.[3]

To reduce the incidence of infectious diseases, the HP2020 includes objectives that address the reduction in the number of vaccine preventable disease cases. A few diseases of which case counts are being monitored include rubella, hepatitis B, measles, mumps, pertussis, poliomyelitis and varicella. At the midcourse review, these objectives were met with mixed results. The number of U.S.-acquired cases of rubella decreased significantly, falling below the target goal of 10 cases. Meanwhile, cases of measles, mumps, and pertussis continued to increase and move away from the target goal.[3]

Since the midcourse review was conducted, of the 67 objectives and goals for immunizations, 70.1% (n=47) have met or exceeded the target goal, 17 goals remain to be improved upon and the remaining 3 were either informational or not included in the review. The immunization goals for 2020 challenge the nation to reduce the incidence of preventable disease and mortality. As of 2015, the United States is underway to reaching these goals.[3]

References:

1. About Healthy People. Office of Disease Prevention and Health Promotion website. https://www.healthypeople.gov/2020/About-Healthy-People updated August 1, 2017. Accessed August 2, 2017.
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Mumps

Mumps is a viral illness from the family *Paramyxoviridae* and is characterized by fever, muscle aches, fatigue, pain, and tenderness and swelling of the parotid salivary glands. Symptoms typically persist 7-10 days in susceptible individuals.[1] While rare, complications include encephalitis, meningitis, miscarriages, and/or deafness.[1] It is often spread via droplet transmission in which saliva or mucus from the mouth, nose or throat can infect others through talking, sneezing and contamination of objects. In countries where mumps remains endemic, 100-1,000 individuals per 100,000 are affected every year, with endemic peaks every 2 to 5 years.[1] Children ages 5 to 9 are most susceptible in these populations.[1]

Mumps can be prevented by the two-dose MMR or MMRV vaccine which is recommended to be given at 12-15 months and again at 4-6 years old.[2] The vaccine is approximately 78% effective for the first dose and 88% for the second dose.[3] Since vaccination has been implemented, there has been a 99% reduction in cases in the United States.[2] While formerly characterized as a childhood illness, mumps cases are currently primarily identified in older children, adolescents and young adults in unvaccinated or under-vaccinated populations.[1]

Despite high vaccination rates in some populations, outbreaks have occurred due to waning immunity and high-density, close-contact settings.[3] In 2015, an outbreak occurred at the University of Illinois despite a >97% vaccination rate among all students. Overall a total of 317 students, with an 89% vaccination rate, were affected by the outbreak.[3]

In Florida, the average number of cases has fluctuated between 1 to 20 cases since 2008 and Pinellas County has reported one sporadic case in 2017.[4] A confirmed case of mumps is characterized by clinical symptoms and isolation of virus or positive PCR. To reduce the number of U.S.-acquired mumps cases, the Healthy People 2020 goal for the MMR vaccine for children ages 19-35 months is 90%.[5]

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1. Barskey A. Mumps. In: Haymann, David L. Control of Communicable Diseases Manual. 20th Ed. Washington, D.C.: American Public Health Association; 2015: 419-423.
2. Mumps Vaccination. Center for Disease Control and Prevention web site. https://www.cdc.gov/mumps/vaccination.html Updated July 14, 2016. Accessed August 2, 2017.
3. Alberson, Justin P, Clegg, Whitney J., Reid, Heather D., et al. Mumps Outbreak at a University and Recommendations for a Third Dose of Measles-Mumps-Rubella Vaccine- Illinois, 2015-2016. Morbidity and Mortality Weekly Report. 2016; (65)29: 731-734.
4. Mumps. FLHealth Charts website. http://www.flhealthcharts.com/charts/OtherIndicators/NonVitalIndNoGrpCountsDataViewer.aspx?cid=0155 Accessed August 2, 2017.
5. Immunization and Infectious Disease, National Snapshots. Health People Website. https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/national-snapshot Accessed August 2, 2017.

Human Papillomavirus in Men

By Kyle Olle

According to the Centers of Disease Control and Prevention (CDC), the human papillomavirus (HPV) is the most common sexually transmitted infection in the United States with an estimated 14 million people becoming newly infected each year. HPV is transmitted primarily by having vaginal, anal or oral sex and/or skin to skin contact with an infected individual. HPV can be passed at any time while the person is infected. There is currently no treatment for the virus. In instances that the virus continues to persist in the body, health problems that may develop include several types of cancer such as anal, penile, throat, lingual and tonsillar cancer in men, and cervical and vulvar cancer in women. HPV is also the leading cause of genital warts for both men and women.[1] HPV is a group of more than 150 related viruses. These viruses are classified into high-risk and low-risk categories based on the likelihood of changes in the cells leading to cancer or warts if the infection persists.[1] Thus, the type of HPV that causes cancer is not the same that causes genital warts.[1]

In the past, focus has been placed on the prevention of HPV in relation to prevention of cervical cancer in women, but the effects of HPV on men are just as severe. One study conducted in the United States shows that 45 percent of men who were tested are infected with HPV and may stay infected longer compared to women.[2] HPV has also been found to be responsible for 70 percent of the oropharyngeal, 91 percent of anal and 63 percent of penile cancers in the United States.[2] In addition, according to a study performed in the United States, Mexico and Brazil, the sexual behaviors of men have a direct correlation to the rates of cervical cancer in woman. This further emphasizes the impact of men in the transmission and prevention of HPV.[3] In a similar manner that physicians speak to their female patients about HPV, they should speak to their male patients as well. As with many sexually transmitted infections, the virus does not discriminate against who it infects and the long lasting medical conditions that it can cause in those infected.

Currently, there is no screening available for the detection of HPV prior to the formation of abnormal cells which can lead to cancer and genital warts. At this time, there are only two prevention methods. The first is the use of latex condoms to minimize skin to skin contact during sexual intercourse; however, condoms do not cover all exposed skin that comes in contact during intercourse and thus is not 100 percent effective. Second, there is a HPV vaccine that can prevent up to 9 high-risk cancer-causing strains of HPV which is administered in a 2 to 3 shot series depending on age.[4] Becoming fully vaccinated for HPV has been estimated to prevent approximately 91 percent of the 30,700 HPV associated cancers from occurring annually.[1] The vaccine is recommended for all males and females between the ages of 11 to 26 years of age.

References:

1. HPV | Home | Human Papillomavirus | Centers for Disease Control and Prevention web site. https://www.cdc.gov/hpv/index.html. Published September 2015, Updated January 25, 2017. Accessed August 9, 2017.
2. Reinberg S. Nearly half of U.S. men infected with HPV, study finds. January 19, 2017. https://www.upi.com/Health_News/2017/01/19/Nearly-half-of-US-men-infected-with-HPV-study-finds/4511484858577/. Accessed August 9, 2017
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4. GARDASIL®9 (Human Papillomavirus 9-valent Vaccine, Recombinant) for Health Care Professionals Merck Vaccines web site. https://www.merckvaccines.com/Products/Gardasil9. Updated March 2017. Accessed August 9, 2017

Selected Reportable Diseases in Pinellas County

	Pinellas		YTD Total		Pinellas County Annual Totals		
Disease	**July 2017**	**July 2016**	**Pinellas 2017**	**Florida 2017**	**2016**	**2015**	**2014**
A. Vaccine Preventable							
Measles	**0**	**0**	**0**	**3**	0	0	0
Mumps	**0**	**0**	**1**	**24**	0	0	0
Pertussis	**3**	**2**	**25**	**243**	18	17	19
Varicella	**0**	**3**	**14**	**406**	74	38	35
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	**0**	**1**	**0**	**17**	2	3	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	**0**	**0**	**7**	**67**	7	6	4
Meningococcal Disease	**0**	**0**	**0**	**16**	0	1	0
C. Enteric Infections							
Campylobacteriosis	**18**	**13**	**113**	**2520**	146	104	103
Cryptosporidiosis	**5**	**6**	**22**	**235**	27	49	240
Cyclosporiasis	**1**	**5**	**2**	**48**	5	3	0
E. coli Shiga Toxin (+)	**0**	**1**	**2**	**76**	3	2	6
Giardiasis	**2**	**3**	**30**	**611**	41	30	42
Hemolytic Uremic Syndrome (HUS)	**0**	**0**	**0**	**8**	0	0	0
Listeriosis	**0**	**0**	**0**	**26**	2	2	0
Salmonellosis	**27**	**18**	**115**	**2942**	188	196	216
Shigellosis	**3**	**1**	**17**	**702**	19	174	21
D. Viral Hepatitis							
Hepatitis A	**0**	**0**	**0**	**149**	2	4	2
Hepatitis B: Pregnant Woman +HBsAg	**2**	**3**	**20**	**288**	28	37	21
Hepatitis B, Acute	**4**	**5**	**25**	**424**	68	57	44
Hepatitis C, Acute	**3**	**7**	**12**	**201**	49	32	19
E. VectorBorne/Zoonoses							
Animal Rabies	**0**	**0**	**2**	**25**	4	1	2
Rabies, possible exposure	**22**	**14**	**86**	**1913**	131	114	190
Chikungunya Fever	**0**	**0**	**0**	**1**	1	2	10
Dengue	**0**	**1**	**0**	**14**	2	3	1
Eastern Equine Encephalitis	**0**	**0**	**0**	**0**	0	0	0
Lyme Disease	**0**	**6**	**7**	**94**	11	6	5
Malaria	**0**	**0**	**0**	**34**	0	2	3
West Nile Virus	**0**	**0**	**0**	**1**	1	1	0
F. Others							
Chlamydia	**337**	**332**	**2585**	**n/a**	4084	4168	3853
Gonorrhea	**127**	**123**	**929**	**n/a**	1560	1439	1295
Hansen's Disease	**0**	**0**	**0**	**13**	0	0	0
Lead Poisoning	**1**	**3**	**18**	**475**	32	40	62
Legionellosis	**2**	**1**	**10**	**208**	19	18	13
Mercury Poisoning	**0**	**0**	**0**	**25**	0	1	2
Syphilis, Total	**33**	**27**	**229**	**n/a**	400	289	186
Syphilis, Infectious (Primary and Secondary)	**15**	**12**	**101**	**n/a**	187	151	75
Syphilis, Early Latent	**11**	**12**	**74**	**n/a**	144	83	61
Syphilis, Congenital	**0**	**0**	**2**	**n/a**	2	3	0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	**7**	**3**	**52**	**n/a**	68	52	50
Tuberculosis	**7**	**2**	**21**	**n/a**	31	14	25
Vibrio Infections	**1**	**2**	**3**	**138**	8	11	10

n/a = not available at this time. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx.

*STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

* Florida tracks cases of HIV/AIDS. For the most up to date data, please visit: http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/index.html