EpiNotes

Florida Department of Health - Hillsborough County
Disease Surveillance Newsletter
March 2015

Director
Douglas Holt, MD
813.307.8008
Medical Director (HIV/STD/EPI)
Charurut Somboonwit, MD
813.307.8008
Medical Director (TB/Refugee)
Beata Casanas, MD
813.307.8008
Medical Director (Vaccine Outreach)
Jamie P. Morano, MD, MPH
813.307.8008
Community Health Director
Leslene Gordon, PhD, RD, LD/N
813.307.8015 x7107
Disease Control Director
Faye Coe, RN
813.307.8015 x6321
Environmental Administrator
Brian Miller, RS
813.307.8015 x5901
Epidemiology
Warren R. McDougle Jr., MPH
813.307.8010 Fax 813.276.2981

TO REPORT A DISEASE:
Epidemiology
813.307.8010
After Hours Emergency
813.307.8000
Food and Waterborne Illness
James Ashworth
813.307.8015 x5944 Fax 813.272.7242
HIV/AIDS Surveillance
Erica Botting
813.307.8011
Lead Poisoning
Cynthia O. Keeton
813.307.8015 x7108 Fax 813.272.6915
Sexually Transmitted Disease
Carlos Mercado
813.307.8015 x4501 Fax 813.307.8027
Tuberculosis
Chris Lutz
813.307.8015 x4758 Fax 813.975.2014

Preventing outbreaks of influenza in long term care facilities through staff and resident vaccination

By Mackenzie R. Tewell, MA, MPH, CPH

Influenza and influenza-like illnesses can be severe and even deadly among adults 65 and older. Those living in Long Term Care Facilities (LTCFs) such as nursing homes or assisted living facilities can be infected by another resident, staff member, or facility visitors, and illnesses can spread quickly from person to person. According to the CDC, a LTCF has a flu outbreak when there is one confirmed case of influenza, and at least one additional symptomatic resident within 72 hours of onset of the confirmed case. These types of outbreaks are reportable to the Florida Department of Health, and spread can be limited when proper control measures are put into place. Since the beginning of the 2014-2015 flu season, in October 2014, Florida Department of Health in Hillsborough County (FDOH-Hillsborough) has investigated 11 influenza outbreaks in LTCFs. While flu outbreaks in these types of facilities are to be expected, there are measures which can be taken to limit the introduction of influenza into the facility, including exclusion of ill staff members, screening visitors for illness, screening new resident admissions for respiratory illness, maintaining standard and droplet precautions for individuals with influenza-like illnesses (ILI) and annual vaccination for both residents and staff members of LTCFs. This article will discuss staff vaccination in hopes that local LTCFs can increase staff vaccine compliance and immunization record keeping to prevent future outbreaks and reduce the burden of disease among the older adult population in Hillsborough County.

Studies have demonstrated that high vaccination rates among LTCF staff reduce flu-related mortalities in LTCF residents (1-3) and that flu outbreaks have been associated with low rates of staff vaccination in LTCFs (4). Despite this evidence, vaccine acceptance is low among employees in these types of facilities. Results from a CDC Internet panel survey of 1,882 health care personnel (HCP) found that LTCF staff were the least likely of all HCP to be vaccinated during both the 2012-2013 and 2013-2014 flu seasons (5).

Whereas HCP in hospital settings reported the highest coverage at 89.6%, only 63.0% of LTCF staff were vaccinated (5). Across all health care settings, physicians were the most likely to be vaccinated (92.2%), followed by nurses (90.2%), nurse practitioners and physician assistants (89.6%), pharmacists (85.7%) and "other clinical personnel" (87.4%) (5). The majority of respondents from LTCFs classified themselves as "assistants and aides," which was also the group with the lowest vaccination coverage at 57.7% (5). This is particularly concerning based upon the vulnerability of residents in LTCFs; it is estimated that the vast majority of flu deaths—87.9%--occur among individuals over the age of 65 (6).

Yearly flu immunization for HCP is recommended to begin as soon as the vaccines are available. Higher adoption of flu vaccine was found in facilities that require staff to be immunized (97.8% coverage) and facilities that did not require, but encouraged staff vaccination (72.4% coverage) compared to 47.9% coverage in facilities that neither required nor promoted staff vaccination (5). Most striking, LTCFs were the least likely to require staff vaccination, with only 20.1% of LTCFs requiring their staff to be immunized (5). The other factor that most positively contributed to increased staff vaccination is offering no-cost vaccines for staff on multiple days to combat scheduling barriers (5).

Studies estimate that the flu vaccine can reduce one's risk of developing flu illness by 50-60% when the vaccine is well matched to the season's circulating strain (7). As adults age, however, the immune response to vaccination changes, making flu vaccines less effective in those 65 and older. This makes it even more essential that eligible staff, who are likely to have better protection from the flu after vaccination, adopt yearly vaccination to protect those who are unable to be immunized or will experience less protection from the vaccine (7). Additionally, increased vaccine coverage improves herd immunity in the facility, meaning the burden of disease is lessened and outbreaks are less likely to occur (8).

It is no secret that the flu vaccine is imperfect. In fact, the 2014-2015 flu vaccine effectiveness was estimated at only 23% because the predominant strain, a genetically drifted H3N2, was not included in this year's vaccine formulation (9). Because of this, the 2014-2015 flu season has caused a "significant burden of serious disease in older people," including a hospitalization rate among those 65 and older that is "the highest rate recorded since CDC began tracking that data in 2005" (10). Even with these less than ideal vaccine effectiveness rates, annual vaccination provides some protection against circulating strains and can prevent more severe complications from influenza (10). In seasons such as this, it is also important to consider the use of antiviral medications for early signs of respiratory illness, even before laboratory confirmation of influenza (10). For more information on antiviral dosing, visit http://www.cdc.gov/flu/professionals/antivirals/antiviral-dosage.htm.

While removing barriers to vaccination such as cost, accessibility and lack of knowledge are simpler for health care facilities to address, impacting beliefs and attitudes about flu vaccination prove more challenging. The previously discussed CDC internet panel survey of HCP found the most frequently mentioned reasons for non-vaccination include "I might get sick from the vaccine" (20.1%), "I don't think that flu vaccines work," (16.3%) and "I don't need it" (16.0%) (5). Conversely, those who did take the vaccine did so "To protect myself from flu" (43.5%), because "My employer requires me to be vaccinated for the flu" (25.5%), and "To protect patients from getting flu" (8.5%) (5). There are a number of educational resources including posters, videos and toolkits available to health care facilities that may assist in increasing flu vaccination among staff. Table 1 (pages 4-5) provides commonly cited barriers to HCP vaccination and strategies for increasing yearly uptake of flu vaccines.

Influenza outbreaks seen in Hillsborough County in the 2014-2015 influenza season are detailed in Table 2 (page 6). Typically, outbreaks are discovered after the Florida Department of Health in Hillsborough County receives a positive flu lab from a medical provider and makes contact with a LTCF, or are reported by LTCF

staff members who notice an increase in influenza-like illness, or ILI. This flu season, a few outbreaks have been reported as an increase in pneumonia or upper respiratory infections, but confirmatory testing reveals these were outbreaks of influenza. Therefore, it is important to keep in mind that older adults with influenza, particularly those with neurological or neurocognitive disorders, may have atypical symptoms, including the lack of a fever. FDOH-Hillsborough always recommends testing to determine the cause of pneumonia or a respiratory illness. Clusters of illness that may indicate transmission among staff, residents, or both are to be reported to the local health department at (813) 307-8010. For additional information on flu outbreaks in LTCFs, visit http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm

FDOH-Hillsborough epidemiologists work closely with LTCFs experiencing outbreaks of illness, and often hear that staff vaccination rates are not known for the facility, because staff vaccination is not required, staff are not offered flu vaccines by their employer, or this type of information is not tracked by the facility administration. Hillsborough County LTCFs are encouraged to take a more active role in discussing, promoting and monitoring their staff and resident vaccination status because its importance cannot be understated. FDOH-Hillsborough epidemiologists are available to answer any questions or concerns health care staff may have regarding flu vaccinations, flu activity or flu outbreaks both over the phone and in person.

Additional resources:

- Best practices, tool kits, and resources for increasing flu vaccination among HCP from the National Adult and Influenza Immunization Summit
- Flu vaccination pledge
- Flu IQ test
- Position papers on vaccination of HCP
- Advisory Committee on Immunization Practices recommendations for HCP

1. Potter J, Stott DJ, Roberts MA, et al. Influenza vaccination of health care workers in long-term-care hospitals reduces the mortality of elderly patients. J Infect Dis 1997;175:1-6.
2. Carman WF, Elder AG, Wallace LA, et al. Effects of influenza vaccination of health-care workers on mortality of elderly people in long-term care: a randomised controlled trial. Lancet 2000;355:93-7.
3. Hayward AC, Harling R, Wetten S, et al. Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity, and health service use among residents: cluster randomised controlled trial. BMJ 2006;333:1241.
4. CDC. Immunization of health-care personnel: Recommendations of the advisory committee on immunization practices (ACIP). MMWR 2011;60(RR07):1-45.
5. CDC. Influenza vaccination coverage among health care personnel –United States, 2013-2014 influenza season. MMWR 2014;63(37):805-811.
6. CDC. Estimates of deaths associated with seasonal influenza –United States, 1976-2007. MMWR 2010;59(33);1057-1062.
7. CDC. Vaccine effectiveness - How well does the flu vaccine work? http://www.cdc.gov/flu/about/qa/vaccineeffect.htm
8. National Institute of Allergies and Infectious Diseases. Community immunity ("herd" immunity) http://www.niaid.nih.gov/topics/Pages/communityImmunity.aspx
9. CDC. Early estimates of seasonal influenza vaccine effectiveness –United States, January 2015. MMWR 2015;64(01):10-15.
10. CDC. What you should know for the 2014-2015 influenza season. http://www.cdc.gov/flu/about/season/flu-season-2014-2015.htm

Barriers	Recommended Strategies to Overcome Barriers
Lack of access to influenza vaccine	• Provide free vaccine at the workplace • Offer vaccine at multiple times and locations convenient to all workers on all shifts during the flu season • Use a mobile vaccination cart to take influenza vaccinations to staff • Provide staff with a voucher for vaccination at a drugstore or clinic • Partner with a larger healthcare organization (e.g., hospital) to provide vaccinations • Work with pharmacy consultants to offer influenza vaccinations for facility staff • Work with visiting nurses associations or other community immunizers to provide vaccination on-site • Offer influenza vaccine at mandatory trainings, departmental conferences, and other meetings

Beliefs
• Belief that influenza is not a serious illness/not a risk for young or healthy people
• Belief that influenza vaccine is not effective
• Belief that influenza vaccine causes illness/side effects
• Fear of injections
	• Provide a strong educational program for staff.
	  ○ Focus on protecting the worker and their family as well as the residents in the educational materials
	  ○ Share CDC's Influenza Vaccine Information Statements
	  ○ Share the Joint Commission's *Influenza and Influenza Vaccine Myths and Reality* fact sheet
	  ○ Show the American Medical Director's Association *Influenza Immunization and the Health Care Worker* video to staff (18 min)
	  ○ Use a declination form to learn why staff are declining vaccination to focus your own messages
	  ○ Ask vaccinated healthcare personnel to encourage their coworkers to get vaccinated

Lack of enthusiasm about influenza vaccination	• Establish a culture of prevention in your organization with the following ideas
	  ○ Publicize a "vaccine day" in combination with education to offer influenza vaccinations
	  ○ Emphasize that flu vaccination protects the employees and their loved ones and those they work with
	  ○ Encourage employees to set an example; remind them that their action and recommendation carries a lot of weight in others' decisions to get vaccinated
	  ○ Encourage employees via e-mail, posters, an employee newsletter, and any other communication tools used in your workplace to get the vaccine
	  ○ Track and report vaccination rates to staff and supervisors
	  ○ Remind unvaccinated employees with e-mail, letters, encouragement from supervisors, and telephone calls
	  ○ Provide contests or incentives to get vaccinated (small gift cards, raffles, pizza party, etc.)
	  ○ Vaccinate the medical director and all managers in front of the staff
	  ○ Foster team building to increase trust and cooperation
	  ▪ Team building may lead to increased compliance with organizational goals including immunization

Barriers (con't)	Recommended Strategies to Overcome Barriers
HCP represent diverse cultures	• Access guidance from the HHS National Standards for Culturally and Linguistically Appropriate Services in Health and Healthcare • Provide educational materials in multiple languages, including ○ CDC's Vaccine Information Statements ○ Flu information: MedlinePlus and Public Health–Seattle & King County ○ Spanish language declination form • MedlinePlus provides tutorials and videos on health topics that might be good for low literacy groups
Lack of centralized workplace	• Educate and vaccinate staff as part of new employee orientation, training, and meetings • Establish a process to determine and track proof of influenza vaccination each year for each employee
Lack of incentive for employer to cover cost of influenza vaccination	• LTC organizations could advertise high HCP influenza vaccination rates to consumers to indicate patient safety • Share CDC's Business Toolkit to demonstrate that employers across sectors think it makes good sense to promote influenza vaccination of employees • Educate staff about expanded health insurance coverage for influenza vaccinations under the Affordable Care Act ○ Employee health insurance plans may now cover influenza vaccine for your employees ○ Other health insurance plans that staff may participate in (such as a spouse's insurance plan) may now cover influenza vaccinations ○ Staff who do not qualify for employer-provided insurance may be able to get insurance through state Health Insurance Marketplaces

Table 1. "Barriers and Strategies to Improving Influenza Vaccination among Healthcare Personnel."
http://www.cdc.gov/flu/toolkit/long-term-care/strategies.htm

Facility type	Type of outbreak	Number of ill residents / total number of residents (%)	Number of ill staff/ total number of staff (%)	Percentage of residents who received 2014-2015 flu vaccine at time of outbreak	Percentage of staff who received 2014-2015 flu vaccine at time of outbreak
ALF	Influenza A (H3N2)	28/101 (27.70%)	10/65 (15.38%)	0%	0%
ALF	Influenza A (H3N2)	28/66 (42.42%)	4/52 (7.69%)	unknown	unknown
SNF	Influenza A (untyped)	7/110 (6.36%)	3/90 (3.33%)	65%	10%
ALF	Influenza B (untyped)	2/6 (33.33%)	1/3 (33.33%)	100%	100%
SNF	Influenza A (H3N2)	18/88 (20.45%)	0/75 (0.00%)	80%	75%
ILF	Influenza A (untyped)	11/482 (2.28%)	0/120 (0.00%)	unknown	unknown
ALF	Influenza A (H3N2)	38/105 (36.19%)	2/40 (5%)	90%	75%
SNF	Influenza A (H3N2)	106/175 (60.57%)	27/250 (10.80%)	83.60%	71.30%
SNF	Influenza A (H3N2)	37/115 (32.17%)	22/150 (14.67%)	unknown	unknown
SNF	Influenza A (H3N2)	13/60 (21.67%)	9/40 (22.50%)	100%	50%
SNF	Influenza A (H3N2)	18/43 (12.59%)	5/130 (3.85%)	unknown	unknown

Table 2. Outbreaks of influenza at Hillsborough County Long Term Care Facilities in the 2014-2015 influenza season. ALF = Assisted Living Facility, SNF = Skilled Nursing Facility, ILF = Independent Living Facility

Reportable Disease Surveillance Data

Disease Category	Annual Totals			3 Year Average	Year-to-date	
	2012	2013	2014		Jan-Feb 14	Jan-Feb 15
Vaccine Preventable Diseases						
Diphtheria	0	0	0	0.00	0	0
Measles	0	0	0	0.00	0	0
Mumps	0	0	2	0.67	0	0
Pertussis	119	95	65	93.00	9	1
Poliomyelitis	0	0	0	0.00	0	0
Rubella	0	0	0	0.00	0	0
Smallpox	0	0	0	0.00	0	0
Tetanus	0	0	0	0.00	0	0
Varicella	45	65	59	56.33	4	16
CNS Diseases & Bacteremias						
Creutzfeldt-Jakob Disease	3	1	1	1.67	0	0
H. influenzae (Invasive Disease in children <5)	2	2	3	2.33	0	0
Listeriosis	1	5	2	2.67	0	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	5	11	12	9.33	1	0
Meningococcal Disease	3	6	3	4.00	2	0
Staphylococcus aureus (VISA, VRSA)	1	1	0	0.67	0	0
S. pneumoniae (Invasive Disease in children <6)	5	7	5	5.67	1	1
Enteric Infections						
Campylobacteriosis	105	134	189	142.67	21	36
Cholera	1	0	0	0.33	0	0
Cryptosporidiosis	77	59	354	163.33	5	10
Cyclospora	2	9	4	5.00	0	0
Escherichia coli, Shiga toxin-producing (STEC)	22	30	20	24.00	2	6
Giardiasis	54	56	64	58.00	8	6
Hemolytic Uremic Syndrome	1	2	1	1.33	0	1
Salmonellosis	331	303	362	332.00	42	23
Shigellosis	36	63	68	55.67	8	32
Typhoid Fever	0	0	0	0.00	0	0
Viral Hepatitis						
Hepatitis A	5	10	5	6.67	1	0
Hepatitis B (Acute)	39	56	61	52.00	9	10
Hepatitis C (Acute)	26	38	28	30.67	4	3
Hepatitis +HBsAg in Pregnant Women	38	30	35	34.33	7	4
Hepatitis D, E, G	1	0	0	0.33	0	0

Reportable Disease Surveillance Data

Disease Category	Annual Totals			3 Year Average	Year-to-date	
	2012	2013	2014		Jan-Feb 14	Jan-Feb 15
Vectorborne, Zoonoses						
Chikungunya	N/A	N/A	36	N/A	0	6
Dengue	5	4	6	5.00	2	0
Eastern Equine Encephalitis	0	1	0	0.33	0	0
Ehrlichiosis/Anaplasmosis	0	2	2	1.33	0	0
Leptospirosis	0	0	0	0.00	0	0
Lyme Disease	9	12	12	11.00	1	1
Malaria	7	8	11	8.67	3	0
Plague	0	0	0	0.00	0	0
Psittacosis	0	0	0	0.00	0	0
Q Fever (Acute and Chronic)	0	0	0	0.00	0	0
Rabies (Animal)	5	6	5	5.33	2	0
Rabies (Human)	0	0	0	0.00	0	0
Rocky Mountain Spotted Fever	1	1	0	0.67	0	1
St. Louis Encephalitis	0	0	0	0.00	0	0
Trichinellosis	0	0	0	0.00	0	0
Tularemia	0	0	0	0.00	0	0
Typhus Fever (Epidemic)	0	0	0	0.00	0	0
Venezuelan Equine Encephalitis	0	0	0	0.00	0	0
West Nile Virus	1	0	0	0.33	0	0
Western Equine Encephalitis	0	0	0	0.00	0	0
Yellow Fever	0	0	0	0.00	0	0
Others						
Anthrax	0	0	0	0.00	0	0
Botulism, Foodborne	0	0	0	0.00	0	0
Botulism, Infant	0	0	0	0.00	0	0
Brucellosis	0	0	0	0.00	0	0
Glanders	0	0	0	0.00	0	0
Hansen's Disease (Leprosy)	2	2	0	1.33	0	0
Hantavirus Infection	0	0	0	0.00	0	0
Legionellosis	8	18	8	11.33	1	1
Melioidosis	0	0	0	0.00	0	0
Vibriosis	13	13	7	11.00	0	0

Reportable Disease Surveillance Data

Disease Category	Annual Totals			3 Year Average	Year-to-date	
	2012	2013	2014		Jan-Feb 14	Jan-Feb 15
Chemicals/Poisoning						
Arsenic	0	0	0	0.00	0	0
Carbon Monoxide	4	5	22	10.33	0	4
Lead	329	173	246	249.33	41	26
Mercury	0	0	0	0.00	0	0
Pesticide	4	13	42	19.67	0	14
Influenza						
Influenza, Pediatric Associated Mortality	0	1	1	0.67	0	0
Influenza, Novel or Pandemic Strain	0	0	0	0.00	0	0
HIV/AIDS						
AIDS	172	231	178	193.67	NA	NA
HIV Infection	327	403	443	391.00	NA	NA
STDs						
Chlamydia	7124	7220	7461	7268.33	1090	1122
Gonorrhea	2160	2023	1848	2010.33	268	258
Syphilis, Congenital	6	3	4	4.33	NA	NA
Syphilis, Latent	129	189	166	161.33	30	29
Syphilis, Early	117	124	141	127.33	26	14
Syphilis, Infectious	155	156	208	173.00	36	44
Tuberculosis						
TB	51	54	51	52.00	NA	NA
Food and Waterborne Illness Outbreaks						
Food and Waterborne Cases	74	73	55	67.33	0	0
Food and Waterborne Outbreaks	4	4	3	3.67	0	0

Mission:
To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.

Florida HEALTH

Rick Scott
Governor

John H. Armstrong, MD, FACS
State Surgeon General & Secretary

Vision: To be the **Healthiest State** in the Nation

February 3, 2015

Dear Colleague:

With the ongoing multistate measles outbreak, it is imperative to review what we know about this highly infectious but vaccine-preventable disease since most clinicians have never seen a case. While there have been no confirmed measles cases in Florida residents, we have seen confirmed cases in visitors, some of whom were evaluated by Florida healthcare providers but not tested or diagnosed.

Measles is a highly contagious disease, transmitted by respiratory aerosols when an infected person coughs or sneezes. The virus can live for up to two hours on surfaces or in an airspace where the infected person coughed or sneezed. The incubation period ranges from 7-21 (average 10-12) days and an individual can pass the virus to others before feeling ill. The prodromal signs and symptoms of measles include: fever, malaise, coryza, cough, conjunctivitis, and the pathognomonic enanthema—Koplik spots—on the oral mucosa. Please note: the presence of Koplik spots confirms measles, but the absence of Koplik spots does not rule it out, as it is present in only a small percentage of cases.

An erythematous maculopapular rash typically appears ~3 days after onset of illness and the ill person continues to be infectious for about 4 days after rash appears. The rash initially appears behind the ears and on the forehead, spreading down the neck, upper extremities, trunks, and lower extremities (including palms and soles). Rash may last for 5-7 days before fading. Complications from measles may include: otitis media, bronchopneumonia, laryngotracheobronchitis, diarrhea, acute encephalitis, and death. The attached document and following link provide an overview of what a patient infected with measles looks like, www.cdc.gov/measles/about/photos.html.

Please isolate and report suspect measles cases to the county health department immediately (www.floridahealth.gov/CHDEpiContact and www.floridahealth.gov/DiseaseReporting). For patients presenting with fever, rash and other symptoms, consider measles in your differential and inquire about MMR vaccine status, recent international travel, and exposure to a person with febrile rash illness. Collect serum, nasopharyngeal swab, and clean catch urine sample for IgM or RNA from suspect patients and isolate them until four days after the onset of rash while awaiting laboratory results. Local health department staff will conduct a contact investigation and provide guidance as needed.

Remember, the best way to prevent the spread of measles is to ensure full MMR vaccine coverage in our community. Identify and offer vaccine to patients that have not received the full series (www.cdc.gov/measles). Thank you for your help in keeping our community safe and healthy.

Sincerely,

Anna M. Likos, MD, MPH

Anna Marie Likos, MD, MPH
State Epidemiologist and Director,
Division of Disease Control & Health Protection

Florida Department of Health
Division of Disease Control & Health Protection
4052 Bald Cypress Way, Bin A-09• Tallahassee, FL 32399-1720
PHONE: 850/245-4300 • FAX 850/245-4297

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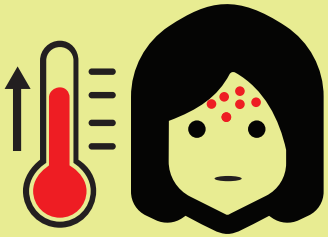
YOUTUBE: fldoh
FLICKR: HealthyFla
PINTEREST: HealthyFla

Think **Measles**

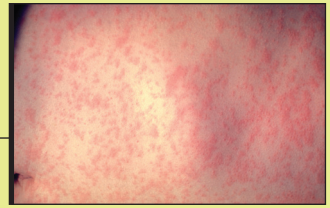
Florida Department of Health • Find county contact information at: FloridaHealth.gov

1. IDENTIFY

Suspect measles in patients with:



- Fever and rash.
- History of international travel or contact with visitors from locations with known measles outbreaks in the past 3 weeks.
- No or unknown MMR vaccine status. History of MMR vaccine **does not** exclude a measles diagnosis.



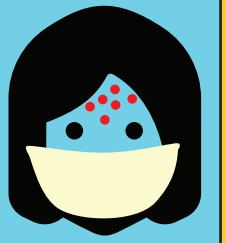
This is the skin of a patient after 3 days of measles infection.

Photo courtesy of the CDC.

Head and shoulders of boy with measles; third day of rash.

Photo courtesy of the CDC.

2. ISOLATE



- Implement airborne infection control precautions, mask and isolate patient in a negative pressure room, if available.
- Permit only staff immune to measles to be near the patient.
- Collect nasopharyngeal swab, urine, and serum for measles IgG, IgM and PCR.

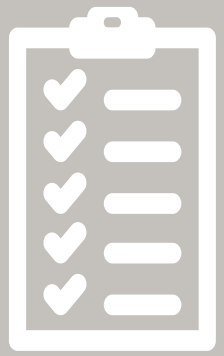
3. INFORM

Immediately report ALL suspected measles infections to your county health department. Notify other facilities of suspected measles before transport.

< FIND YOUR COUNTY

Vaccination Protects Against Measles

A single dose is 93% effective and two doses are 97% effective.



Risk Factors

- ☐ History of international travel, contact with international travelers, or domestic travel to locations with known measles outbreaks.
- ☐ No or unknown MMR vaccine status. History of MMR vaccine does not exclude a measles diagnosis.
- ☐ Contact with a person that had a febrile rash illness.

Prodrome

- ☐ Fever, cough, coryza, conjunctivitis

Rash Onset

- ☐ Fever spikes, often up to 104°F.
- ☐ Red, maculopapular rash that may become confluent—typically starts at hairline, then face and spreads down body.
- ☐ The rash may be difficult to see on darker skin.
- ☐ Koplik's spots (small, red, irregularly-shaped spots with blue-white centers found on the oral mucosa) may be present in a small number of cases.

02/03/15

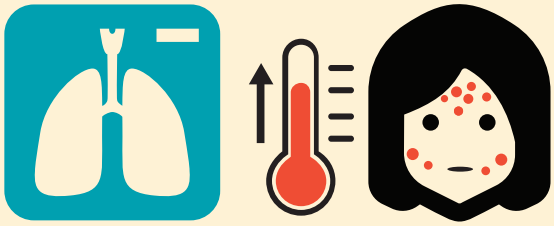
Measles & the MMR Shot

FloridaHealth.gov • Florida Department of Health

Measles is a respiratory disease.

Measles affects the lungs and breathing tubes. It causes fever, cough and rash. Measles is very contagious, and can be deadly.

Measles remains common outside of the U.S.—it is only a plane ride away.



Measles can be serious.

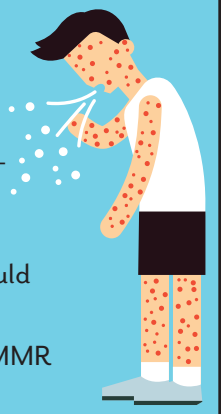
Measles can be serious, especially for babies and young children. From 2001–2013, 28% of children younger than 5 years old who had measles had to be treated in the hospital.

For some children, measles can lead to:

- Pneumonia, a serious lung infection
- Lifelong brain damage
- Deafness
- Death

Measles is very contagious.

- Measles spreads when an infected person breathes, coughs or sneezes.
- You can catch measles just by being in a room where an infected person has been—even up to 2 hours after that person has left.
- A person with rash or cough illness should wear a mask when seeking health care.
- Almost everyone who has not had the MMR shot will get measles if they are exposed.



The MMR shot is the best way to protect against measles.

The measles, mumps and rubella (MMR) shot:

- Protects your child from measles, mumps and rubella.
- Keeps your child from missing school and keeps you from missing work to care for your sick child.
- Helps keep your community and neighbors safe from measles.

The MMR shot is safe.

The MMR shot is effective at preventing measles, mumps and rubella.

Shots, like any medicine, may have side effects. Side effects of the MMR shot are usually mild, such as fever or a minor rash.

➡The MMR shot is almost 100% effective at preventing measles.

➡Adults may also need an MMR shot.

Talk to your health care provider if you have questions about the MMR shot or measles.

LEARN MORE ABOUT THE MMR SHOT: contact your county health department or visit FloridaHealth.gov.

02/06/15

Reportable Diseases/Conditions in Florida

Practitioner List (Laboratory Requirements Differ)

Effective June 4, 2014

Did you know that you are required* to report certain diseases to your local county health department?

FDOH-Hillsborough Disease Reporting Telephone and Fax Numbers
HIV/AIDS -813.307.8011 (DO NOT FAX) STD -813.307.8022 Fax -813.307.8027
TB -813.307.8015 X4758 Fax -813.975.2014
All Others/Epidemiology -813.307.8010 Fax -813.276.2981
After Hours Reporting All Diseases -813.307.8000

- ! Report immediately 24/7 by phone upon initial suspicion or laboratory test order
- ☎ Report immediately 24/7 by phone
- • Report next business day
- + Other reporting timeframe

Birth Defects — 850.245.4444 x2198

- + Congenital anomalies
- + Neonatal abstinence syndrome (NAS)

Cancer — Tumor Registry Database

- + Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors

HIV/AIDS — 813.307.8011

- + Acquired immune deficiency syndrome (AIDS)
- + Human immunodeficiency virus (HIV) infection
- • HIV, exposed infants <18 months old born to an HIV-infected woman

STDs — 813.307.8022

- • Chancroid
- • Chlamydia
- • Conjunctivitis in neonates <14 days old
- • Gonorrhea
- • Granuloma inguinale
- • Herpes simplex virus (HSV) in infants <60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children <12 years old
- • Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children <6 years old; anogenital papillomas in children <12 years old
- • Lymphogranuloma venereum (LGV)
- • Syphilis
- ☎ Syphilis in pregnant women and neonates

Tuberculosis — 813.307.8015 x4758

- • Tuberculosis (TB)

All Others — 813.307.8010

- ! Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed that is of urgent public health significance
- ☎ Amebic encephalitis
- ! Anthrax
- • Arsenic poisoning
- • Arboviral diseases not otherwise listed
- ! Botulism, foodborne, wound, and unspecified
- • Botulism, infant
- ! Brucellosis
- • California serogroup virus disease
- • Campylobacteriosis
- • Carbon monoxide poisoning
- • Chikungunya fever
- ☎ Chikungunya fever, locally acquired
- ! Cholera (*Vibrio cholerae* type O1)
- • Ciguatera fish poisoning
- • Creutzfeldt-Jakob disease (CJD)
- • Cryptosporidiosis
- • Cyclosporiasis
- • Dengue fever
- ☎ Dengue fever, locally acquired
- ! Diphtheria
- • Eastern equine encephalitis
- • Ehrlichiosis/anaplasmosis
- • *Escherichia coli* infection, Shiga toxin-producing
- • Giardiasis, acute
- ! Glanders
- ! *Haemophilus influenzae* invasive disease in children <5 years old
- • Hansen's disease (leprosy)
- ☎ Hantavirus infection
- ☎ Hemolytic uremic syndrome (HUS)
- ☎ Hepatitis A
- • Hepatitis B, C, D, E, and G
- • Hepatitis B surface antigen in pregnant women or children <2 years old
- ☎ Herpes B virus, possible exposure
- ! Influenza A, novel or pandemic strains
- ☎ Influenza-associated pediatric mortality in children <18 years old
- • Lead poisoning
- • Legionellosis
- • Leptospirosis
- ☎ Listeriosis
- • Lyme disease
- • Malaria
- ! Measles (rubeola)
- ! Melioidosis
- • Meningitis, bacterial or mycotic
- ! Meningococcal disease
- • Mercury poisoning
- • Mumps
- ☎ Neurotoxic shellfish poisoning
- ☎ Pertussis
- • Pesticide-related illness and injury, acute
- ! Plague
- ! Poliomyelitis
- • Psittacosis (ornithosis)
- • Q Fever
- ☎ Rabies, animal or human
- ! Rabies, possible exposure
- ! Ricin toxin poisoning
- • Rocky Mountain spotted fever and other spotted fever rickettsioses
- ! Rubella
- • St. Louis encephalitis
- • Salmonellosis
- • Saxitoxin poisoning (paralytic shellfish poisoning)
- ! Severe acute respiratory disease syndrome associated with coronavirus infection
- • Shigellosis
- ! Smallpox
- ☎ Staphylococcal enterotoxin B poisoning
- ☎ *Staphylococcus aureus* infection, intermediate or full resistance to vancomycin (VISA, VRSA)
- • *Streptococcus pneumoniae* invasive disease in children <6 years old
- • Tetanus
- • Trichinellosis (trichinosis)
- ! Tularemia
- ☎ Typhoid fever (*Salmonella* serotype Typhi)
- ! Typhus fever, epidemic
- ! Vaccinia disease
- • Varicella (chickenpox)
- ! Venezuelan equine encephalitis
- • Vibriosis (infections of *Vibrio* species and closely related organisms, excluding *Vibrio cholerae* type O1)
- ! Viral hemorrhagic fevers
- • West Nile virus disease
- ! Yellow fever

*Section 381.0031 (2), *Florida Statutes* (*F.S.*), provides that "Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 395; or any laboratory licensed under chapter 483 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." Florida's county health departments serve as the Department's representative in this reporting requirement. Furthermore, Section 381.0031 (4), *F.S.* provides that "The department shall periodically issue a list of infectious or noninfectious diseases determined by it to be a threat to public health and therefore of significance to public health and shall furnish a copy of the list to the practitioners…"

Florida Department of Health, Practitioner Disease Report Form

Complete the following information to notify the Florida Department of Health of a reportable disease or condition, as required by Chapter 64D-3, *Florida Administrative Code* (*FAC*). This can be filled in electronically.

Print Form

Patient Information

SSN: _____

Last name: _____

First name: _____

Middle: _____

Parent name: _____

Gender: ◯ Male ◯ Female ◯ Unk

Pregnant: ◯ Yes ◯ No ◯ Unk

Birth date: _____ **Death date:** _____

Race: ◯ American Indian/Alaska Native ◯ Asian/Pacific Islander ◯ Black ◯ White ◯ Other ◯ Unk

Ethnicity: ◯ Hispanic ◯ Non-Hispanic ◯ Unk

Address: _____

ZIP: _____ **County:** _____

City: _____ **State:** _____

Home phone: _____

Other phone: _____

Emer. phone: _____

Email: _____

Medical Information

MRN: _____

Date onset: _____ **Date diagnosis:** _____

Died: ◯ Yes ◯ No ◯ Unk

Hospitalized: ◯ Yes ◯ No ◯ Unk

Hospital name: _____

Date admitted: _____ Date discharged: _____

Insurance: _____

Treated: ◯ Yes ◯ No ◯ Unk

Specify treatment:

Laboratory testing: ◯ Yes ◯ No ◯ Unk Attach laboratory result(s) if available.

Provider Information

Physician: _____

Address: _____

City: _____ **State:** _____ **ZIP:** _____

Phone: _____ **Fax:** _____

Email: _____

Reportable Diseases and Conditions in Florida

! Notify upon suspicion 24/7 by phone ☎ **Notify upon diagnosis 24/7 by phone**

HIV/AIDS and HIV-exposed newborn notification should be made using the Adult HIV/AIDS Confidential Case Report Form, CDC 50.42A (revised March 2013) for cases in people ≥13 years old or the Pediatric HIV/AIDS Confidential Case Report, CDC 50.42B (revised March 2003) for cases in people <13 years old. Please contact your local county health department for these forms (visit http://floridahealth.gov/chdepicontact to obtain CHD contact information). **Congenital anomalies** and **neonatal abstinence syndrome** notification occurs when these conditions are reported to the Agency for Health Care Administration in its inpatient discharge data report pursuant to Chapter 59E-7 *FAC*. **Cancer** notification should be directly to the Florida Cancer Data System (see http://fcds.med.miami.edu). All other notifications should be to the CHD where the patient resides.
To obtain CHD contact information, see http://floridahealth.gov/chdepicontact. See http://floridahealth.gov/diseasereporting for other reporting questions.

- ☎ ☐ Amebic encephalitis
- ! ☐ Anthrax
- ☐ Arsenic poisoning
- ☐ Arboviral disease not listed here
- ☐ Botulism, infant
- ! ☐ Botulism, foodborne
- ! ☐ Botulism, wound or unspecified
- ! ☐ Brucellosis
- ☐ California serogroup virus disease
- ☐ Campylobacteriosis
- ☐ Carbon monoxide poisoning
- ☐ Chancroid
- ☐ Chikungunya fever
- ☎ ☐ Chikungunya fever, locally acquired
- ☐ Chlamydia
- ! ☐ Cholera (*Vibrio cholerae* type O1)
- ☐ Ciguatera fish poisoning
- ☐ Conjunctivitis in neonate <14 days old
- ☐ Creutzfeldt-Jakob disease (CJD)
- ☐ Cryptosporidiosis
- ☐ Cyclosporiasis
- ☐ Dengue fever
- ☎ ☐ Dengue fever, locally acquired
- ! ☐ Diphtheria
- ☐ Eastern equine encephalitis
- ☐ Ehrlichiosis/anaplasmosis
- ☐ *Escherichia coli* infection, Shiga toxin-producing
- ☐ Giardiasis, acute
- ! ☐ Glanders
- ☐ Gonorrhea
- ☐ Granuloma inguinale
- ! ☐ *Haemophilus influenzae* invasive disease in child <5 years old
- ☐ Hansen's disease (leprosy)
- ☎ ☐ Hantavirus infection
- ☎ ☐ Hemolytic uremic syndrome (HUS)
- ☎ ☐ Hepatitis A
- ☐ Hepatitis B, C, D, E, and G
- ☐ Hepatitis B surface antigen in pregnant woman or child <2 years old
- ☎ ☐ Herpes B virus, possible exposure
- ☐ Herpes simplex virus (HSV) in infant <60 days old
- ☐ HSV, anogenital in child <12 years old
- ☐ Human papillomavirus (HPV), laryngeal papillomas or recurrent respiratory papillomatosis in child <6 years old
- ☐ HPV, anogenital papillomas in child <12 years old
- ! ☐ Influenza A, novel or pandemic strains
- ☎ ☐ Influenza-associated pediatric mortality in child <18 years old
- ☐ Lead poisoning
- ☐ Legionellosis
- ☐ Leptospirosis
- ☎ ☐ Listeriosis
- ☐ Lyme disease
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- ☐ *Streptococcus pneumoniae* invasive disease in child <6 years old
- ☐ Syphilis
- ☎ ☐ Syphilis in pregnant woman or neonate
- ☐ Tetanus
- ☐ Trichinellosis (trichinosis)
- ☐ Tuberculosis (TB)
- ! ☐ Tularemia
- ☎ ☐ Typhoid fever (*Salmonella* serotype Typhi)
- ! ☐ Typhus fever, epidemic
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- ! ☐ Venezuelan equine encephalitis
- ☐ Vibriosis (infections of *Vibrio* species and closely related organisms, excluding *Vibrio cholerae* type O1)
- ! ☐ Viral hemorrhagic fevers
- ☐ West Nile virus disease
- ! ☐ Yellow fever
- ! ☐ Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed above that is of urgent public health significance. Please specify:

Comments

Revised June 4, 2014