

A Healthy Missouri, Influenza Basics

2020-2021

Lynelle Phillips, RN MPH
Extension Nurse Specialist



Fort Riley, Kansas, 1918

Highly Infectious Viral Illness

- 1580 – first pandemic
- 19th Century – at least four pandemics
- 20th Century - three pandemics
- 1933 – first virus pandemic
- 2009 – H1N1

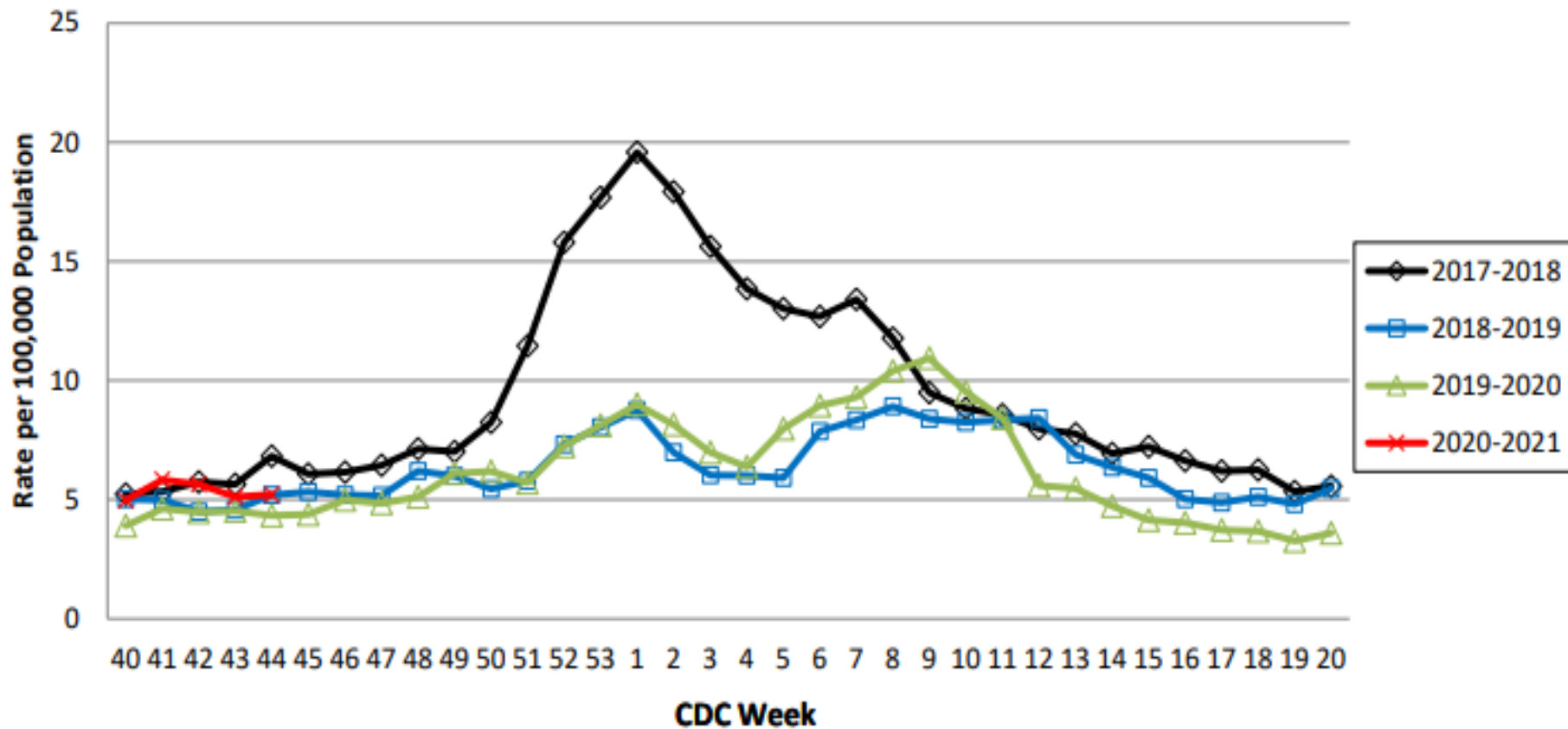
**TO CLOSE SCHOOLS
AND THEATERS TO
CHECK INFLUENZA**

**The Mayor Decides on This
Action After a Conference
With Medical Men and
Others.**

**LIKELY GO INTO
EFFECT TOMORROW**

**Health Commissioner Is Em-
powered to Prevent Any
Public Gathering—Call for
Doctors at Jefferson Bar-
racks.**

Figure 9. Weekly Rate of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Missouri Hospitals, 2017-2021 Influenza Seasons



Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, HL7 Messaging Portal. Population data from Missouri Census Data Center 2017 (<https://census.missouri.edu>).

Influenza Complications

Impact of Influenza

- Influenza deaths vary by:
 - Year
 - Virus type and subtype
 - Age group
- Between 2010 and 2017 an average of 37,877 annual deaths
- Persons 65+ account for 80% of deaths

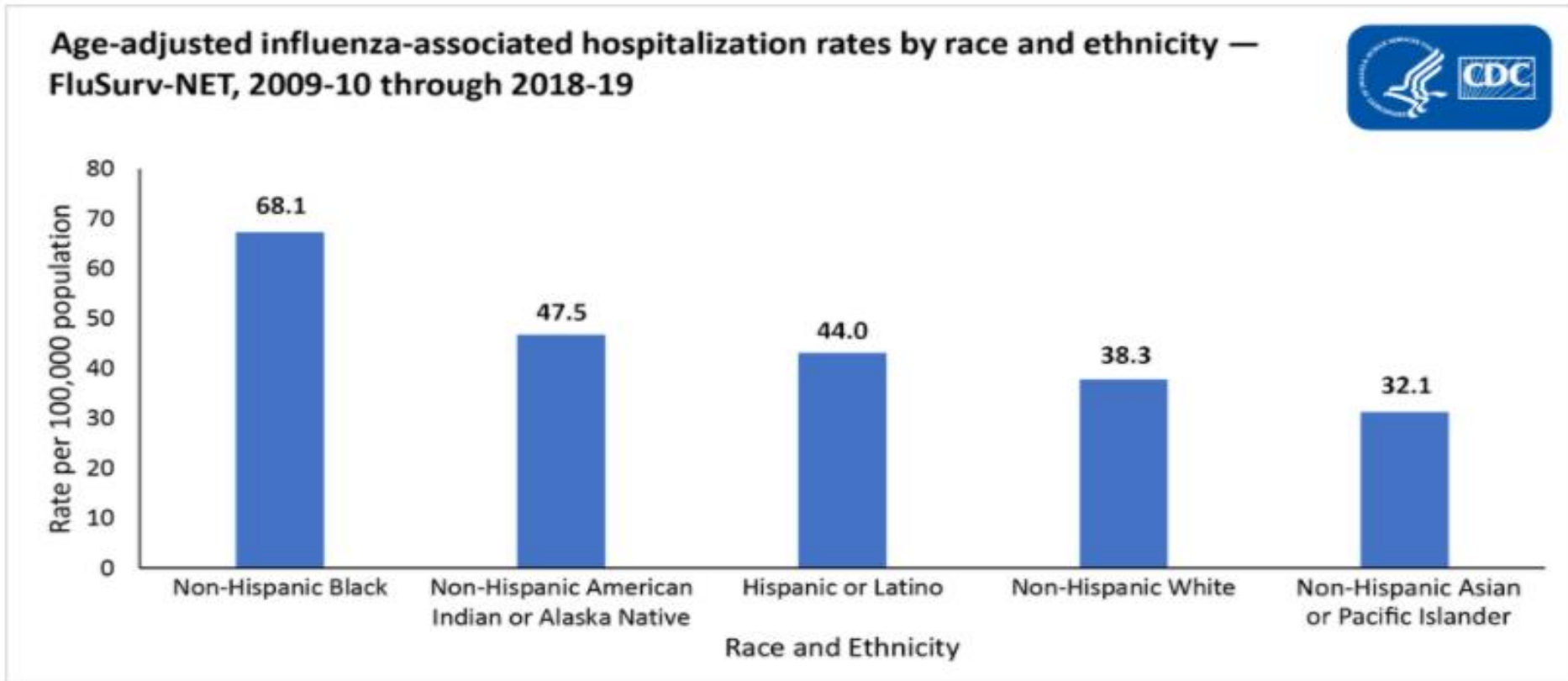


Impact of Influenza

- Complications and hospitalizations high among:
 - Persons 65+
 - Young children
 - Persons with underlying medical conditions
- 2015-2016 flu season – 310,000 people hospitalized



TABLE 1. Age-adjusted Influenza-related Hospitalizations by Race/Ethnicity (2009-2010 through 2018-2019)*



Health Disparities



Influenza Vaccine



4.4million flu cases prevented
in 2018-2019 due to flu shots.
Fewer doctor visits,
less \$ on copays.

The flu vaccine can reduce your and
your family's risk of hospitalization.

Flu related pediatric
intensive care unit
(PICU) admission

Risk reduced by

74%

Flu related ICU
visits by adults

Risk reduced by

82%

Flu associated
hospitalizations among
pregnant women

Risk reduced by

40%

Flu associated
hospitalizations among
older adults and elderly

Risk reduced by

40%

*Percentages provided by the CDC.

Flu Shot Effectiveness



Vaccine Recommendations



Vaccine Recommendations

Can a flu vaccine
give you flu?



Why is the Flu Vaccine Essential?

During the pandemic, it is more important than ever to get the flu shot. Here are three important reasons why:

1. To reduce the overall burden of respiratory illnesses
2. To protect vulnerable populations at risk of severe illness
3. To reduce the burden on the healthcare system and other critical infrastructures

There's no better time than now to get the flu vaccine!

COVID-19 Versus The Flu

- Flu + COVID-19 infections possible
- Treatments for severe COVID-19 might be harmful for influenza patients
- Surveillance is tricky
- Simultaneous testing process for flu and COVID-19 needed
- ICU and ventilator capacity concerns for COVID-19 high incidence states

Source: <https://jamanetwork.com/journals/jama/fullarticle/2769835>


Healthcare System Burden

Figure 6. Perc

ICU Availability

Ventilator Availability

Healthcare System Capacity

To enhance the viewability of this chart, scroll down or click the 'expand' button  at the upper right of this window.

Current Status:

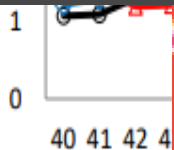
YELLOW

Each hospital in Boone County will provide a daily report of either green status, yellow status, or red status. The various colored status designations are defined by the following:

Level	Description
Green	Operating within licensed bed capacity; accepting patient transfers from referring hospitals within standard care operating procedures.
Yellow	Operating within standard capacity and meeting any of the following criteria: - Delaying non-emergency patient transfers from referring hospitals due to capacity for greater than two (2) days, or - Delaying non-emergency patient transfers from referring hospitals due to staffing for greater than two (2) consecutive days, or - Delaying non-urgent procedures and operations to provide additional inpatient capacity
Red	Expansion of care for patients above and beyond standard capacity, diversion or delays from own Emergency Department due to staffing or capacity at any time for greater than two (2) consecutive days.

The Info Hub will report:

- Green** status if no more than one hospital reports yellow, and no hospitals report red;
- Yellow** status if two hospitals report yellow, or one hospital reports red;
- Red** status if two or more hospitals report red;



Bed Totals - ICU	Bed Availability - ICU	Ventilator Totals	Ventilator Availability
497	264	185	112

What Can You Do?

TAKE 3 ACTIONS TO FIGHT FLU

Influenza (flu) is a contagious disease that can be serious. Every year, millions of people get sick, hundreds of thousands are hospitalized, and thousands die from flu. CDC urges you to take the following actions to protect yourself and others from flu.

GET YOURSELF AND YOUR FAMILY VACCINATED!

A yearly flu vaccine is the first and most important step in protecting against flu viruses.

Everyone 6 months or older should get an annual flu vaccine. **Protect Yourself. Protect Your Family. Get Vaccinated. #FightFlu**

STOP THE SPREAD

Take everyday preventive actions to help stop the spread of flu viruses!

Avoid close contact with sick people, avoid touching your eyes, nose, and mouth, cover your coughs and sneezes, wash your hands often (with soap and water).

ASK YOUR DOCTOR ABOUT FLU ANTIVIRALS

Take antiviral drugs if your doctor prescribes them!

Antiviral drugs can be used to treat flu illness and can make illness milder and shorten the time you are sick.

SICK WITH FLU? KNOW WHAT TO DO!

Influenza (or flu) is a contagious respiratory illness caused by flu viruses. Most people with flu have mild illness and do not need medical care or antiviral drugs. If you get flu symptoms, in most cases, you should stay home and avoid contact with others except to get medical care.

KNOW THE SYMPTOMS OF FLU

Flu viruses can cause mild to severe illness, and at times can lead to death. The flu is different from a cold. The flu usually comes on suddenly.

People who have flu often feel some or all of these symptoms: Fever* or feeling feverish/chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue (tiredness). Some people may have vomiting and diarrhea. This is more common in children.

*It's important to note that not everyone with flu will have a fever.

TAKE ANTIVIRAL DRUGS IF YOUR DOCTOR PRESCRIBES THEM!

Antiviral drugs can be used to treat flu illness. Antiviral drugs can make illness milder and shorten the time you are sick. They also can prevent serious flu complications.

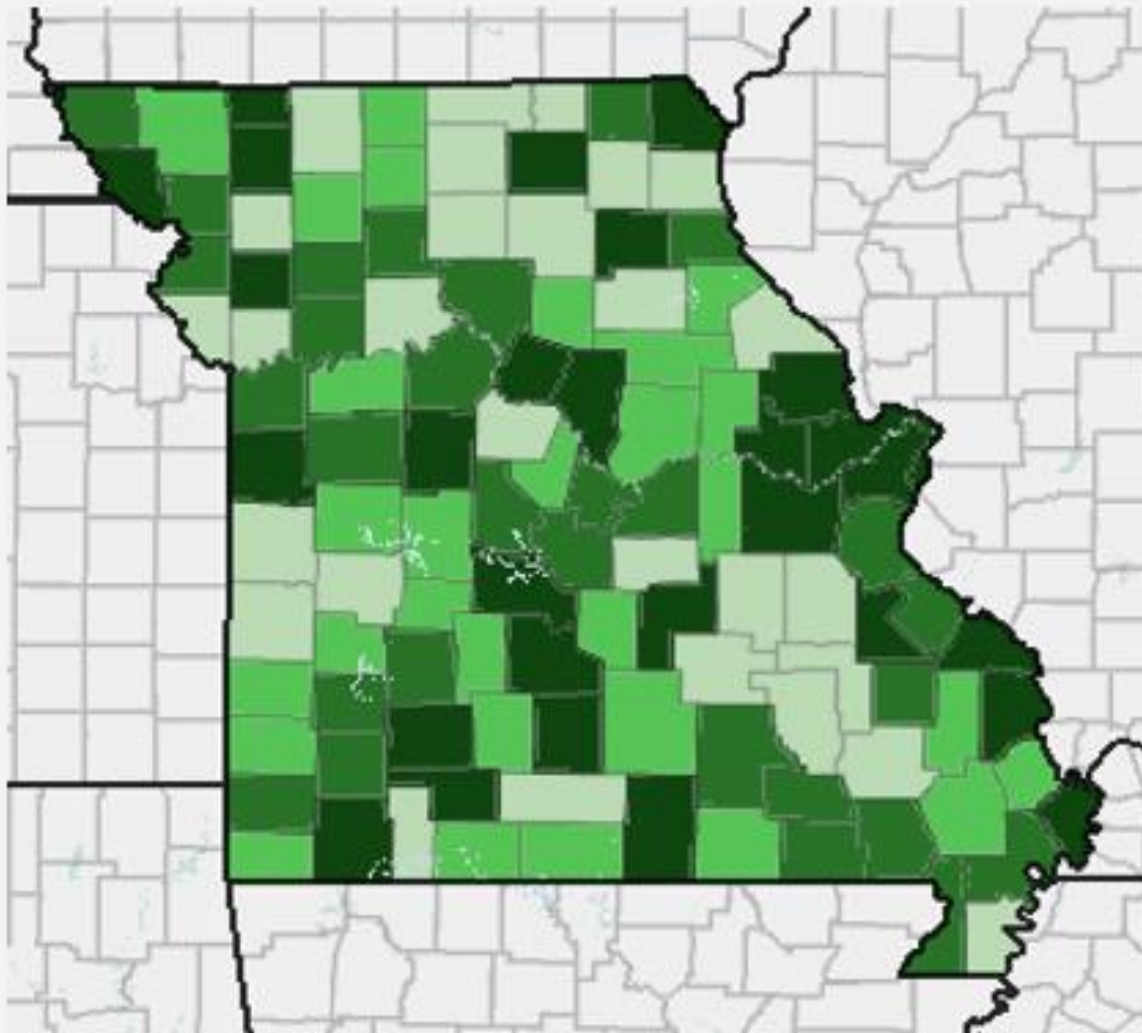
CDC recommends that antiviral drugs be used early to treat people who are very sick with the flu and people who get flu symptoms who are at high risk of serious flu complications, either because of their age or because they have a high risk medical condition.

STAY HOME WHEN SICK

When you are sick, limit contact with others as much as possible. Remember to cover your nose and mouth with a tissue when you cough or sneeze, and throw tissues in the trash after you use them. Stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities.

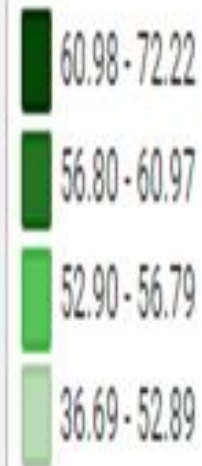
*Your fever should be gone for 24 hours without the use of a fever-reducing medicine before resuming normal activities.

Receiving Flu Shot, % by County



Receiving Flu Shot, Percent by County, Missouri

CLS 2016



Ways to Support Vaccine Efforts

- Reminder system utilization
- Combining multi-system interventions
- MU CARES Immunization Report
- Social media posts
- Local testimonials

FLU VACCINE

Resources and Reporting Tools

Resources:

Multilingual

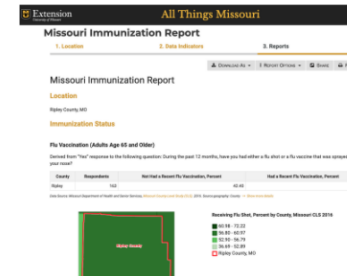
[Influenza Resources in Spanish](#)

[Influenza Marketing Kit in Spanish](#)

Tools

All Things Missouri: [Missouri Immunization Report](#)

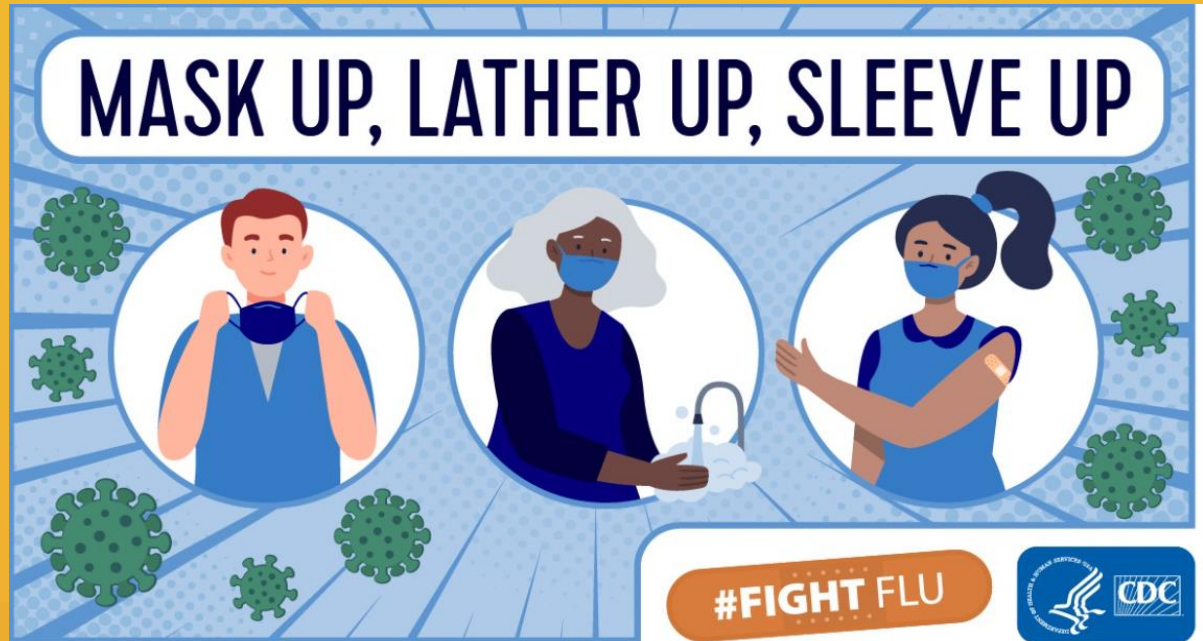
The All Things Missouri Immunization Report allows you to access data on immunizations in your area which can be broken down by county, public health region or congressional districts.




Missouri Hospital Association: [COVID-19 and Influenza Data Dashboard](#)

Summary

- Influenza is bad
- Influenza + COVID-19 is **very** bad
- Influenza is preventable
- You can help!





It is especially important for children to get flu vaccine during the COVID pandemic

Yet only **1 in 3 parents** believe getting flu vaccine is more important this year



Questions

- Rob Kallenbach,
Associate Dean of CAFNR Extension
and Senior Program Director of
Agriculture and Environment
Extension
- Kathleen Quinn,
Associate Dean for Rural
Health/Senior Program Director for
Health and Safety
- Lynelle Phillips,
Extension Nurse Specialist
- Nicole Cope
Interim Executive Director, Missouri
Immunization Coalition



Extension
University of Missouri