Weekly Influenza-associated Hospitalizations Activity Summary:
Butler County (MMWR Week 52, ending in 12/28/2019): The number of Influenza-associated hospitalizations has increased from week 51 to week 52 by ten (10) cases from four (4) to fourteen (14). This is a slightly higher number of hospitalizations than we would normally expect to see according to the three-year-average (12.67). This also represents an overall increase of thirteen (13) more hospitalizations compared to this time (MMWR 51) in the 2018-2019 Influenza season. Demographics are being withheld as potentially identifying due to the small case numbers. See Figure 1.

Confirmed Influenza-associated Hospitalizations,
Butler County Residents, 2019-2020 Influenza Season

Table 1.* Influenza-associated Hospitalizations,
Butler County Residents, 2019-2020 Influenza Season

<table>
<thead>
<tr>
<th>MMWR Week</th>
<th>Week Ending</th>
<th>Weekly Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>10/05/2019</td>
<td>0</td>
</tr>
<tr>
<td>41</td>
<td>10/12/2019</td>
<td>1</td>
</tr>
<tr>
<td>42</td>
<td>10/19/2019</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>10/26/2019</td>
<td>0</td>
</tr>
<tr>
<td>44</td>
<td>11/02/2019</td>
<td>0</td>
</tr>
<tr>
<td>45</td>
<td>11/09/2019</td>
<td>0</td>
</tr>
<tr>
<td>46</td>
<td>11/16/2019</td>
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<tr>
<td>47</td>
<td>11/23/2019</td>
<td>1</td>
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<td>48</td>
<td>11/30/2019</td>
<td>0</td>
</tr>
<tr>
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<td>12/07/2019</td>
<td>2</td>
</tr>
<tr>
<td>50</td>
<td>12/14/2019</td>
<td>7</td>
</tr>
<tr>
<td>51</td>
<td>12/21/2019</td>
<td>4</td>
</tr>
<tr>
<td>52</td>
<td>12/28/2019</td>
<td>14</td>
</tr>
</tbody>
</table>

Season Total (thus far): As of 12/28/2019 31

Table 2.* Influenza-associated Hospitalization Trend from Previous Week,
Butler County Residents, 2019-2020 Influenza Season

<table>
<thead>
<tr>
<th>Surveillance Data</th>
<th># in Current Week</th>
<th>% Change (from previous week)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza Hospitalizations</td>
<td>14</td>
<td>250%</td>
<td></td>
</tr>
</tbody>
</table>

Data is provisional- Butler County influenza-associated hospitalization cases are included in counts for Tables 1 and 2 and are subject to change due to delays in reporting. Report reflects time period of 9/29/19 – 12/28/19 (MMWR Week 40 of 2019 to Week 52 of 2019). Data accessed from the Ohio Disease Reporting System (ODRS) on 1/2/20. 

Figure 1. Confirmed Influenza-Associated Hospitalizations by MMWR Week with Past 3-Year Baseline Average; Butler County Residents, 2019-2020 Influenza Season, MMWR Week 52
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Dec 21, 2019 - Week 51

Sources of Influenza Surveillance Data

Influenza-associated Hospitalizations (ODRS): Influenza-associated hospitalizations are reported to local health departments for entry into the Ohio Disease Reporting System (ODRS). Hospitalizations can be used as an indicator of the severity of illness during a particular influenza season. This condition became reportable in 2009.

For further information or questions, please contact:
Jordan Luttrell-Freeman, Epidemiologist, 513-887-5248
Butler County General Health District, 513-863-1770 http://health.bcohio.us

*This map indicates geographic spread and does not measure the severity of influenza activity.

Note: Flu View map updated 1 week late due to delays in data reporting to the CDC.

National Influenza Activity Summary http://www.cdc.gov/flu/weekly/fluactivitysurv.htm
CDC recommends a three-step approach to fighting influenza (flu). The first and most important step is to get a flu vaccination each year. But if you get the flu, there are prescription antiviral drugs that can treat your illness. Early treatment is especially important for the elderly, the very young, people with certain chronic health conditions, and pregnant women. Finally, everyday preventive actions may slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu. This flyer contains information about everyday preventive actions.

**How does the flu spread?**

Flu viruses are thought to spread mainly from person to person through droplets made when people with flu cough, sneeze, or talk. Flu viruses also may spread when people touch something with flu virus on it and then touch their mouth, eyes, or nose. Many other viruses spread these ways too. People infected with flu may be able to infect others beginning 1 day before symptoms develop and up to 5-7 days after becoming sick. That means you may be able to spread the flu to someone else before you know you are sick as well as while you are sick. Young children, those who are severely ill, and those who have severely weakened immune systems may be able to infect others for longer than 5-7 days.

**What are everyday preventive actions?**

- Try to avoid close contact with sick people.
- If you or your child gets sick with flu-like illness, CDC recommends that you (or your child) stay home for at least 24 hours after the fever is gone except to get medical care or for other necessities. The fever should be gone without the use of a fever-reducing medicine.
- While sick, limit contact with others as much as possible to keep from infecting them.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.
- If an outbreak of flu or another illness occurs, follow public health advice. This may include information about how to increase distance between people and other measures.

For more information, visit: [www.cdc.gov/flu](http://www.cdc.gov/flu) or call 1-800-CDC-INFO.
What additional steps can I take at work to help stop the spread of germs that can cause respiratory illness, like flu?

- Find out about your employer’s plans if an outbreak of flu or another illness occurs and whether flu vaccinations are offered on-site.
- Routinely clean frequently touched objects and surfaces, including doorknobs, keyboards, and phones, to help remove germs.
- Make sure your workplace has an adequate supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes.
- Train others on how to do your job so they can cover for you in case you or a family member gets sick and you have to stay home.
- If you begin to feel sick while at work, go home as soon as possible.

What additional preventive actions can I take to protect my child from germs that can cause respiratory illness, like flu?

- Find out about plans your child’s school, child care program, or college has if an outbreak of flu or another illness occurs and whether flu vaccinations are offered on-site.
- Make sure your child’s school, child care program, or college routinely cleans frequently touched objects and surfaces, and that they have a good supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes on-site.
- Ask how sick students and staff are separated from others and who will care for them until they can go home.

Everyday preventive actions can help slow the spread of germs that can cause many different illnesses and may offer some protection against the flu.
Do you have Asthma, Diabetes, or Chronic Heart Disease?
If so, you are at high risk of serious illness if you get flu. Asthma, diabetes and chronic heart disease were among the most common of these. Treatment with an influenza antiviral drug can mean the difference between having milder illness instead of very serious illness that could result in a hospital stay. This fact sheet provides information about using prescription antiviral drugs to treat influenza in people at high risk for flu complications.

Why am I at greater risk of serious flu complications?
Your medical condition makes it more likely that you will get complications from flu, like pneumonia. Flu also can make long-term health problems worse, even if they are well-managed. People with asthma or chronic congestive heart failure may experience worsening of their conditions. Diabetes (type 1 and 2) can make the immune system less able to fight flu. Also, flu illness can raise blood sugar levels.

Can flu be treated?
Yes. There are prescription medications called “antiviral drugs” that can be used to treat influenza illness. Antiviral drugs fight influenza viruses in your body. They are different from antibiotics, which fight against bacterial infections.

What should I do if I think I have flu?
If you get flu, antiviral drugs are a treatment option. Check with your doctor promptly if you have a high risk factor and you get flu symptoms. Symptoms of flu can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue. Your doctor may prescribe antiviral drugs to treat your flu illness.

Should I still get a flu vaccine?
Yes. Antiviral drugs are not a substitute for getting a flu vaccine. While flu vaccines can vary in how they work, flu vaccination is the first and best way to prevent influenza. Antiviral drugs are a second line of defense to treat flu if you get sick.

What are the benefits of antiviral drugs?
Antiviral treatment works best when started within two days of getting symptoms. Antiviral drugs can lessen fever and other symptoms, and shorten the time you are sick by about one day. They also can prevent serious flu complications, like pneumonia.

For people at high risk of serious flu complications, treatment with an antiviral drug can mean the difference between having a milder illness versus a very serious illness that could result in a hospital stay. For adults hospitalized with flu illness, some studies have reported that early antiviral treatment can reduce the risk of death.

What antiviral drugs are recommended?
There are four FDA-approved influenza antiviral drugs recommended by CDC: oseltamivir (available as a generic version or under the trade name Tamiflu®), zanamivir (trade name Relenza®), peramivir (trade name Rapivab®), and baloxavir marboxil (trade name Xofluza®). Oseltamivir is available as a pill or liquid, and zanamivir is a powder that is inhaled. Peramivir is administered intravenously by a health care provider. Baloxavir is a pill given as a single dose by mouth.
Health and age factors known to increase a person's risk for developing flu-related complications:

- Asthma
- Neurological and neurodevelopmental conditions
- Blood disorders (such as sickle cell disease)
- Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
- Endocrine disorders (such as diabetes mellitus)
- Heart disease (such as congenital heart disease, congestive heart failure, and coronary artery disease)
- Kidney disorders
- Liver disorders
- Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
- People who are obese with a body mass index [BMI] of 40 or higher
- People younger than 19 years of age on long-term aspirin- or salicylate-containing medications
- People with a weakened immune system due to disease or medication (such as people with HIV or AIDS, or some cancers such as leukemia) or medications (such as those receiving chemotherapy or radiation treatment for cancer, or persons with chronic conditions requiring chronic corticosteroids or other drugs that suppress the immune system)

Other people at high risk from the flu:

- Adults 65 years and older
- Children younger than 2 years old
- Pregnant women and women up to 2 weeks after the end of pregnancy
- American Indians and Alaska Natives
- People who live in nursing homes and other long-term-care facilities

1 Although all children younger than 5 years old are considered at high risk for serious flu complications, the highest risk is for those younger than 2 years old, with the highest hospitalization and death rates among infants younger than 6 months old.

What are the possible side effects of antiviral drugs?

Side effects vary for each medication. For example, the most common side effects for oseltamivir are nausea and vomiting, zanamivir can cause bronchospasm, and peramivir can cause diarrhea.

Other less common side effects also have been reported. Your health care provider can give you more information about these drugs or you can check the Food and Drug Administration (FDA) website for specific information about antiviral drugs, including the manufacturer's package insert.

When should antiviral drugs be taken for treatment?

Studies show that flu antiviral drugs work best for treatment when started within two days of getting sick. However, starting them later can still be helpful, especially if the sick person has a high-risk factor (see list in sidebar) or is very sick from flu (for example, hospitalized from flu). Follow your health care provider’s instructions for taking these drugs.

How long should antiviral drugs be taken?

To treat flu, oseltamivir and zanamivir are usually taken for 5 days, although people hospitalized with flu may need the medicine for longer than 5 days. Peramivir is given intravenously for 15 minutes to 30 minutes. Baloxavir is given as a single dose.

Can children take antiviral drugs?

Yes. Oseltamivir is recommended by CDC and the American Academy of Pediatrics (AAP) for early treatment of flu in people of any age, and for the prevention of flu (i.e., prophylaxis) in people 3 months and older. Zanamivir is recommended for early treatment of flu in people 7 years and older, and for the prevention of flu in people 5 years and older. Peramivir is recommended for early treatment in people 2 years and older. Baloxavir is recommended for early treatment of flu in people 12 years and older.

Can pregnant and breastfeeding women take antiviral drugs?

Oral oseltamivir is recommended for treatment of pregnant women with flu because compared to other recommended antiviral medications, it has the most studies available to suggest that it is safe and beneficial during pregnancy. Baloxavir is not recommended for pregnant women or breastfeeding mothers.

Who should take antiviral drugs?

It’s very important that antiviral drugs be used early to treat flu in

- People who are very sick with flu (for example, people who are in the hospital).
- People who are sick with flu and have a high-risk factor related to a health condition like asthma, diabetes or chronic heart disease or their age. (See the full list of high-risk factors).

For more information, visit: www.cdc.gov/flu or call 1-800-CDC-INFO