2019-2020 FLU SEASON UPDATE

• For MMWR Week 49 (December 1 through December 7, 2019):

  • WIDESPREAD ACTIVITY (first time this season)
  
  • 511 lab-confirmed cases bringing the season total to 1,622 cases

  • 1 long-term care facility outbreak – season total is now 2

  • 4 deaths – all adults with multiple comorbidities
GROUPS THAT NEED SPECIAL ATTENTION

• Elderly

• People of Any Age who have Chronic Conditions
CORRELATION BETWEEN FLU AND ITS EFFECT ON CHRONIC CONDITIONS

• Adults are 6-10 times more likely to suffer a heart attack within the first week after having lab-confirmed flu.

• Adults were shown to be 8 times more likely to suffer a stroke in the first 3 days after having lab-confirmed flu.
ESTIMATES OF THE EFFECTIVENESS OF FLU VACCINE IN PREVENTING ACUTE MYOCARDIAL INFARCTION (AMI)

<table>
<thead>
<tr>
<th>CORONARY INTERVENTION</th>
<th>INTERVENTION EFFICACY/EFFECTIVENESS AGAINST AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking cessation</td>
<td>32%-43%</td>
</tr>
<tr>
<td>Statins</td>
<td>19%-30%</td>
</tr>
<tr>
<td>Antihypertensive drugs</td>
<td>17%-25%</td>
</tr>
<tr>
<td>Influenza vaccines</td>
<td>15%-45%</td>
</tr>
</tbody>
</table>
IN A STUDY OF PEOPLE WITH DIABETES, FLU MAY BE ASSOCIATED WITH

• **3 times** the risk of hospitalization

• **4 times** the risk of ICU Admission

• **2 times** the risk of Death
FLU VACCINE REDUCED HOSPITALIZATION AND DEATH IN PEOPLE WITH TYPE 2 DIABETES

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>REDUCTION</th>
</tr>
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<tbody>
<tr>
<td>Stroke</td>
<td>30%</td>
</tr>
<tr>
<td>All-Cause Death</td>
<td>24%</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>22%</td>
</tr>
<tr>
<td>Acute Myocardial Infarction</td>
<td>19%</td>
</tr>
<tr>
<td>Pneumonia or Influenza</td>
<td>15%</td>
</tr>
</tbody>
</table>
REFERENCES

• Flu and Heart Disease & Stroke: https://www.cdc.gov/flu/highrisk/heartdisease.htm

doi: 10.1056/NEJMoa1702090

• Flu and People with Diabetes:
https://www.cdc.gov/flu/highrisk/diabetes.htm

• *Epidemiology & Infection*. 1997 Dec; 119(3): 335-341.
doi: 10.1017/s095026889700825x.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2809006/
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