R7 HCC
HOT TOPICS
Feb 15, 2018

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Parts of Puerto Rico have been in the dark for 145 days, 10 hours and 48 minutes

- **Hurricane Maria** slammed into Puerto Rico in the early hours of Sept. 20, bringing 155 mph winds that knocked the majority of the 3.4 million residents into one of its longest widespread power outages since Hurricane Jeanne in 2004 (8 day outage).
HURRICANE MARIA: By The Numbers

**COMMODITIES**
- **POTABLE WATER**: 16.93 million gallons
- **BOTTLED WATER**: 64.62 million liters
- **MEALS**: 58.30 million

**POWER-GENERATORS**
- **862** generators installed

**DEBRIS CLEARED**
- **5.64** million CY

**DISASTER UNEMPLOYMENT ASSISTANCE**
- **APPROVED**: 9,147
- **AMOUNT DISBURSED**: $3,237,872 million

**HOUSING, PUBLIC ASSISTANCE AND SBA**
- **INDIVIDUAL AND HOUSEHOLDS PROGRAM**
  - **TOTAL REGISTRATIONS**: 1,099,802
  - **TOTAL DOLLARS APPROVED**: $990,021,293

**PUBLIC ASSISTANCE**
- **TOTAL DOLLARS OBLIGATED**: $508,663,072

**SMALL BUSINESS ADMINISTRATION**
- **APPLICATIONS RECEIVED**: 54,890
- **TOTAL DOLLARS APPROVED**: $720,572,600 million

**NUMBERS OF FEDERAL CIVILIAN EMPLOYEES AND MILITARY PERSONNEL**
- **FEMA ONLY**: 2,929
- **DEPARTMENT OF DEFENSE**: 1,223
- **SURGE FORCE**: 19
- **LOCAL HIRES**: 1,885
- **TOTAL**: 6,056

**FEMA TEMPORARY ROOFING**
- **SELF HELP TARPS**: 125,981
- **BLUE ROOFS INSTALLED**: 50,645
- **RIGHTS OF ENTRY**: 76,023

As of Jan. 25, 2018

[https://www.fema.gov/media-library/assets/images/157403](https://www.fema.gov/media-library/assets/images/157403)
101 Prescription Drugs Made in Puerto Rico

- Puerto Rico is home to prescription drug manufacturing facilities for pharmaceutical giants like Johnson & Johnson, Pfizer, Eli Lilly, Amgen, Bristol-Myers Squibb, AbbVie, Merck, Baxter, and others.
- *Puerto Rico manufactures nearly 10 percent of medicine used by Americans*, including numerous medical devices.
- FDA warns of possible impending drug shortages in mainland America.

http://insight-us.org/puerto_rico_drugs.html
Shortage of intravenous fluids directly linked to the hurricane damage

• “…nearly all hospitals across the country are currently reporting significant shortages of IV fluids. Although IV fluid shortages have occurred intermittently since 2014, the impact of Hurricane Maria on Puerto Rico this fall has greatly exacerbated the situation, given the significant medical products manufacturing industry on the island that sustained damage. Although the initial impact from manufacturing shortfalls was mostly limited to shortages of small volume bags, there have now been secondary effects, causing a shortage of 'regular' IV fluid bags as health systems have had to switch their use to these products.\“

• Chris Fortier, Chief Pharmacist, MA General Hospital

FDA Drug Shortages

- Sodium Chloride 0.9% Injection Bags

<table>
<thead>
<tr>
<th>Company</th>
<th>Date Revised</th>
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<tbody>
<tr>
<td>Baxter Healthcare</td>
<td>New 02/06/2018</td>
</tr>
<tr>
<td>Fresenius Kabi USA, LLC</td>
<td>Revised 01/09/2018</td>
</tr>
<tr>
<td>Fresenius Medical Care North America</td>
<td>Revised 10/27/2017</td>
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<tr>
<td>Hospira, Inc.</td>
<td>Revised 01/19/2018</td>
</tr>
<tr>
<td>ICU Medical, Inc.</td>
<td>Revised 01/26/2018</td>
</tr>
<tr>
<td>Laboratorios Grifols, S.A.</td>
<td>Revised 12/12/2017</td>
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</table>

https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?utm_campaign=02-06-2018%20Drug%20Shortages&utm_medium=email&utm_source=Eloqua&AI=Sodium+Chloride+0.9per+Injection+Bags&st=c&tab=tabs-4&panels=0&elqTrackId=17e794db1cad4b2ab6e85636335d1e6&elq=8b0ec001312f4526ba9b596f63555c37d&elqaid=2356&elqat=1&elqCampaignId=1668
**FLU SEASON**

**CDC Grand Rounds**

- **Jan 16, 2018**

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**Significant Annual Burden of Influenza**

- **United States**
  - Deaths: 12,000 – 56,000
  - Severe Cases: 140,000 – 710,000
  - Hospitalizations: 9.2M – 35.6M

- **Global**
  - Deaths: 291,000 – 646,000
  - Severe Cases: 3M to 5M
  - Hospitalizations: 1.0 B

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**Direct Medical Costs:** $10.4 B per year

**Indirect and Direct Costs:** $87.1 B per year

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Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2017-2018 and Selected Previous Seasons
Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2017-2018 Season

https://www.cdc.gov/flu/weekly/
Flu Virus Subtype and Age

- A/H3N2
- A/H1N1
WA Flu situation

Figure 2: Influenza Positive Tests Reported to CDC, WA Commercial Laboratories

Updated 02/09/2018
### WA: Flu associated deaths through Feb 3, 2018

#### Table 4: Count and rate of reported laboratory-confirmed influenza-associated deaths by age group, Washington, 2017-2018 season to date

<table>
<thead>
<tr>
<th>Age Group (in years)</th>
<th>Count of Deaths</th>
<th>Death Rate (per 100,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>1</td>
<td>0.23</td>
</tr>
<tr>
<td>5-24</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>25-49</td>
<td>4</td>
<td>0.17</td>
</tr>
<tr>
<td>50-64</td>
<td>26</td>
<td>1.87</td>
</tr>
<tr>
<td>65+</td>
<td>120</td>
<td>12.81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>181</strong></td>
<td><strong>2.19</strong></td>
</tr>
</tbody>
</table>

#### Table 5: Count of Reported Laboratory-Confirmed Influenza-Associated Deaths, Past Seasons to Week 05 and Total

<table>
<thead>
<tr>
<th>Season</th>
<th>Count of Deaths as of Week 05 of Season</th>
<th>Count of Deaths Reported for the Entire Season (week 40 to week 39)</th>
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</thead>
<tbody>
<tr>
<td>2017-2018, to date</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>2016-2017</td>
<td>214</td>
<td>278</td>
</tr>
<tr>
<td>2015-2016</td>
<td>13</td>
<td>67</td>
</tr>
<tr>
<td>2014-2015</td>
<td>125</td>
<td>156</td>
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<td>2013-2014</td>
<td>55</td>
<td>80</td>
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<tr>
<td>2012-2013</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>2011-2012</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>2010-2011</td>
<td>5</td>
<td>36</td>
</tr>
</tbody>
</table>

#### Count of Deaths Reported to WA DOH from week 40 of 2017 to present

- Benton: 11
- Chelan: 3
- Clallam: 3
- Clark: 8
- Cowlitz: 1
- Grant: 1
- Grays Harbor: 1
- Island: 3
- King: 23
- Kitsap: 8
- Kittitas: 2
- Lewis: 1
- Mason: 1
- Pend Oreille: 1
- Pierce: 11
- Skagit: 2
- Snohomish: 26
- Spokane: 22
- Stevens: 4
- Thurston: 4
- Walla Walla: 2
- Whatcom: 6
- Whitman: 1
- Yakima: 4

[https://www.doh.wa.gov/Portals/1/Documents/5100/420-100-FluUpdate.pdf](https://www.doh.wa.gov/Portals/1/Documents/5100/420-100-FluUpdate.pdf)
Figure 3: Percentage of ILI Visits Reported by Sentinel Providers, Washington, 2016-2018
If it’s not flu then what is it?

Figure 10: Respiratory and Enteric Viruses, Washington, 2017-2018 Season to Date
Region 7 Epi Response Plan

• What’s our plan?

Epidemiology Response Plan
Region 7 Public Health Public Health
North Central Washington State
(Chelan, Douglas, Grant, Kittitas and Okanogan Counties)
Region 7 Epi Response Plan

Routine and Expanded Disease Surveillance

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Washington State Guidelines on Notifiable Diseases Reporting

• Public Health Surveillance is the collection, investigation and distribution of data about illness and death.

• This surveillance helps prevent and control disease in WA State.

• Surveillance is used to protect and improve the health of the public by:
  ▫ describing disease trends;
  ▫ identifying and controlling the sources of infection;
  ▫ educating the public and;
  ▫ preventing disease.
In WA, health care providers, health care facilities, laboratories, veterinarians, food service establishments, child day care facilities, and schools are legally required to notify public health authorities at their local health jurisdiction of suspected or confirmed cases of selected diseases or conditions. These are referred to as **notifiable conditions**.

**General Public or Self reporting**

[Diagram showing the process of reporting to local health jurisdictions, then to the Washington State Department of Health, and finally to the CDC.]
Notifiable conditions in WA

- Influenza, novel or unsubtypable strain

Notifiable within 24 hours: Requires a phone call if reporting after normal public health business hours
- Brucellosis
- Hantavirus pulmonary syndrome
- Hepatitis A, acute
- Hepatitis B, acute
- Hepatitis E, acute
- Legionellosis
- Leptospirosis
- Listeriosis
- Mumps, acute
- Pertussis
- Psittacosis
- Q fever
- Relapsing fever (borreliosis)
- Salmonellosis
- Shigellosis
- Vancomycin-resistant Staphylococcus aureus (not to include Vancomycin-intermediate)
- Vibrio
- Yersiniosis

Other rare diseases of public health significance, including but not limited to:
- Amoebic meningitis
- Anaplasmosis
- Babesiosis
- Carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE)
- Chagas disease
- Coccidioidomycosis
- Cryptococcus gattii
- Ehrlichiosis
- Histoplasmosis
- Influenza-associated death, laboratory-confirmed
- Lyme disease
- Malaria
- Nipah virus
- Pontia disease, including Creutzfeldt-Jakob disease (CJD)
- Syphilis (including congenital)
- Tetanus
- Trichinosis
- Varicella-associated death

Notifiable within 3 business days
- Acquired immunodeficiency syndrome (AIDS), including in persons previously reported with HIV infection
- Arboviral disease (acute disease only, including: West Nile virus, dengue, eastern & western equine encephalitis, Zika, etc.)
- Campylobacteriosis
- Chancroid
- Chlamydia trachomatis infection
- Clostridium difficile infection
- Cryptosporidiosis
- Cytomegalovirus
- Cyclosporiasis
- Giardiasis
- Gonorrhea
- Granuloma inguinale
- Hepatitis B, surface antigen positive pregnant women
- Hepatitis C, acute
- Herpes simplex, neonatal and genital (initial infection only)
- HIV infection
- Immunization reactions (severe, adverse)
- Influenza-associated death, laboratory-confirmed
- Lyme disease
- Lupus
- Malaria
- Meningococcal disease (invasive)
- Monkeypox
- Other rare diseases of public health significance, including but not limited to:
- Poliomyelitis
- Rabies, confirmed human or animal
- Rabies, suspected human exposure
- Rubella (include congenital rubella syndrome), acute
- SARS (Severe Acute Respiratory Syndrome)
- Shiga toxin-producing E. coli infections (STEC, including but not limited to E. coli O157:H7; also includes post-diarrheal hemolytic uremic syndrome)
- Smallpox
- Tuberculosis
- Tularemia
- Vaccinia transmission
- Viral hemorrhagic fever
- Yellow fever

Notifiable within 30 days
- Acquired immunodeficiency syndrome (AIDS), including in persons previously reported with HIV infection
- Arboviral disease (acute disease only, including: West Nile virus, dengue, eastern & western equine encephalitis, Zika, etc.)
- Campylobacteriosis
- Chancroid
- Chlamydia trachomatis infection
- Clostridium difficile infection
- Cryptosporidiosis
- Cytomegalovirus
- Cyclosporiasis
- Giardiasis
- Gonorrhea
- Granuloma inguinale
- Hepatitis B, surface antigen positive pregnant women
- Hepatitis C, acute
- Herpes simplex, neonatal and genital (initial infection only)
- HIV infection
- Immunization reactions (severe, adverse)
- Influenza-associated death, laboratory-confirmed
- Lyme disease
- Lupus
- Malaria
- Meningococcal disease (invasive)
- Monkeypox
- Poliomyelitis
- Rabies, confirmed human or animal
- Rabies, suspected human exposure
- Rubella (include congenital rubella syndrome), acute
- SARS (Severe Acute Respiratory Syndrome)
- Shiga toxin-producing E. coli infections (STEC, including but not limited to E. coli O157:H7; also includes post-diarrheal hemolytic uremic syndrome)
- Smallpox
- Tuberculosis
- Tularemia
- Vaccinia transmission
- Viral hemorrhagic fever
- Yellow fever

Notifiable on a monthly basis
- Asthma, occupational (suspected or confirmed): 1-888-66-SHARP
- Birth defects: 360-236-3533
  (autism spectrum disorders, cerebral palsy, alcohol-related birth defects)
- Hepatitis B, chronic (initial diagnosis/previously unreported cases)
- Hepatitis C, chronic

http://www.doh.wa.gov/Portals/1/Documents/5100/210-001-Poster-HCP.pdf
Influenza-associated Death (Laboratory-confirmed)

1. DISEASE REPORTING

A. Purpose of Reporting and Surveillance
   1. To determine mortality rates for laboratory-confirmed influenza-associated deaths.
   2. To monitor the epidemiology of severe influenza infections.
   3. To detect emerging threats such as avian and other novel influenza strains.

B. Legal Reporting Requirements for Influenza-associated Deaths (Laboratory-confirmed)
   1. Healthcare providers: notifiable to local health jurisdiction within 3 business days
   2. Healthcare facilities: notifiable to local health jurisdiction within 3 business days

1. DISEASE REPORTING

A. Purpose of Reporting and Surveillance
   1. To detect emerging threats such as avian and other novel influenza strains.
   2. To determine the clinical severity, epidemiology, and communicability of novel influenza viruses.

B. Legal Reporting Requirements
   1. Health care providers: immediately notifiable to local health jurisdiction
   2. Health care facilities: immediately notifiable to local health jurisdiction
   3. Laboratories: immediately notifiable to local health jurisdiction; specimen submission required – isolate or clinical specimen (2 business days)
   4. Veterinarians: suspected human cases immediately notifiable to local health jurisdiction; animal cases notifiable to Washington State Department of Agriculture
Electronic reporting to DOH to change in 2018

## Local health jurisdiction (LHJ) phone numbers and websites

<table>
<thead>
<tr>
<th>LHJ</th>
<th>Communicable disease (CD) phone numbers</th>
<th>CD after hours</th>
<th>Fax</th>
<th>Website</th>
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<tbody>
<tr>
<td>Franklin</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Douglas</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Clallam</td>
<td>360-417-2274</td>
<td>800-656-1506</td>
<td>360-452-4492</td>
<td><a href="http://www.clallam.net/HHS/">http://www.clallam.net/HHS/</a></td>
</tr>
<tr>
<td>Garfield</td>
<td>509-843-3412</td>
<td>509-843-3494</td>
<td>509-843-1935</td>
<td><a href="co.garfield.wa.us/health">co.garfield.wa.us/health</a></td>
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<tr>
<td>Grant</td>
<td>509-766-7060</td>
<td>509-398-2083</td>
<td>509-764-2813</td>
<td><a href="granthalth.org/">granthalth.org/</a></td>
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<td>Harbor</td>
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<tr>
<td>Island</td>
<td>360-221-6626</td>
<td>360-914-0839</td>
<td>360-221-8480</td>
<td><a href="https://www.islandcountywa.gov/health/Pages/Home.aspx">https://www.islandcountywa.gov/health/Pages/Home.aspx</a></td>
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<td>Other notifiable: 206-296-4782</td>
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<td>King</td>
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<td>Kittitas</td>
<td>509-962-7515</td>
<td>800-839-1922</td>
<td>509-933-6246</td>
<td><a href="http://www.co.kittitas.wa.us/health/">http://www.co.kittitas.wa.us/health/</a></td>
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<td></td>
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<td>Lincoln</td>
<td>509-725-1001</td>
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<td>509-725-1014</td>
<td><a href="http://www.co.lincoln.wa.us/Health%20Department/">http://www.co.lincoln.wa.us/Health%20Department/</a></td>
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<tr>
<td>Tri</td>
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<td>Pend Oreille: 509-447-3131</td>
<td>509-447-5644</td>
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<tr>
<td></td>
<td></td>
<td>Stevens: 509-685-2823</td>
<td>509-684-0878</td>
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</tr>
</tbody>
</table>
Protocol for Activating Emergency Surveillance

Emergency Surveillance will be implemented within Region 7 Public Health LHJs under the following conditions:

- Upon receiving notification of a confirmed or suspected disease significance or of a bioterrorism nature from the following sources:
  - US Centers for Disease Control (CDC)
  - Washington State Department of Health (WSDOH)
  - British Columbia Centers for Disease Control (BCCDC)
- Upon the discretion and direction of the Region 7 Health Officers.
- Evidence of an epidemic occurring in Washington State
- A significant increase in key signs/symptoms among patients within either Region 7 or Washington State
Regional Coordination of Surveillance Activities

- In keeping with the mutual aid agreements among Region 7 Public Health LHJs and to coordinate notifiable condition reporting surveillance within Public Health Emergency Response Planning Region 7, participants will cooperate and coordinate with the Region 7 Public Health Epidemiologist in the event of a disease outbreak within Region 7.
TERMINATION OF SURVEILLANCE

• Emergency Surveillance may be terminated by Region 7 Public Health following consultation with the Health Officer, Epidemiologist, Communicable Disease Program Manager, Environmental Health Director or the Administrator.