



**UW TASP**  
tele-antimicrobial stewardship program

15 OCT, 2018

## Agenda

- John Lynch: *HCW VACCINATIONS*
- Case Discussions
- Open Discussion

[Health](#) | [Local News](#) | [Northwest](#)

# Man with measles may have exposed people at Sea-Tac Airport and Harborview waiting room

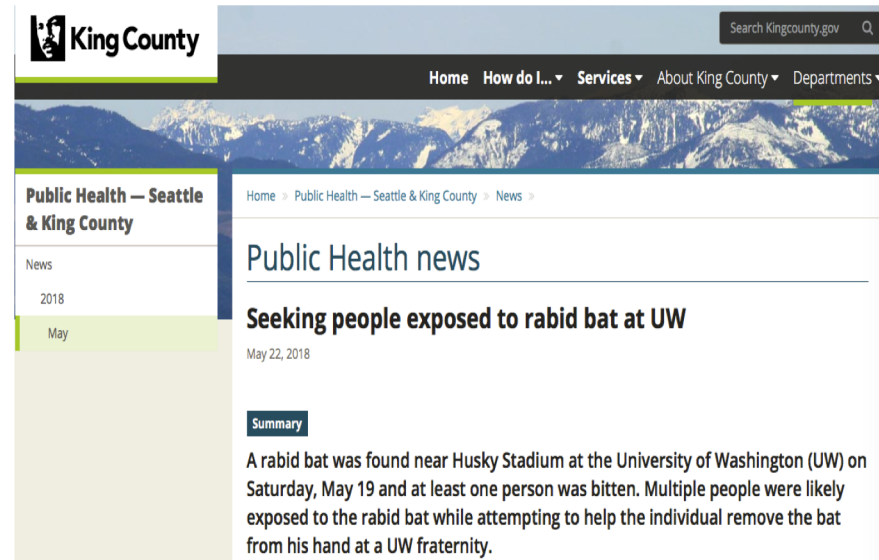
Originally published August 24, 2018 at 4:52 pm | *Updated August 25, 2018 at 12:56 pm*

**Seattle-King County Public Health officials have confirmed a case of measles in a King County man and warn that others may have been exposed.**

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The screenshot shows the King County Public Health website. The top navigation bar includes links for Home, How do I..., Services, About King County, and Departments. A search bar is located in the top right corner. The main content area is titled "Public Health news" and features a news article titled "Seeking people exposed to rabid bat at UW" dated May 22, 2018. The article includes a "Summary" section with the following text: "A rabid bat was found near Husky Stadium at the University of Washington (UW) on Saturday, May 19 and at least one person was bitten. Multiple people were likely exposed to the rabid bat while attempting to help the individual remove the bat from his hand at a UW fraternity."

**King County**

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Public Health — Seattle & King County

News

2018

May

Home > Public Health — Seattle & King County > News >

## Public Health news

### Seeking people exposed to rabid bat at UW

May 22, 2018

**Summary**

A rabid bat was found near Husky Stadium at the University of Washington (UW) on Saturday, May 19 and at least one person was bitten. Multiple people were likely exposed to the rabid bat while attempting to help the individual remove the bat from his hand at a UW fraternity.

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## With 404 cases, Washington mumps outbreak continues to grow

### Summary

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# HEALTHCARE WORKERS

"...all persons  
working in a  
healthcare setting."

ACIP 2012



# ID Risks for HCP

- Viruses
  - Measles, mumps, rubella
  - Influenza, RSV, human metapneumovirus
  - Norovirus
  - HSV, VZV
  - HIV, HBV, HCV
- Fungi
- Parasites - scabies
- Bacteria
  - Tuberculosis
  - Pertussis
  - Meningococcus
  - *Clostridium difficile*, *Staphylococcus aureus*



# ACIP RECOMMENDATIONS

- HBV (all HCP with BBE exposure)
- Influenza (all HCP)
- Tdap (all HCP)
- MMR (all HCP)
- Varicella zoster (all HCP)
- Meningococcus (specific HCP subsets)



# MEASLES

- An acute viral respiratory illness
- Cough, coryza, conjunctivitis
- High fever and malaise
- Enanthema (Koplik spots)



# GLOBAL EPIDEMIOLOGY

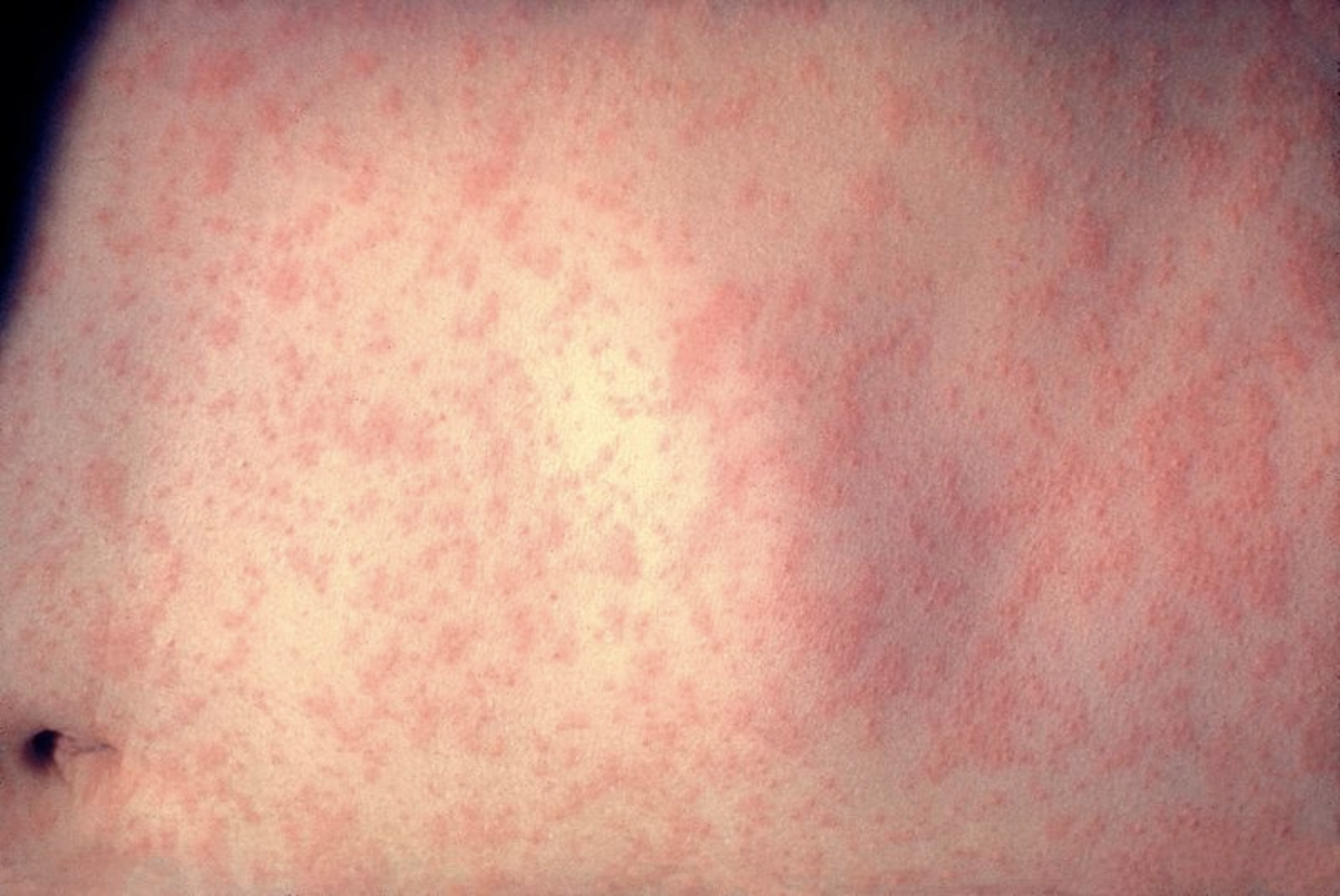
- 50-1000 cases in the US per year
- Almost all in unvaccinated individuals
- All cases the result of people coming from other countries
- ~19 case/million, 90K deaths/year globally



# MEASLES

- Extremely contagious
- $R_0 \sim 12-18$  / 90% of exposed will be infected
- Contagious 4 days before till 4 days after rash appears





# MUMPS

- Respiratory and fomite transmission
- Tender painful unilateral or bilateral parotid swelling
- Peaks in 1-3 days, then ~1 week to subside
- Occasional prodrome of low grade fever, malaise, headache and anorexia
- Contagious ~5 days after onset of symptoms

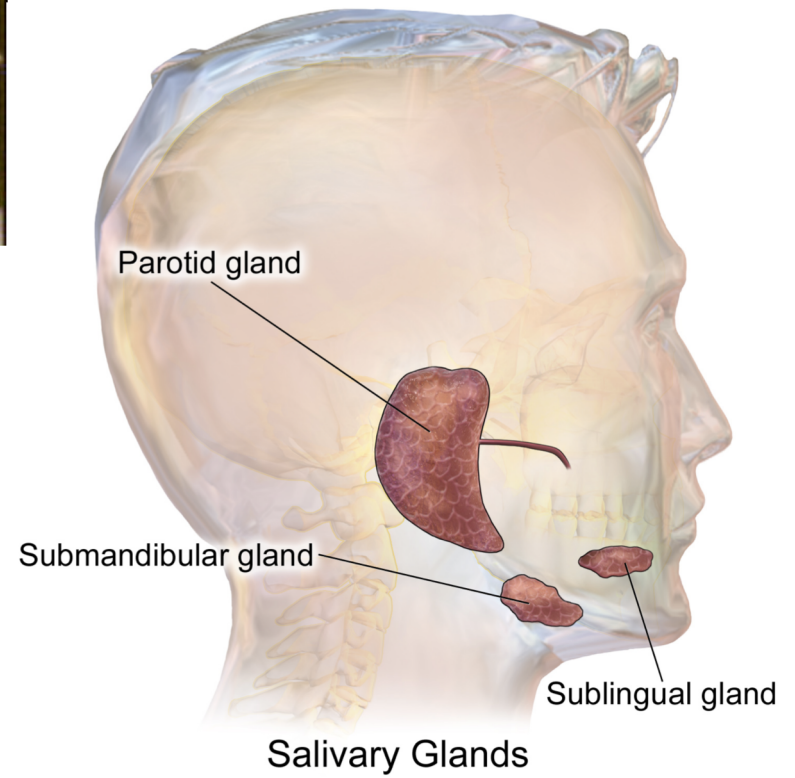




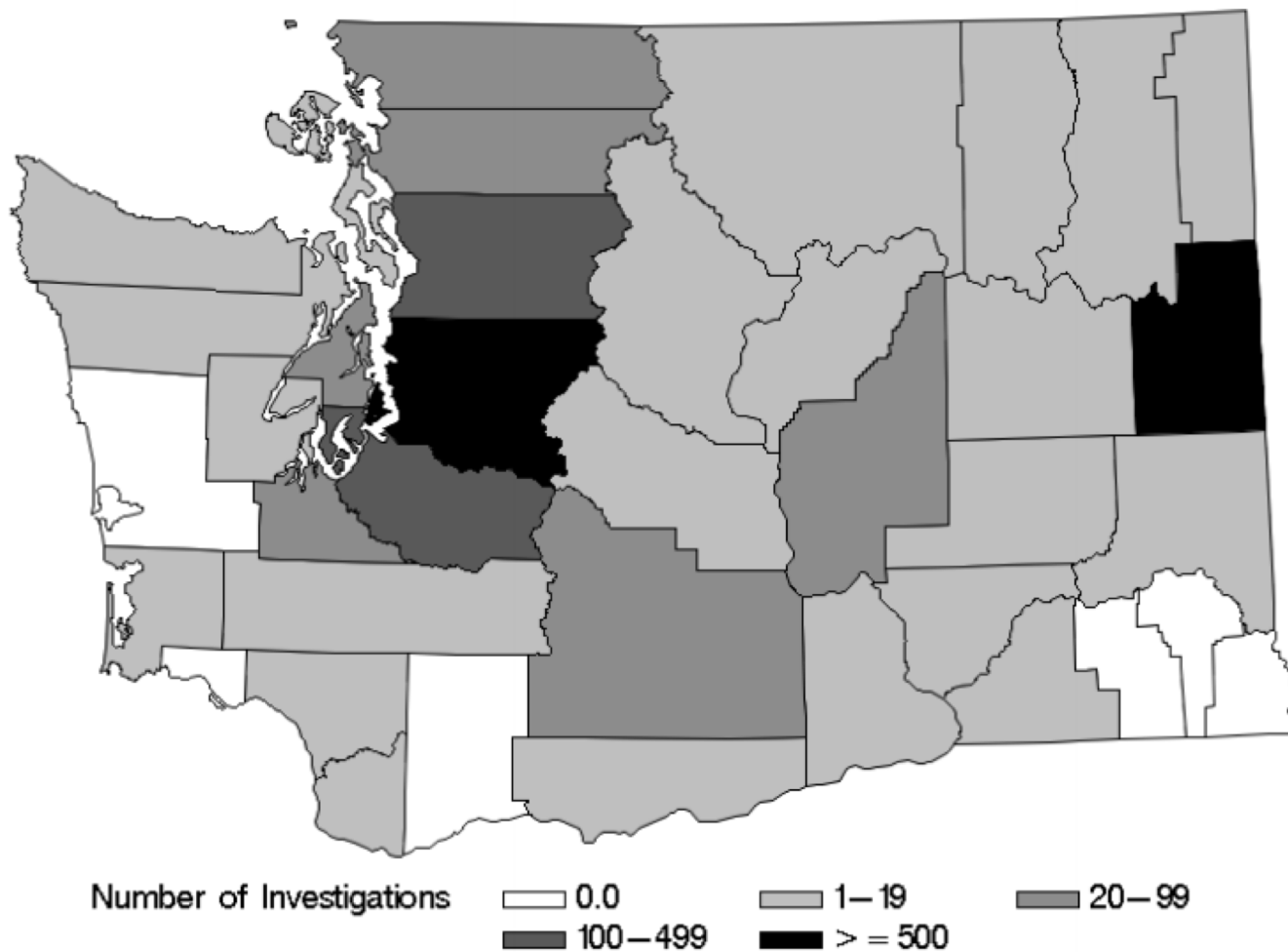
# GLOBAL EPIDEMIOLOGY

- ✓ 100s – 1000s of cases in US per year
- ✓ Outbreaks are common, especially in dense communities
- ✓ Cases in dense communities = transmission even to vaccinated individuals





## Number of Mumps Investigations by County, October 2016—May 2017



# MMR VACCINE

- 😊 Measles: 93% (1<sup>st</sup> dose)-97% (2<sup>nd</sup> dose) effective
- 😊 Mumps: 78%-88% effective
- 😞 Pre-MMR: 500 measles deaths and 500k case/yr in US and mumps was universal childhood illness

# MMR VACCINE

- 3 live-attenuated viruses in one vaccine
- Highly-effective (95%-99% for measles, similar for mumps and rubella)
- HCP should have documented evidence of immunity to measles, mumps, and rubella:
  - Written documentation of 2 vaccine doses
  - Laboratory evidence of positive serological testing (IgG)
  - Laboratory confirmation of disease
- Birth before 1957 not longer recommended as exclusion as 3-9% of individuals lack immunity
- If no vaccination -> 2 doses of MMR four weeks apart, serological testing not recommended as interpretation is not straightforward



# Texas Children's Hospital nurse fired after posting Houston toddler's positive measles results on Facebook



In screen shots viewed by Eyewitness News, the nurse stated, ".. for the first time in my career I saw Measles this week. Actually most of my coworkers and the ER docs saw measles for the first time as well. And honestly, it was rough. The kid was super sick. Sick enough to be admitted to the ICU and he looked miserable...By no means have I changed my vax stance, and I never will. But I just wanted to share my experience and how much worse it was than I expected."

The postings included some comments by other group members, and at one point, the nurse commented, "I'm not kidding that I thought about swabbing his mouth and bringing it home to my 13 (year old)."

# Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

Streptococcal  
disease (group A  
streptococcus)  
Pharyngitis in  
infants and  
young children

Droplet

Until 24 hours after  
initiation of effective  
therapy

# Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

Streptococcal disease (group A streptococcus) Skin, wound, or burn Major	Contact + Droplet + Standard	Until 24 hours after initiation of effective therapy	No dressing or dressing does not contain drainage adequately.
Streptococcal disease (group A streptococcus) Skin, wound, or burn Minor or limited	Standard		Dressing covers and contains drainage adequately.
Streptococcal disease (group A streptococcus) Serious invasive disease	Droplet	Until 24 hours after initiation of effective therapy	Outbreaks of serious invasive disease have occurred secondary to transmission among patients and healthcare personnel [162, 972, 1096-1098] Contact Precautions for draining wound as above; follow rec. for antimicrobial prophylaxis in selected conditions [160].