Kitsap Public Health Board Health Officer Update

Gib Morrow, MD, MPH Health Officer, Kitsap Public Health District September 6, 2022





Agenda

- Omicron Boosters
- Monkeypox
- TB in Kitsap
- Rabies
- Healthcare Access







Omicron Bivalent Boosters September 6, 2022



Bivalent COVID Vaccines

- Omicron boosters available for 12 and over (Pfizer) and 18 and over (Moderna) soon – through FDA, ACIP, CDC and Western States Safety Group– shipments arriving in Kitsap...
- Anyone 2 months out from primary series or most recent booster
- Prior vaccines primary series and boosters for 5-12
- Pfizer available as primary series for 6 months to 5-year and Novavax for 18 and over prime
- Back to School Immunizations Get up to date!



MONKEYPOX (MPV) OUTBREAK OVERVIEW AND STATUS UPDATE

- 1. Monkeypox (MPV) Outbreak Overview and Status Update
- 2. KPHD Activities
- Clinical Recognition and Pathology
- 4. Testing
- 5. Infection Prevention
- 6. Vaccination
- 7. Treatment

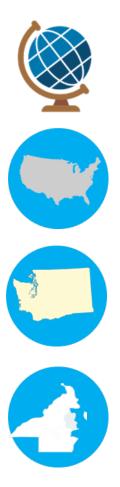


History of Monkeypox (MPV)

- 1958- Identified among lab monkeys
- 1970- First human cases in in DRC;
- 1980's 300 cases in Africa, vastly zoonotic
- 2003 1st US outbreak of 71 cases, all cases traced to rodents imported from Ghana
- 2018-22 Sporadic cases in UK, travel related.
- May 2022 First cases in Europe and US, all travel related
 - West African virus clade; milder illness than Congo Basin virus
 - Human transmission through skin contact-MSM



As of August 30, 2022

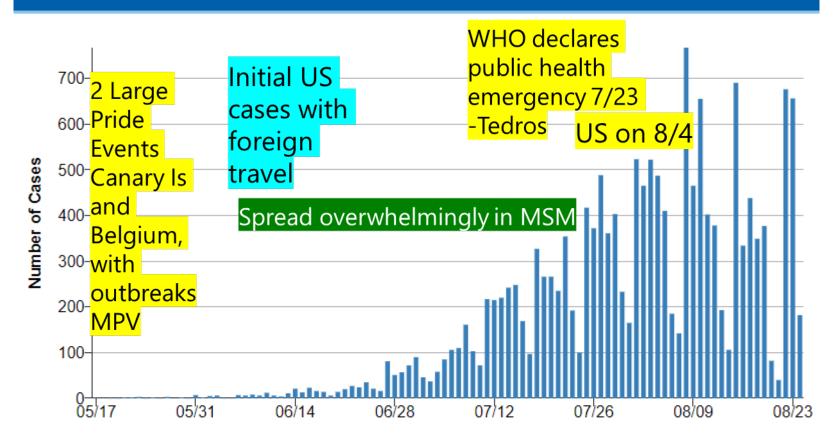


- **Global**: 49,974 cases in 99 countries (92 without historically reporting MOV; 15 deaths
- **US**: 18,417 cases in 50 states
 - 1 death
 - No reported healthcare transmission
- Washington: 447 cases in 14 counties
 - 360 in King County, ~50 in Sno/Pierce
- Kitsap: 3 cases, all in July;
 - Contacts vaccinated and monitored
 - 2/3 treated with TPoxx
 - Broader vaccine clinics in August



Case Trends

U.S. Monkeypox Case Trends Reported to CDC



Cases Reported in 2022



ORIGINAL ARTICLE

Monkeypox Virus Infection in Humans across 16 Countries — April–June 2022

J.P. Thornhill, S. Barkati, S. Walmsley, J. Rockstroh, A. Antinori, L.B. Harrison, R. Palich, A. Nori, I. Reeves, M.S. Habibi, V. Apea, C. Boesecke,
L. Vandekerckhove, M. Yakubovsky, E. Sendagorta, J.L. Blanco, E. Florence, D. Moschese, F.M. Maltez, A. Goorhuis, V. Pourcher, P. Migaud, S. Noe,
C. Pintado, F. Maggi, A.-B.E. Hansen, C. Hoffmann, J.I. Lezama, C. Mussini, A.M. Cattelan, K. Makofane, D. Tan, S. Nozza, J. Nemeth, M.B. Klein, and C.M. Orkin, for the SHARE-net Clinical Group*

- 95% Gay or bisexual men transmission sexual 95%
- 75% white
- 42% with HIV
- 29% Concomitant STI GC>CT>Syphilis>HSV>LGV
- Presented to STI>ED>PCP>Derm
- Sx: Rash (95%), Fever (62), nodes (56), lethargy (41), Myalgia (31)...

Monkeypox Virus Infection in Humans across 16 Countries — April–June 2022 https://www.nejm.org/doi/pdf/10.1056/NEJMoa2207323



CLINICAL RECOGNITION AND PATHOLOGY

Identifying Monkeypox

- Lesions typically develop simultaneously and evolve together on any given part of the body.
- Incubation period is 3-17 days. During this time, a person does not have symptoms and may feel fine.
- Lesions progress through four stages—macular, papular, vesicular, to pustular—before scabbing over and desquamation.
- The illness typically lasts 2-4 weeks.
- Patients are infectious once symptoms begin, whether prodromal or rash
- Remain infectious until lesions form scabs, scabs fall off, and a fresh layer of skin forms











KPHD Activities VACCINATION INFECTION PREVENTION TREATMENT: TPOXX

- Provider Advisories and Webinars (multiple)
- Testing and Treatment Assistance
- Vaccinating and Monitoring Close Contacts
- Vaccination Clinics
- Infection Prevention
- Surveillance

- **Consultation on case** (diagnosis, appropriate testing, treatment recommendations)
- **Case management and counseling** (including linkage to other services)
- Contact tracing
- Notifying Infection Control/Prevention
- Investigation
- Public notification of exposures
- Coordinating specimen testing
- Coordinating drug and vaccine acquisition
- Public Education and Awareness Campaigns

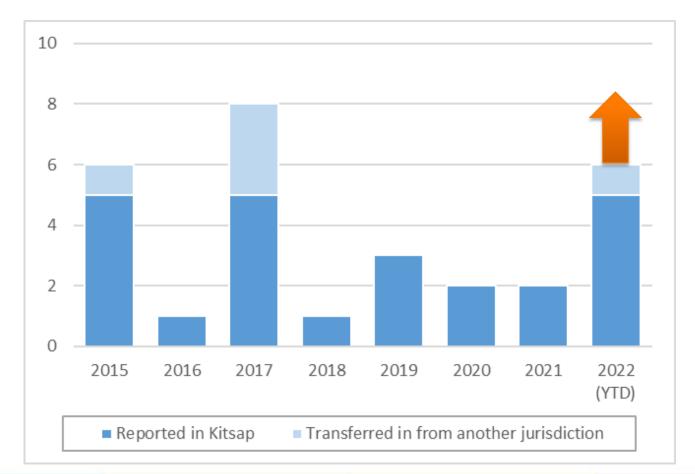


Tuberculosis in Kitsap September 6, 2022



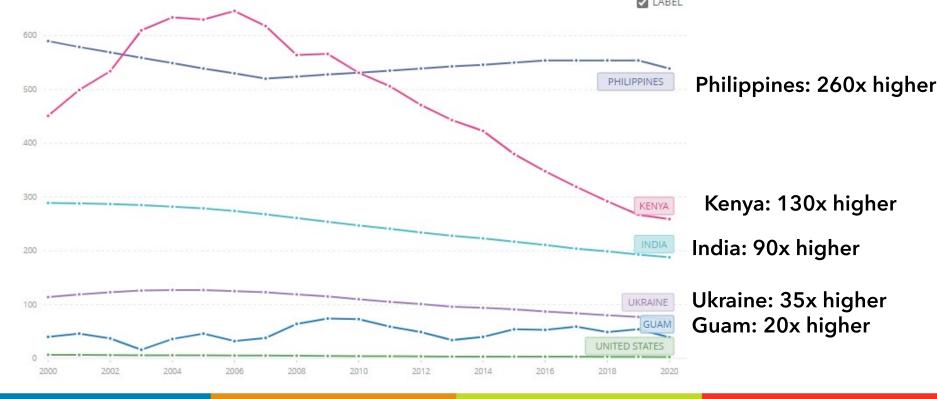


Active TB cases managed by KPHD, 2015 - 2022





In the U.S. in 2020, there were about 2 active TB cases per 100,000 people; in other parts of the world, this is much higher (Latent TB 2.7% US population; 20% of global population!)



https://data.worldbank.org/indicator/SH.TBS.INCD?end=2020&locations=GU-US-PH-KE-IN&start=2000&view=chart



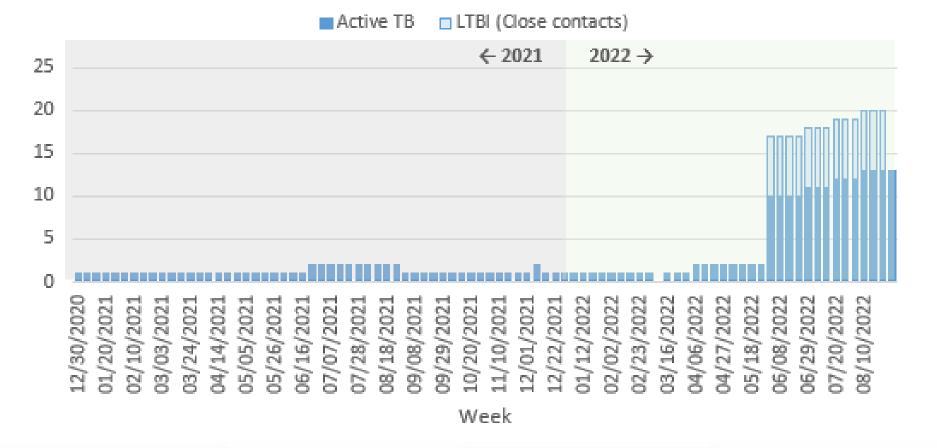
2022: A Perfect Storm

- A household cluster of high public health priority requiring intensive case management:
 - 2 MDR active cases, one of which is a child <5 years
 - 21 close contacts, 7 requiring treatment
 - High social complexity requiring housing and transportation resources, social services
- One case requiring an interpreter for an uncommon language (difficult to schedule through interpreter services)
- 5 cases (83%) with Medicaid or who are uninsured
 - Uninsured or publicly insured cases cost health departments <u>~\$3,000</u> more per case than fully insured cases (Shiau, et al 2022)
- 20 close contacts identified by DOC requiring follow-up
 - Contacts are often socially complex and require multiple strategies to locate



KPHD Workload: TB DOT

Number of TB cases requiring daily monitoring by KPHD, by week





A typical person with TB disease in the United States requires:



PLUS

- X-rays
- Lab tests
- Follow-up & testing of contacts

Total cost to U.S. (2020) = \$503 million

Multidrug-resistant TB:

- Increases treatment time from 6 mos to 9 – 18 mos.
 - ↑ staff hours

 - ↑ labs needed
- 2nd line drugs more expensive, sometimes more difficult to acquire and/or get insured
- CDC estimates MDR TB cases **9x more costly** than susceptible TB cases

Source: <u>https://www.cdc.gov/tb/publications/infographic/pdf/take-on-tuberculosis-infographic.pdf</u>



DRUG-RESISTANT TB IS COMPLEX & COSTLY

Drug-resistance threatens our ability to treat & control TB

TOTAL 2020 CASES DIRECT TREATMENT COST PER CASE 1 Extensively Drug-Resistant TB \$568,000 55 MDR TB 55 MUltidrug-Resistant TB \$182,000 7,118 TB (Drug-Susceptible, Not Multidrug-Resistant TB, or Unknown) \$20,000

ELIMINATING TB REQUIRES A COMPREHENSIVE APPROACH

CDC is committed to fighting TB whenever & wherever it occurs through:





& Treatments



Testing & Treatment of Populations at Risk for TB



Engaging Affected Communities and Medical Providers

To learn more about TB, visit: www.cdc.gov/tb October 2021



Centers for Disease Control and Prevention National Center for HIV, Viral Hepatitis, STD, and TB Prevention

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Source: <u>https://www.cdc.gov/tb/publications/infographic/pdf/take-on-tuberculosis-infographic.pdf</u>



TB is an equity issue

TB CAN HAPPEN ANYWHERE & TO ANYONE

To eliminate TB, we must prioritize groups at increased risk of TB



7 out of every 10 TB cases occur among

non-U.S.-born persons





higher for Native Hawaiian or Other Pacific Islander persons



higher for Asian persons



higher for **Hispanic** or **Latino persons**





higher for Blac American Indian or Blac Alaska Native persons Ame

higher for Black or African American persons

Source: https://www.cdc.gov/tb/publications/infographic/pdf/take-on-tuberculosis-infographic.pdf



Additional Events Currently Affecting Washington State TB Outlook

- DOC Outbreak
 - Ongoing notification of new close contacts identified, requiring evaluation by LHJs
- United for Ukraine
 - Expected influx of Ukrainian refugees, who require TB evaluation (usually occurring through Public Health)
- Afghan refugees
- Ongoing shortages of three first-line medications



Other bullets

- Using a mathematical model, CDC estimated in 2019 that there were ~3,000 people with LTBI in Kitsap County.
- Treating LTBI is one of the most cost-effective methods of addressing TB:
 - Cost of LTBI treatment ~\$500 (King County, 2015)
 - Cost of treatment for active TB: ~\$20,000 (CDC) (~\$5,000 covered by Public Health (Alameda County, 2022))



Rabies in Kitsap September 6, 2022





· Avoid touching bats.

Teach children to never touch bats.

» BATS CAN HAVE RABIES.

Keep bats out of your home.

What is Rabies is a disease caused by a virus. rabies?

How does rabies spread?

Any warm-blooded animal can get rabies

Rabies is spread through contact with saliva from infected animals. People most often get rabies from animal bites

Bats are the only animals that regularly test positive for rabies in Washington state

PREVENT RABIES EXPOSURE

Avoiding contact with bats is the best way to prevent being exposed to rabies. Enjoy wildlife from a distance!

including bats.

Do not touch wild animals,



Teach children to never touch bats and to tell an adult if they find a bat.

KITSAP PUBLIC HEALTH DISTRICT

Rabies almost always causes death if left untreated. Rabies is 100% preventable with prompt medical care.

Facts about bats and rabies

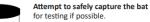
Most bats do not have rabies. However, bats infected with rabies are found in Washington every year.

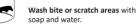
Encounters between bats and people increase when the weather warms up in spring and summer.

You cannot tell if a bat has rabies just by looking at it. Testing is needed to confirm if a bat has rabies.

IF YOU HAVE CONTACT WITH A BAT

Follow these steps if someone has had contact with a bat, or might have had contact with a bat:





Call your healthcare provider and/or Kitsap Public

IEALTH DISTRICT

KITSAP PUBLIC

PUBLIC HEALTH NEWS

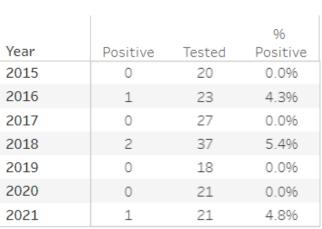
Aug. 30, 2022

Kitsap bat tests positive for rabies; learn how to prevent rabies exposure

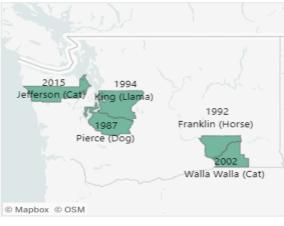
Bats are the only animals in Washington that regularly test positive for rabies. Avoid touching bats and teach children to never touch bats.



KITSAP COUNTY: BATS TESTED FOR RABIES AT WASHINGTON PUBLIC HEALTH LAB¹



NON-BAT ANIMALS TESTING POSITIVE FOR RABIES IN WASHINGTON, 1987-2020.*



* Bat-variant rabies strains were identified in the 1994, 2002, and 2015 animals. Specific rabies strain was not identified in the 1987 or 1992 animals, but the 1987 dog had history of bat exposure.



- 4/167 bats=
- 2.4% Rabid in Kitsap
- 120/2195 bats=
 5.5% Rabid in WA

https://kitsappublichealth.org /CommunityHealth/rabies_ba ts.php



Please!

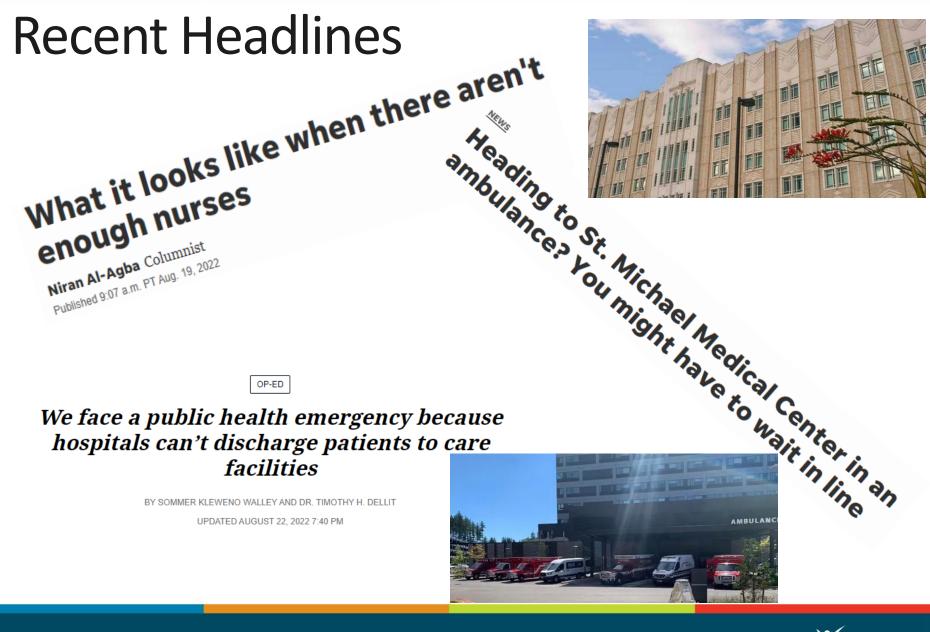
- Ensure your pets are vaccinated or be ready to euthanize or strictly quarantine them if exposed to bats
- Avoid contact with bats
- Capture bats for testing and report all contact with bats to Kitsap Public Health District
- Receive immune globulin and rabies vaccination if you have contact with a bat with rabies or unknown status
- Know that rabies is a rare but deadly disease that can be prevented with vaccination in most exposures



Healthcare Access September 6, 2022





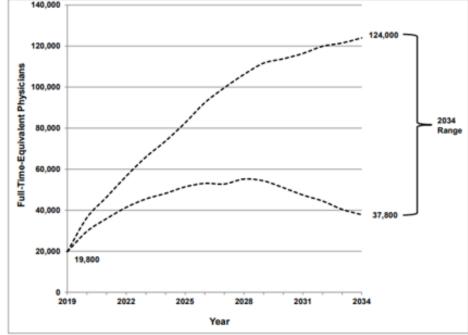




access to healthcare

National landscape





Note: Because complex systems have internal checks and balances to avoid extremes, the upper and lower bounds of the shortage projections reflect the range of most likely outcomes. The divergence over time represents increasing uncertainty.



The Complexities of Physician Supply and Demand: Projections From 2019 to 2034

By 2034, we project:

- A shortage of primary care physicians of between 17,800 and 48,000.
- A shortage across the nonprimary care specialties of between 21,000 and 77,100 physicians.



At-a-glance

Measure	Kitsap	Washington	US
Adults (19+) without health insurance (ACS, 2019)	5% (n=10,324)	7%	11%
Population to primary care physician ratio* (Area Health Resource File/NPI Registry via County Health Rankings, 2019)	1,470:1 (n=184)	1,180:1	1,307:1
Population to dentist ratio* (Area Health Resource File/NPI Registry via County Health Rankings, 2020)	1,260:1 (n=217)	1,200:1	1,400:1
Population to mental health providers ratio* (NPI Registry via County Health Rankings, 2021)	250:1 (n=1,079)	230:1	250:1**
Hospital beds per 1,000 population (American Hospital Association via KFF, 2020)	+	1.58	2.38

^{*}Provider ratios may be underestimates if license uses an OOC address; the ratio represents the number of individuals served by one provider in a county if the population was equally distributed across physicians

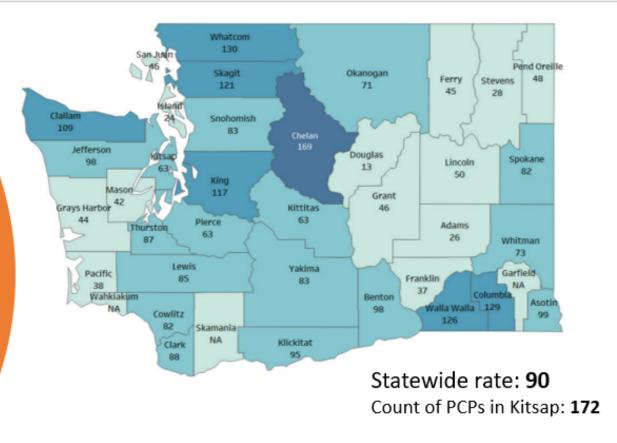
** Top US Performers ratio of population to mental health providers (90th percentile)

Back-of-the-envelope estimate for SMMC: ~1/1,000



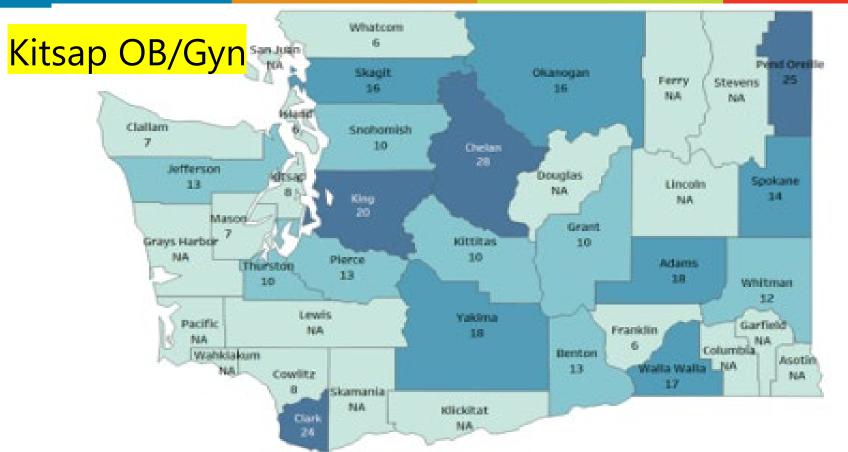
PCPs per 100,000 (2021)

*PCP includes family medicine, internal medicine, and pediatrics



Source: 2010-21 Physician Supply Estimates for Counties: Washington State. Forecasting and Research, The Office of Financial Management (OFM); Note: OFM uses health insurance carrier Network Access Reports and the health professional license database for their estimate and applies a record weighting system to account for PCPs with multiple locations.



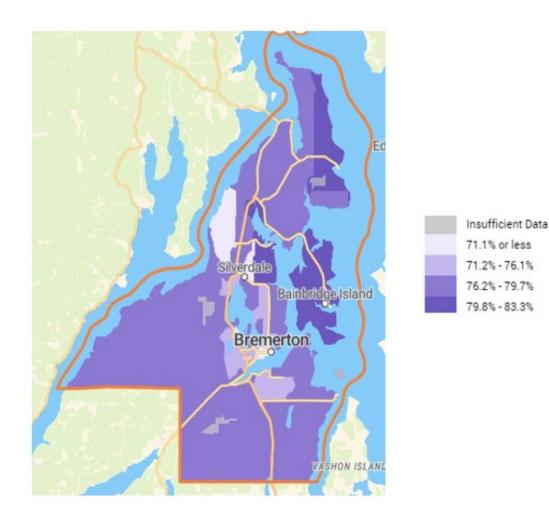


- WA State OB/GYNs per 100,000 Population, 2021: 15 (this is <u>up</u> from 13 in 2020)
- Kitsap County OB/GYNs per 100,000 Population, 2021: 8 (this is <u>down</u> from 9 in 2020)
- Map of OB/GYNs per 100,000 Population by County, 2021

Saved to this PC

Primary care doctor

Estimated percent of adults reporting to have a personal doctor or healthcare provider in 2018 by 2010 Census tract.

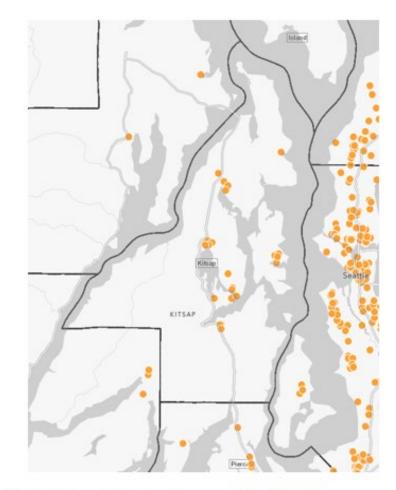


Source: PolicyMap, (based on data from BRFSS; Accessed 24 August 2022).



Childhood Vaccine Program

Providers who received publiclysupplied vaccines though the Childhood Vaccine Program



Source: WA DOH Childhood Vaccine Program Provider Map, accessed August 2022.



RESOURCES

EPIDEMIOLOGY

DOH: <u>https://doh.wa.gov/you-and-your-family/illness-and-disease-z/monkeypox</u> **CDC:** https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html

INFECTION PREVENTION

CDC What Clinicians Need to Know: <u>https://www.cdc.gov/poxvirus/monkeypox/pdf/What-Clinicians-Need-to-Know-about-Monkeypox-6-21-2022.pdf</u>

CDC Infection Control: https://www.cdc.gov/poxvirus/monkeypox/clinicians/infection-control.html

VACCINE

https://www.cdc.gov/poxvirus/monkeypox/clinicians/smallpox-vaccine.html

https://www.cdc.gov/poxvirus/monkeypox/considerations-for-monkeypox-vaccination.html

TREATMENT

CDC Interim Clinical Guidance for the Treatment of Monkeypox: https://www.cdc.gov/poxvirus/monkeypox/clinicians/treatment.html#anchor 1655488137245

Information for Healthcare Providers on Obtaining and Using TPOXX (Tecovirimat) for Treatment of Monkeypox

https://www.cdc.gov/poxvirus/monkeypox/clinicians/obtaining-tecovirimat.html



QUESTIONS?

