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Avian influenza A(H5) ‘Bird flu’ in Oregon

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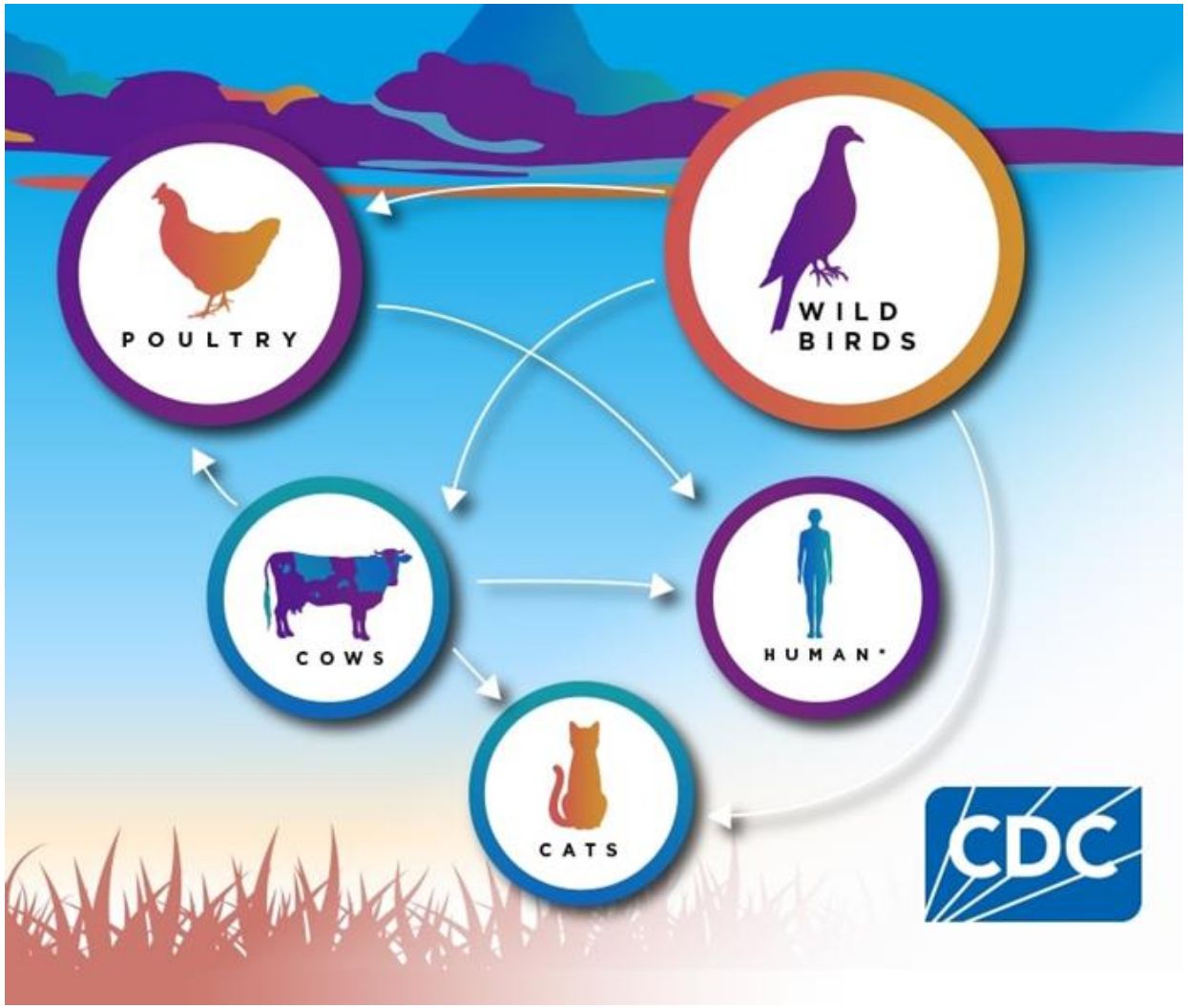
One Health approach

Oregon Department of Agriculture (ODA) investigates animal cases and outbreaks

Oregon Health Authority (OHA) investigates human exposures, cases, and outbreaks

‘Bird flu’ overview

- **1996**: avian influenza A(H5) emerged in Asia
- **1997**: first human case
- **1997-2021**: 883 cases globally, 53% case fatality proportion
- **2022**: widespread in wild birds of North America
- **2024**: dairy cattle outbreaks



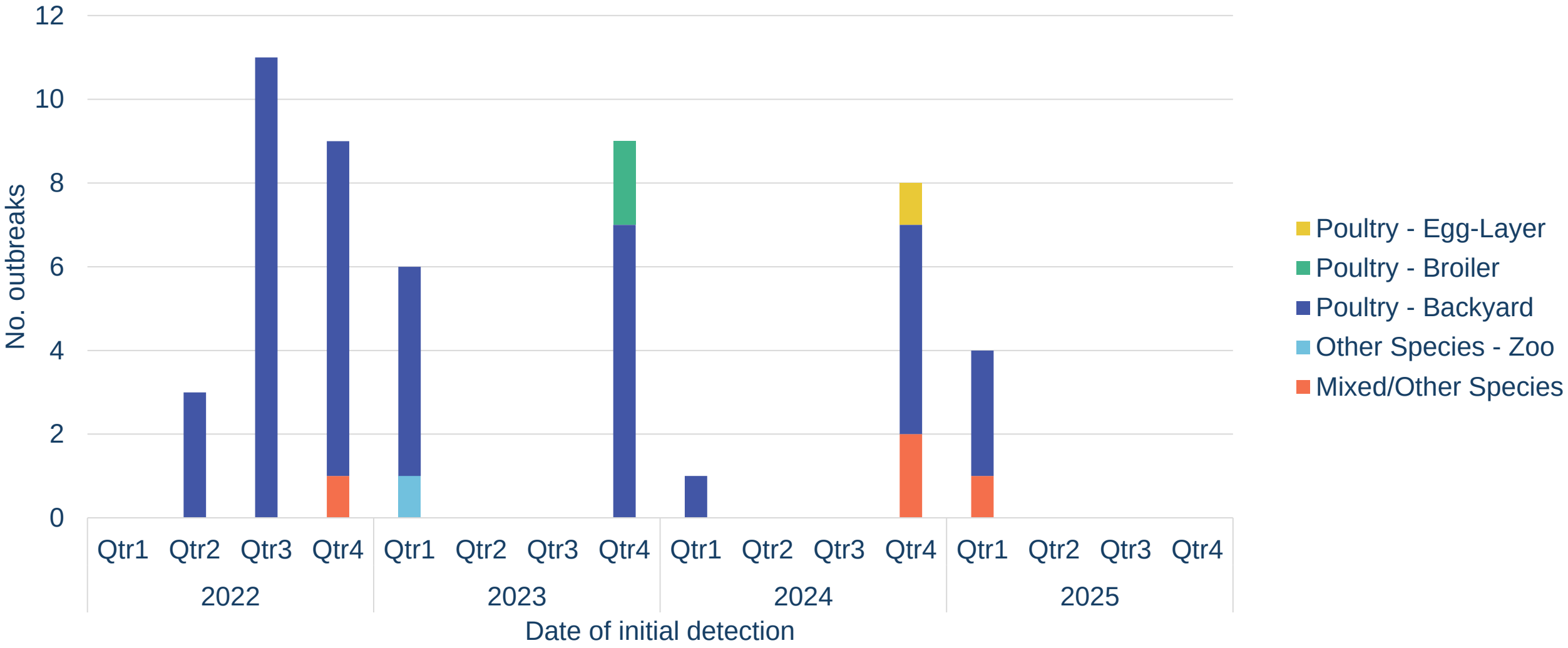
One Health approach to ‘bird flu’ in Oregon

- When an animal case is suspected, ODA deploys to farm to provide animal testing and personal protective equipment (PPE) to farm workers
- ODA notifies OHA of animal outbreak
  - For commercial outbreaks, ODA invites OHA to the farm to provide education and, when indicated, offer testing and treatment to farm workers
  - For backyard outbreaks, ODA provides OHA with farm contact information
- OHA monitors exposed individuals through 10 days following last exposure
  - If symptoms develop, testing and treatment are offered directly by public health
- Bilateral information sharing is key to effective preparedness and response

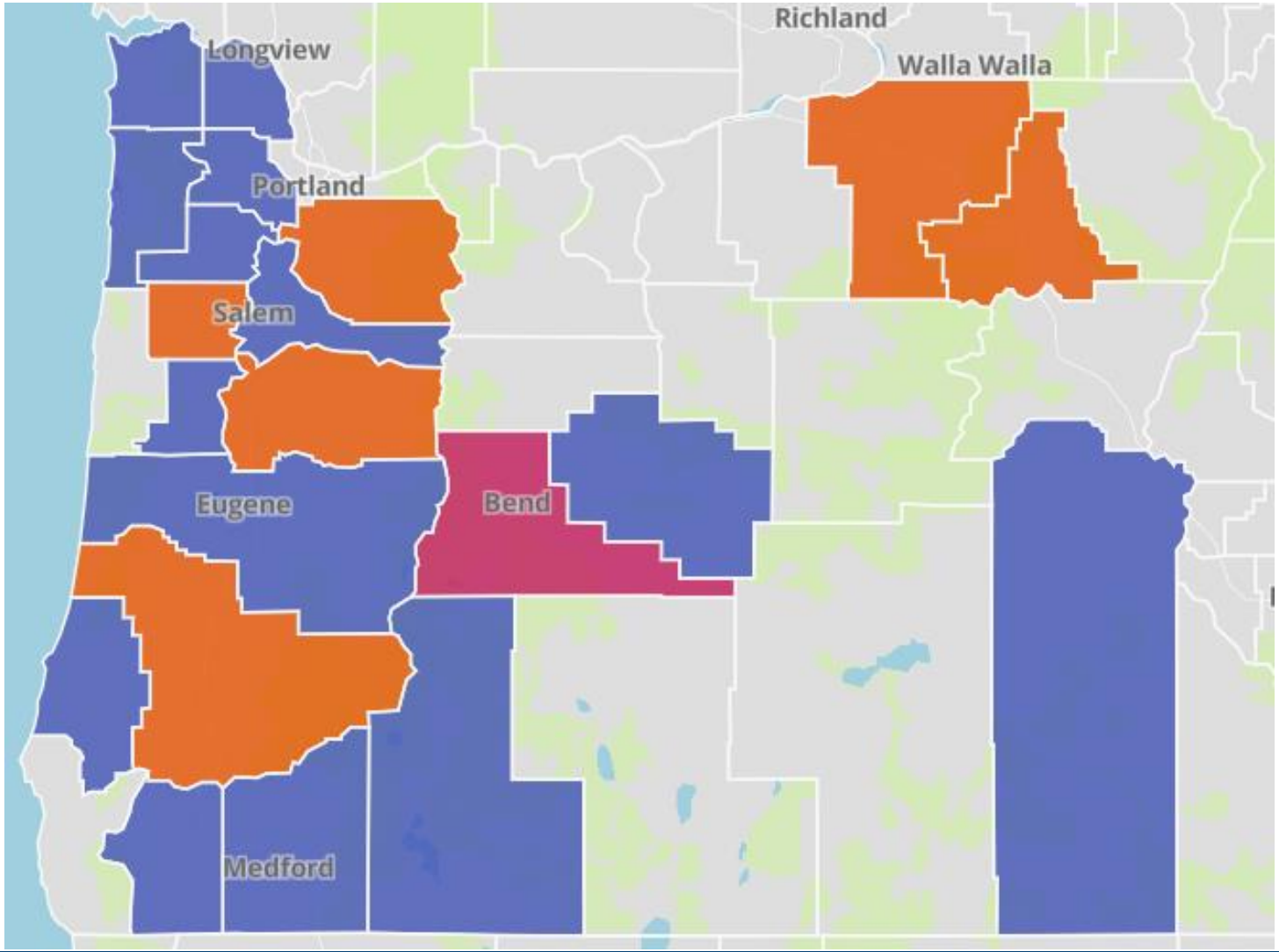
‘Bird flu’ animal outbreaks in Oregon—2022 to present

- 48 outbreaks in poultry
  - 3 commercial, 45 backyard
- 0 dairy cattle outbreaks
- 3 domestic cat outbreaks
  - One infected through raw pet food, with subsequent recall and FDA investigation
- 1 pig outbreak
  - First confirmed case in this species in North America

'Bird flu' animal outbreaks in Oregon—2022 to present



‘Bird flu’ animal outbreaks in Oregon—by county



‘Bird flu’ human cases in Oregon—2022 to present

- 1 confirmed case
  - Associated with a commercial poultry outbreak
  - 4 additional cases *exposed in WA* also identified while in OR
- 219 people monitored following exposure to infected animals
  - 52 tests performed
  - Treatment offered to all individuals with symptoms
  - Prophylaxis offered to all household contacts of case

The risk to the general population is currently low

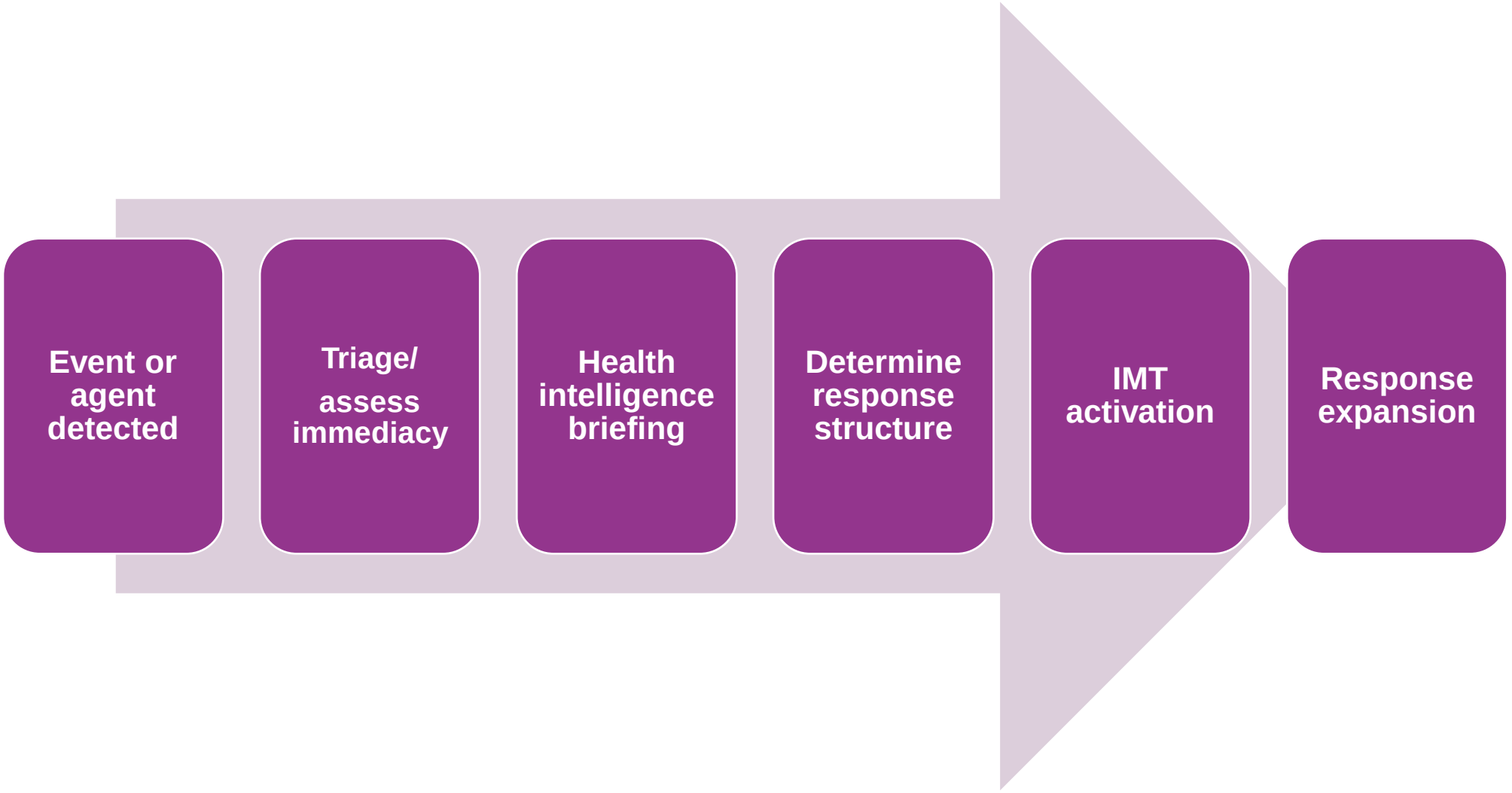
- Rare spillover events have resulted primarily in mild disease
  - Nationally, 67 cases with 2 hospitalizations and 1 death
- No person-to-person transmission and no mutations to facilitate this
  - Concerning mutations have been identified in hospitalized people only late in course of illness
- No markers of antiviral resistance
- Strategic National Stockpile (SNS) contains FDA approved H5 vaccines and influenza antivirals
  - ~ 5 million H5 vaccine doses currently, with 5 million additional under production
- Food chain is safe—affected animal products are diverted and pasteurization and proper cooking of meat inactivates virus
  - Both raw milk and raw meat carry risk

The ‘bird flu’ outbreak is dynamic

- Wild birds cannot be contained and spillover into other species will continue
- Influenza A viruses carry epidemic and pandemic potential
  - Seasonal influenza vaccine uptake has been declining, increasing the risk of coinfection
- Robust surveillance is necessary to monitor virus spread and evolution
  - Clinical influenza surveillance focused on subtyping specimens from hospitalized patients—OSPHL subtyped > 30,000 specimens since 2022
  - Wastewater surveillance can detect surges in both influenza A and the ‘bird flu’ subtype—OHA/ODA/OSU MMWR with critical insights into H5 in wastewater was to be published last week and has been paused
- Emerging influenza viruses may ultimately cause mild or severe disease, and may affect atypical populations (e.g., young adults) most severely

General Approach to Emerging Public Health Situation

Process for emerging public health events



Key Features of Expansion:

- ODEM engagement
- Joint Information Center
- Broad staff IMT participation
- Community Engagement
- Data Sharing
- Distribution of medical and nonpharmaceutical intervention supplies

Response Capabilities

What We Do

- Biosurveillance
- Incident management
- Information sharing & management
- Medical countermeasures (SNS)
- Nonpharmaceutical interventions
- Medical surge and Mass care
- Volunteer management
- Agency Operations Center, “go” equipment

Agency Operations Center, Portland

Partners

- Agencies supporting Emergency Support Functions outside of Public Health
- Local/Tribal PH Authorities
- Medicaid, DCBS, Healthcare systems & coalitions
- Public Health Programs:
  - HSPR, EMS
  - Drinking Water Services, Environmental Public Health, Radiation Protection
  - Immunizations, OSPHL, Acute & Communicable Disease Prevention
  - Community Engagement
- Behavioral Health

Thank You