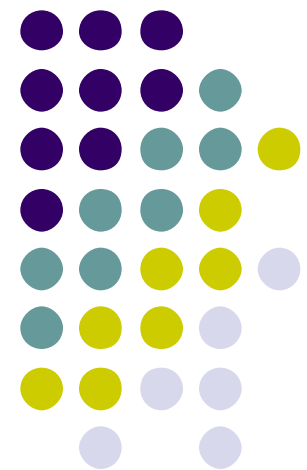


Role of a Local Public Health Department in an Outbreak of Mumps at a Tertiary Teaching Hospital in Northeast Kansas



Robert J. Cummins, MPH¹
Jo-Ann Harris, MD²
Nina Shik, RN, MSN, CIC³
Pam Foerster, RN, MS, COHN-S²



¹Unified Government of Wyandotte County Public Health Department

²University of Kansas Medical Center

³University of Kansas Hospital

Overview of Mumps Outbreak

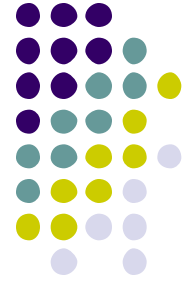


- United States (as of 10/07/2006)
 - 5,783 cases (confirmed and probable) from 45 states and District of Columbia
 - Median age at onset: 22 years (range 1 mo. – 96 yrs.)
 - 63% female
- Kansas (as of 10/07/2006)
 - 930 cases (confirmed and probable) from 73 counties
 - Accounted for 15% of total U.S. cases
 - Median age at onset: 21 years (range 9mo. – 96 yrs.)
 - 60% female

Overview of Mumps Outbreak



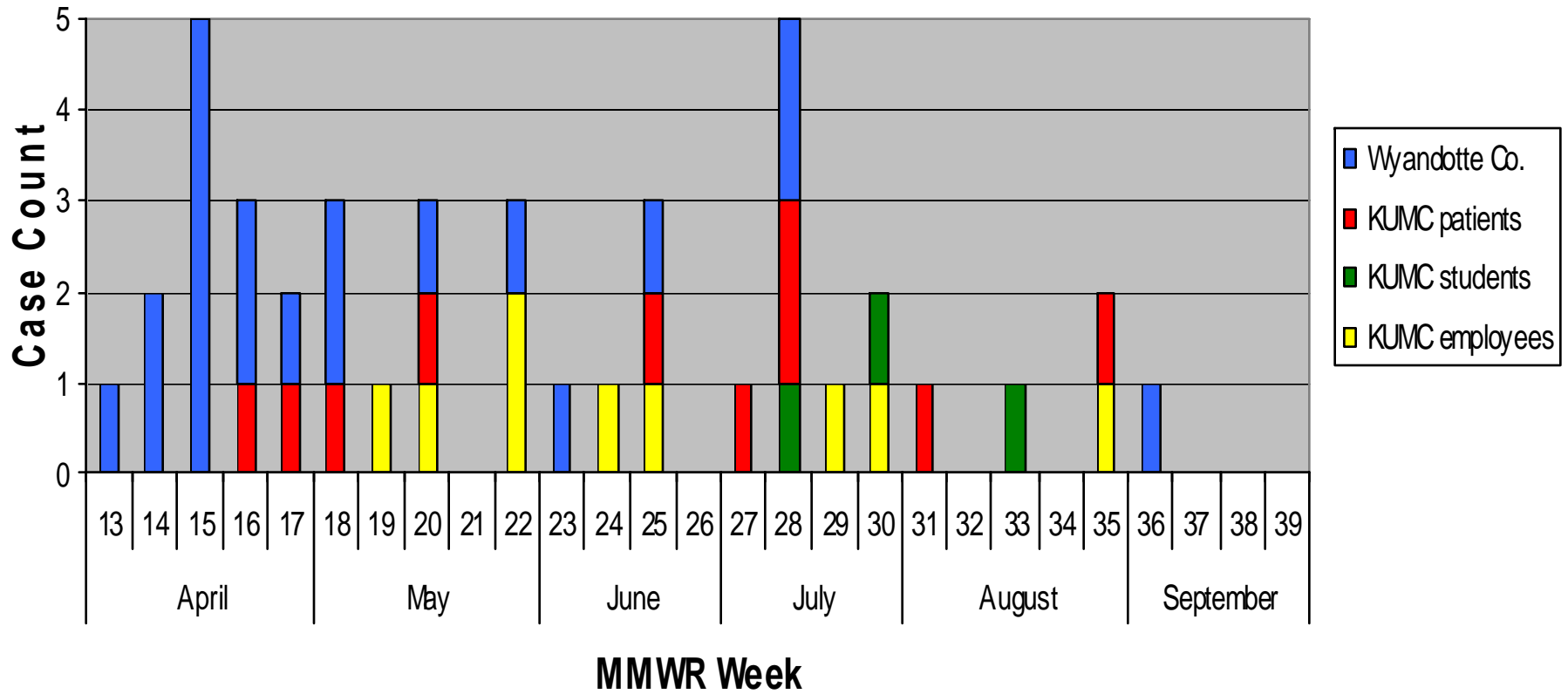
- Wyandotte County (as of 10/07/2006)
 - 20 cases (confirmed and probable)
 - Median age at onset: 21.5 years (range 1 yr. – 56 yrs.)
 - 45% female



Overview of Mumps

- Tertiary Teaching Hospital
 - 22 cases (confirmed and probable)
 - 9 employees
 - 2 nosocomial infections (1 from a visitor and 1 from another employee)
 - Median age at onset: 34 years (range 23 yrs. – 55 yrs.)
 - 100% female
 - 3 students
 - Median age: 20.5 years (range 20-21 yrs.)
 - Age data unavailable for one case
 - 10 patients
 - Median age at onset: 42.5 years (range 6-67 yrs.)

Total Mumps Cases (Confirmed/Probable) by MMWR Week





Action Steps

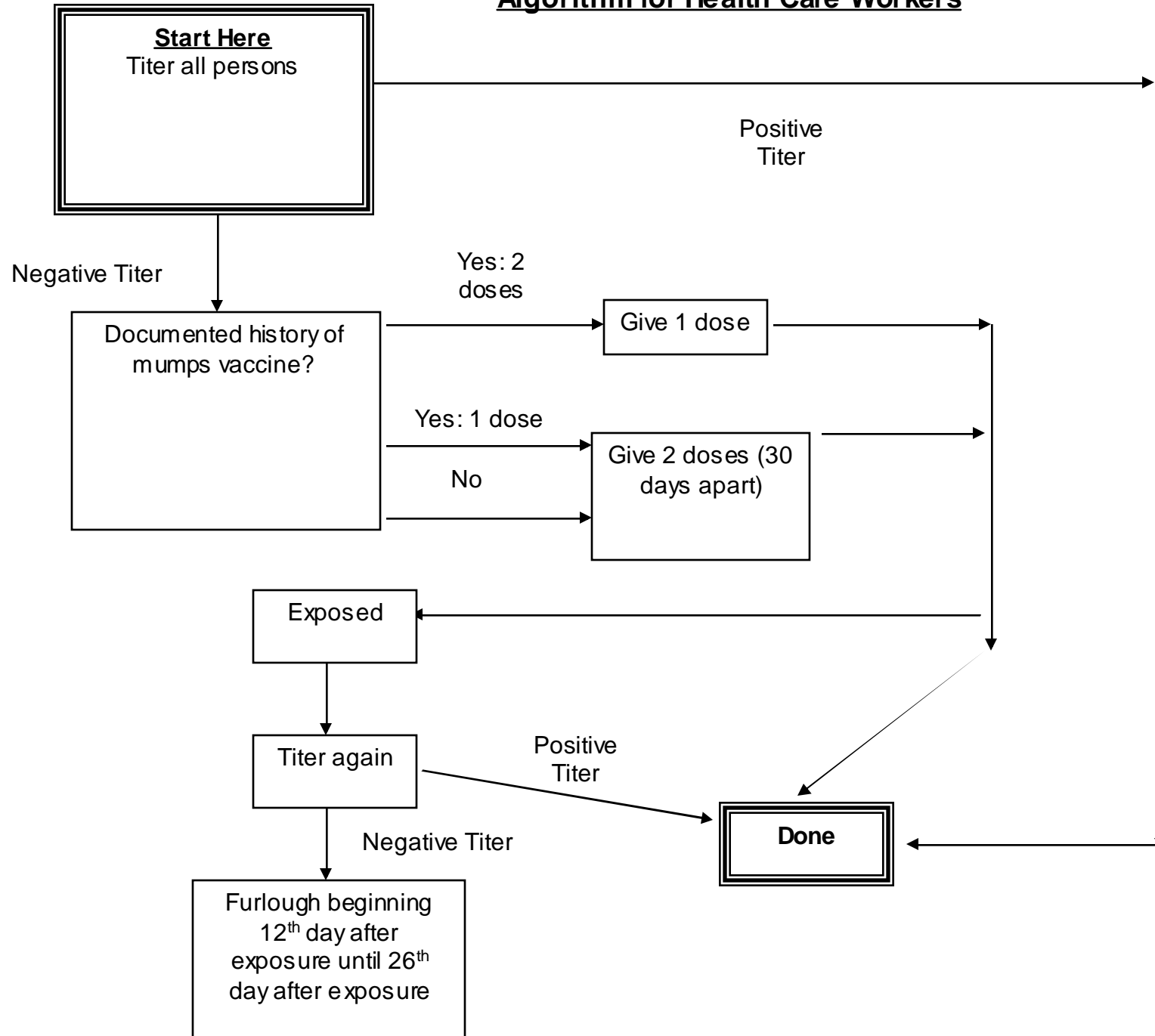
- Formation of a multi-disciplinary task force that included:
 - Hospital Infection Control
 - Hospital Occupational Health
 - Hospital Physicians
 - Hospital Laboratory
 - Hospital Human Resources
 - Hospital Administration
 - Local Public Health Department



Action Steps

- Decision to titer all employees (4,625 employees titered)
- Furlough of exposed employees (38)
- Revision of KDHE Algorithm for Healthcare Workers
 - If 2 documented doses of MMR → Give 1 dose
 - If 1 documented dose of MMR → Give 2 doses
 - If exposed: re-titer
 - If positive → Done
 - If negative → Furlough beginning 12th day after exposure until 26th day after exposure

Algorithm for Health Care Workers



Role of the Health Department



- Member of the multidisciplinary task force
- Provided the hospital with health information from CDC and KDHE via HAN
- Provided MMR vaccine
- Served as a clearinghouse for information collected
- Compiled and analyzed data
- Provided routine reports to the hospital regarding data analysis

Strengths and Weaknesses



Strengths

- Early formation of multidisciplinary task force
- Stringent guidelines (revision of KDHE algorithm)
- Coordination with public health department
- Education

Weaknesses

- What data was needed?
- Large quantity of data