



**PUBLIC HEALTH**  
ALWAYS WORKING FOR A SAFER AND  
**HEALTHIER WASHINGTON**

**Anencephaly Investigation**  
**Central Washington, 2010-2014**

**Advisory Committee Meeting**  
**September 18, 2014**

# Surveillance Updates

- Established contact for provider and facility reports and follow up for any newly identified cases from 3-county area.
- Plan to update tables with cases confirmed through 9/30/2014 in preparation for next meeting on October 20<sup>th</sup>.

# Investigation Update

- Re-analysis of Medical Record case-control study limited to anencephaly cases.
- Only change was related to statistical significance of Folic Acid use.
- Women who did not take folic acid in early pregnancy were at a significantly decreased risk of anencephaly, OR = 0.3 (95% CI: 0.1, 0.9).
- This finding was similar to original report for all neural tube defects. However, that finding was not statistically significant, OR = 0.4 (0.1, 1.1).

# Investigation Update

- We believe this finding may be due to providers being more likely to collect folic acid information from mothers of infants with neural tube defects.
- When no evidence of vitamin or folic acid use was in the chart, the woman was classified as not taking folic acid in early pregnancy.
- Folic acid is considered the primary prevention strategy for neural tube defects, and we continue to promote folic acid use among all women of child-bearing age.

# Investigation Update

- Continuing to work on logistics of interview study.
- Will use National Birth Defects Prevention Study (NBDPS) questionnaire.
- Will approach mothers of all infants with NTD (anencephaly and spina bifida) who had due date within two years of study start (by October 15, 2014).
- Estimate approaching approximately 23 mothers among the 42 cases confirmed through June 2014.

# Investigation Update

- Comparison data is still being worked out. We hope to use data collected as part of the NBDPS study.
- Need to determine whether/how we can access data collected for research purposes.

# Investigation Update

- Hypotheses to further explore using interview data:
  - Folic acid supplementation and food folate
  - Public vs private water source, and water use
  - Nitrates in drinking water and nitrosatable drug exposures
  - Parental agricultural occupations

# Prevention Activities

- Convened monthly prevention call with representation from state and local public health, perinatal coordinators and related non-profits to coordinate efforts.
- Provider Outreach
  - Blast fax to providers in Yakima, Benton-Franklin Health Districts.
  - Alert to local health officers across the state.
  - Grand Rounds – Kadlec Hospital 8/15; Yakima Memorial Hospital 8/27.
  - Grand Rounds scheduled at UW in December.



# Prevention Activities

- Public Outreach
  - Updated Anencephaly investigation web page on Dept .of Health website.
  - Hispanic Commission/Department of Health radio show on anencephaly scheduled for November.
  - Presentation 8/27 to Yakima Board of Health.
  - In follow up to presentations, identified new opportunities for messaging and distribution of materials. Currently, following up on them.
  - Table with folic acid and women's health promotion materials at Yakima County fair.

To provide comments or questions,  
please contact:

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