



STATE OF WASHINGTON

DEPARTMENT OF HEALTH

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June 4, 2015

Jaxon Ravens, Chair
Washington State Democrats
PO Box 4027
Seattle, Washington 98194

Dear Chair Ravens:

The Washington State Democratic Central Committee recently passed a resolution expressing concerns about the elevated anencephaly rates in Yakima, Benton, and Franklin counties. Please know that we share those concerns and appreciate the attention and support the resolution brings to bear on a tragic health problem.

In 2012, the Department of Health determined the rate of anencephaly in these three counties was higher than the expected rate. Since then, the elevated rate has continued. In 2014, eight cases occurred in the three counties – about 1-per-1000 live births. That rate is almost five times higher than the national rate. We have been working diligently in consultation with the Centers for Disease Control and Prevention (CDC) to understand this situation and to learn what is going on in hopes of preventing these tragic birth defects.

It's believed that anencephaly, which is a type of neural tube birth defect, is caused by multiple factors. Experts consider it to be caused by a combination of genes and environmental factors working together. While the specific causes of these defects remain unknown, it is known that up to 70 percent of all neural tube defects may be prevented if women take supplemental folic acid. The key is women must take folic acid prior to pregnancy because the neural tube closes very early in pregnancy, often before a woman realizes she is pregnant. In addition, about half of all pregnancies are unintended. These factors have led CDC and the US Preventive Services Task Force to recommend that all women of reproductive age – from 15-44 years – take the appropriate amount of folic acid daily (400 mcg of folic acid per day).

We support the intention of WSDCC Resolution 730-150418 to call attention to this public health problem, and support additional funding for prevention messaging. We would, however, like to clear up some misperceptions or inaccuracies in the resolution. The rate of anencephaly in these three counties includes all cases – regardless of the gestational age of the pregnancy or whether the mother chose to terminate the pregnancy. The most up-to-date data we have from Benton, Franklin, and Yakima counties has been posted on the Department of Health website (www.doh.wa.gov) since June 2014, with periodic updates.

We have decided not to test the water, soil, or foods of the affected families for contaminants at this time because we do not believe it would be informative. There is no well-known cause of anencephaly in the scientific literature. Testing food, water, or soil requires a specific hypothesis pointing to a cause of this elevated rate, and designing a study to test that hypothesis. Instead, we are interviewing women who have delivered infants with neural tube defects in order to generate hypotheses that we may be able to investigate further.

Similarly, we have not tested women for their blood folate status as levels can vary over time depending on nutrition, vitamin use, and other factors. We could test women now and find their folate status in the normal range when it might not have been during their pregnancy, which would mislead us and confound our investigation.

A possible link between anencephaly and nitrate levels in drinking water is unclear. We looked at the residential water source of women with affected pregnancies during our 2013 medical records study. We found that most women with affected pregnancies (77 percent) were on large public water systems and that nitrate levels in these public water systems did not exceed 10 mg/L (EPA maximum contaminant level goal) and only rarely exceeded 5mg/L. We have continued to assess the water source of more recently confirmed cases, and about 80 percent are served by public water supplies, again with nitrate levels in the safe range. With regard to the testing of private wells, our understanding is that the Yakama Nation opted out of the Lower Yakima Valley Groundwater Management Area (GWMA) in favor of developing its own program. For this reason, the GWMA does not offer testing to tribal residents.

Chemical and/or radiological releases from Hanford have been raised as a potential cause of the increased rate of anencephaly. There doesn't appear to be a pathway through which radiation from Hanford could have exposed most women with anencephaly-affected pregnancies. Most of the leaks into soil or water are contained on the Hanford reservation. Those that seep into the Columbia River are immediately diluted and carried downstream. It's highly unlikely that contamination from these leaks can get into the drinking water used by most of the women with affected pregnancies since they lived throughout the three-county region. Some women with affected pregnancies live in homes served by public water supplies that pull water directly from the Columbia River. This water is carefully monitored to assure that safety standards are met.

We share the Democratic Central Committee's concerns about this tragic public health issue. That's why we continue to closely monitor pregnancies affected by neural tube defects in this area and conduct educational campaigns. We are currently interviewing women who have had an infant with a neural tube defect to determine whether any common exposures could be contributing to the elevated rate of anencephaly. Unfortunately, increases like this are often difficult to explain due to the lack of a significant identified shared risk factor or factors among the women. While the rate is elevated, the number of cases is, thankfully, small — although it's certainly devastating for families and communities. These small numbers reduce our ability to find differences between affected and healthy pregnancies.

Jaxon Ravens, Chair

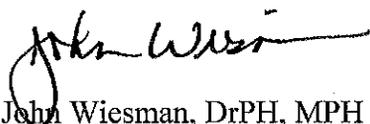
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For the past year, we have convened an advisory group of birth defects experts, local public health officials, scientists from state health and CDC, local health care providers, and community members to provide guidance to our ongoing investigation. We continue to work with the local health department, the March of Dimes, and staff from Yakima Memorial Hospital to promote folic acid use as well as to look for a source of free vitamins for women of childbearing age. We have distributed materials and developed educational tools for providers. We have aired radio public service announcements in English and Spanish promoting folic acid use. Still, there has been no decline in the rate of anencephaly, and we would welcome additional funding to continue these efforts.

Should it be helpful, we would be very willing to come to a committee meeting or meet with members to share in detail our work and answer any questions you may have.

Sincerely,



John Wiesman, DrPH, MPH
Secretary of Health



Kathy Lofy, MD
State Health Officer