#### OMNI-NET PROGRAMS IN UKRAINE - ARTICLES AND REPORTS ANNOTATED HIGHLIGHTS

Full text and authors found in <u>http://medword.net/pdf/PublicationsA-B.pdf</u> Publications in Ukrainian - <u>http://ukr.ibis-birthdefects.org/list/</u>

#### (Antecedents)

#### Josef Warkany's gestation of the teratology society.

The principles, goals and objectives implemented by OMNI-Net programs stem and reflect those advocated by Professor Dr. Josef Warkany, a pioneer of prevention and care of developmental anomalies.

#### Prevention of birth defects: a task for a World Alliance.

Preparatory activities to create the OMNI-Net population birth defects surveillance in Ukraine.

#### (Population-based monitoring of birth defects in Ukraine)

#### Birth Defects Surveillance in Ukraine - A Process.

Chronology of establishing OMNI-Net programs in Ukraine.

#### High Rates of Neural Tube Defects in Ukraine.

*First and unexpected documentation (2000-2002) of elevated rates of spina bifida and related disorders in Ukraine.* 

#### Chronic radiation exposure in the Rivne-Polissia region of Ukraine: implications for birth defects.

A population survey of lifestyles.

#### Malformations in a Chornobyl-Impacted Region.

First major report indicative that congenital anomaly rates in Ukraine, in particular spina bifida, are elevated and highest in Chornobyl radiation impacted regions.

#### Blastopathies and microcephaly in a Chornobyl Impacted Region of Ukraine.

A detailed, data intensive report and analysis designed to permit independent analyses and interpretations by others.

#### Chornobyl radiation - congenital anomalies: A persisting dilemma.

Lack of resources prevent the resolution of the dilemma whether an **epidemic of spina bifida** is due to ionizing radiation or other causes. - Radiation is a carcinogen as well as a teratogen (cause of congenital malformations). The population surveillance conducted by OMNI-Net includes the mandate to monitor population rates in polluted and non-polluted regions of Ukraine.

#### Elevated congenital anomaly rates and incorporated cesium-137 in the Polissia region of Ukraine.

*If pregnant, mothers who incorporate radioactive cesium inherently expose to radiation their embryo/ fetus. The sensitivity of radiation the embryo/fetus is the highest known among humans.* 

### Chornobyl 30 years later: Radiation, pregnancies, and developmental anomalies in Rivne, Ukraine.

Further analysis confirms the persistence of this dilemma.

#### Chornobyl, radiation, neural tube defects, and microcephaly.

Prenatal exposure to radiation and alcohol are causes of microcephaly. The persistence of the epidemic of neural tube defects and spina bifida further underscores the need for funding of international prospective collaborative studies to clarify to what extend these factors are the causes of maldevelopment of Ukrainian children.

*(Expansion, analyses, public health, alcohol-related)* Analysis of Mortality among Neonates and Children with Spina Bifida: An International Registry-Based

#### Study, 2001-2012.

Massive analysis reported by 27 authors and inclusive of OMNI-Net Ukraine Programs – the only full member of Eurocat (EU Consortium) conducting population based monitoring in the area of the former USSR.

## Beckwith Wiedemann syndrome: A population-based study on prevalence, prenatal diagnosis, associated anomalies and survival in Europe.

One of the many studies of a population impact and burden associated with a particular malformation syndrome (other similar studies of other malformations are not included in this display.

#### Prevention of Neural Tube Defects in Europe: A Public Health Failure.

The neural tube defects prevalence if the highest in Europe.

# Linking a European cohort of children born with congenital anomalies to vital statistics and mortality records: A EUROlinkCAT study.

The mortality of Ukrainian children with congenital anomalies is the highest in Europe.

#### A teratology information system in vernacular: Closing an information gap.

Thousands of monthly consultations from Ukrainian visitors demonstrated the need of such information system in Ukrainian as well as in other vernacular languages.

### (Alcohol-related – selection from 30 reports)

Can prenatal ultrasound detect the effects of in-utero alcohol exposure? A Pilot Study.

Correlation of Early Pregnancy Alcohol Dose with Number of Physical Features of FASD in Infants Born in Ukraine.

Micronutrient Levels in Plasma in Mid-Gestation Vary by Quantity of Alcohol Consumption in Pregnant Women in Ukraine.

Alcohol Drinking Patterns and Nutrient Status in Ukrainian Pregnant Women.

Altered Maternal Nutritional Factors May Confer Risk of Fetal Alcohol Spectrum Disorders (FASD).

The impact of micronutrient supplementation in alcohol-exposed pregnancies on information processing skills in Ukrainian infants.

Low Vitamin D Status in Alcohol-Exposed and Low/unexposed pregnant Ukrainian Women.

Cardiac Orienting Responses Differentiate the Impact of Prenatal Alcohol Exposure in Ukrainian Toddlers.

The Use of Cardiac Orienting Responses as an Early and Scalable Biomarker of Alcohol-Related Neurodevelopmental Impairment.

Patterns of Prenatal Alcohol Use That Predict Infant Growth and Development.

Patterns of Prenatal Alcohol Exposure and Alcohol-Related Dysmorphic Features

Infant Cardiac Orienting Responses Predict Later FASD in the Preschool Period

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