

# International Clearinghouse for Birth Defects Surveillance and Research Monthly Newsletter

September 2021 Issue 2021-09

## **ICBDSR ANNUAL MEETING**

The **47**<sup>th</sup> ICBDSR Annual Meeting will be held as **virtual meeting on October 11**<sup>th</sup>, **2021**, from 10 a.m. to 12 p.m. US EDT – you can check your time zone schedule: go to <u>2021 ICBDSR Annual Meeting</u> and look at the Agenda. The viewing is in US EDT (Eastern Daylight Time), but you can click on "Adjust" and see your local time, according to the geolocation of the device you are using.

The ICBDSR Annual Meeting Committee has put together an outstanding program around the meeting theme which is the impact of Covid-19 pandemic on selected maternal and child health issues, including birth defects. Additional sessions on ICBDSR activities are also scheduled.

Complete details about the meeting program, speakers, registration (*no registration fee is required*), and more are available on the event website: 2021 ICBDSR Annual Meeting.

We hope that you will join us online. Spread the word and invite your colleagues to participate as well. The meeting is open to anyone interested in birth defects surveillance and research, i.e. medical doctors, epidemiologists, researchers, parents, health workers.

## **NEWS AND UPDATE ON COVID-19**

# **European Centre for Disease Prevention and Control (ECDC)**

Covid 19 Dataset: data on the daily number of new reported COVID-19 cases and deaths by EU/EEA country is available to download. ECDC continues to publish weekly updates on the number of cases and deaths reported in the EU/EEA and worldwide every Thursday. <a href="https://www.ecdc.europa.eu/en/covid-19/data">https://www.ecdc.europa.eu/en/covid-19/data</a>

## American Academy of Pediatrics - Children and COVID-19: State-Level Data Report

State-level reports are the best publicly available and timely data on child COVID-19 cases in the United States. The American Academy of Pediatrics and the Children's Hospital Association are collaborating to collect and share all publicly available data from states on child COVID-19 cases. Here a summary of findings (data available as of September 23, 2021):

https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/

## WHO Coronavirus (Covid 19) Dashboard

The WHO Coronavirus disease situation dashboard presents official daily counts of COVID-19 cases and deaths worldwide: <a href="https://covid19.who.int/">https://covid19.who.int/</a>.

# **ICBD corner:** News and comments from the *International Centre on Birth Defects (ICBD)*

**1.** Are you using checklists in your program? You probably use (and find useful) a checklist when you go grocery shopping, lest you forget the milk. Checklists help "summarise and simplify what to do; measure and provide feedback on outcomes; and improve culture by building expectations of performance standards into work processes" Lancet 2009, Bosk et al.

Importantly, checklists alone cannot do the job. A common sense of mission is, in many ways, the 'secret' to the success of checklist implementation – through, for example, ongoing feedback between team leaders and frontline workers, and by empowering the latter to participate in improvement and evaluation.

As many of you return from well-deserved holidays, why don't you check out the reporting checklists in the Quick Reference Handbook, developed by WHO, CDC, and ICBDSR, and see how they make it easier for your staff to do it right (PDF available at

https://www.who.int/publications/i/item/9789240015418).

We anticipate the release of the mobile app (for IOS and Android) by early fall. And as usual, your feedback is welcome and very much encouraged.

2. Some timely news for this month (personal selection) – on COVID vaccines and on folic acid.

**CDC Report: Covid vaccines don't increase risk of miscarriage or birth defects.** The CDC tracked 1,613 pregnant women who received a Covid-19 vaccine, 30% of whom were vaccinated in the second trimester. The remaining 70% received their inoculations in the third trimester. Participants gave birth to 1,634 infants.

The 1,613 participants were part of the CDC's v-safe pregnancy registry, which had 5,096 enrollees as of Sept. 13. The rate of miscarriages were normal for the underlying population, adjusting for maternal age. Among the 1,634 babies Olson, 45 were considered small for their gestational age and 158 required intensive care. There were no infant fatalities in the group. Just 45 babies in the group were born with birth defects, with no reported uncommon types or clusters of birth defects.

## Folic acid to be added to UK flour to help prevent birth defects

## https://www.bbc.com/news/health-58615838

Recommendations are already in place in the UK to take folic acid to reduced the risk for spina bifida and anencephaly. Now the UK government has announced that folic acid will be added to flour (with some exceptions, including gluten-free foods and whole meal flour exempt).

The government ran a public consultation in 2019 around the issues of mandatory fortification. Neural tube defects affect about 1,000 pregnancies per year in the UK and cause a preventable burden of death, morbidity, and disability.

Lorenzo Botto, ICBD Director

# **What's Going on Regarding Birth Defects**

## **Human Teratogens: A Live Virtual Course**

The Human Teratogens Course, organized by the Society for Birth Defects Research and Prevention (BDRP) is held on November 2–4, 2021, 10:00 AM–3:30 PM Eastern (US). The course provides balanced and comprehensive information on the current knowledge and controversies in the field of teratology and counseling for pregnancy exposures. The faculty, teratology and toxicology experts, present lectures that cover basic principles of teratology, embryology, and epidemiology as well as detailed information regarding maternal conditions and environmental exposures which may pose teratogenic effect in pregnancy and lactation. The course provides up-to-date information on common exposures and hot topics, such as COVID-19 and vaccines, which providers are likely to encounter in their practice. The target audience for this course includes obstetricians, maternal fetal medicine specialists, teratogen information specialists, genetic

counselors, pharmacists, and allied health professionals. Normally taking place every two years in Tampa, Florida, this year the international course will take place in a live virtual setting. Full details and registration are available on the course website



# World Birth Defects Day - WBDD, March 3<sup>rd</sup>

Join World Birth Defects Day as **WBDD Partner Organization**, by completing the online application form on the WBDD website <a href="https://www.worldbirthdefectsday.org/application-form/">https://www.worldbirthdefectsday.org/application-form/</a>.

Follow @worldbdday on Twitter <a href="https://twitter.com/WorldBDDay">https://twitter.com/WorldbDDay</a> and Instagram worldbdday <a href="https://www.instagram.com/worldbdday/">https://www.instagram.com/worldbdday/</a>. Join WBDD page on Facebook <a href="https://www.facebook.com/WBDDay/">https://www.facebook.com/WBDDay/</a>. Visit WBDD website <a href="https://www.worldbirthdefectsday.org/">https://www.worldbirthdefectsday.org/</a>.

## A selection from the recent literature, and recommendations from readers

All readers are kindly invited to contribute to this section of the Newsletter, sending their suggestions to <a href="mailto:centre@icbdsr.org">centre@icbdsr.org</a> by the 1<sup>st</sup> Friday of the month

**Causes: Risk factors, Protective Factors** 

# Exposures and risk factors

Bolin EH, Gokun Y, Romitti PA, Tinker SC, Summers AD, Roberson PK, Hobbs CA, Malik S, Botto LD, Nembhard WN; National Birth Defects Prevention Study. <u>Maternal Smoking and Congenital Heart Defects, National Birth Defects Prevention Study</u>, <u>1997-2011</u>. J Pediatr. 2021 Sep 8:S0022-3476(21)00877-5. doi: 10.1016/j.jpeds.2021.09.005. Epub ahead of print. PMID: 34508749.

Malik S, Cohen PR. <u>Thalidomide-Then and Now: Case Report of a Woman With Thalidomide Embryopathy and Review of Current Thalidomide Uses</u>. Cureus. 2021 Aug 10;13(8):e17070. doi: 10.7759/cureus.17070. PMID: 34522548; PMCID: PMC8428198

Monangi N, Xu H, Khanam R, Khan W, Deb S, Pervin J, Price JT; INTERBIO-21st Study Consortium, Kennedy SH, Al Mahmud A, Fan Y, Le TQ, Care A, Landero JA, Combs GF, Belling E, Chappell J, Kong F, Lacher C, Ahmed S, Chowdhury NH, Rahman S, Kabir F, Nisar I, Hotwani A, Mehmood U, Nizar A, Khalid J, Dhingra U, Dutta A, Ali S, Aftab F, Juma MH, Rahman M, Vwalika B, Musonda P, Ahmed T, Islam MM, Ashorn U, Maleta K, Hallman M, Goodfellow L, Gupta JK, Alfirevic A, Murphy S, Rand L, Ryckman KK, Murray JC, Bahl R, Litch JA, Baruch-Gravett C, Alfirevic Z, Ashorn P, Baqui A, Hirst J, Hoyo C, Jehan F, Jelliffe-Pawlowski LL, Rahman A, Roth DE, Sazawal S, Stringer J, Zhang G, Muglia L. <u>Association of maternal prenatal selenium concentration and preterm birth: a multicountry meta-analysis</u>. BMJ Glob Health. 2021 Sep;6(9):e005856. doi: 10.1136/bmjgh-2021-005856. PMID: 34518202.

Saint-Lary L, Diallo A, de Monteynard LA, Paul C, Marchand L, Tubiana R, Warszawski J, Mandelbrot L, Rekacewicz C, Petrov-Sanchez V, Faye A, Sibiude J, Dabis F, Sommet A, Leroy V. <u>In utero exposure to antiretroviral drugs and pregnancy outcomes: analysis of the French ANRS pharmacovigilance database</u>. Br J Clin Pharmacol. 2021 Sep 10. doi: 10.1111/bcp.15075. Epub ahead of print. PMID: 34505718.

Wang D, Jin L, Zhang J, Meng W, Ren A, Jin L. <u>Maternal Periconceptional Folic Acid Supplementation and Risk for Fetal Congenital Heart Defects.</u> J Pediatr. 2021 Sep 8:S0022-3476(21)00876-3. doi: 10.1016/j.jpeds.2021.09.004. Epub ahead of print. PMID: 34508748.

## COVID-19

Alfieri NL, Kusma JD, Heard-Garris N, Davis MM, Golbeck E, Barrera L, Macy ML. <u>Parental COVID-19 vaccine hesitancy for children: vulnerability in an urban hotspot.</u> BMC Public Health. 2021 Sep 13;21(1):1662. doi: 10.1186/s12889-021-11725-5. PMID: 34517848; PMCID: PMC8436579.

Carlsson Y, Bergman L, Zaigham M, Linden K, Andersson O, Veje M, Sandström A, Wikström AK, Östling H, Fadl H, Domellöf M, Blomberg M, Brismar Wendel S, Åden U, Sengpiel V; COPE study group. COVID-19 in Pregnancy and Early Childhood (COPE): study protocol for a prospective, multicentre biobank, survey and database cohort study. BMJ Open. 2021 Sep 14;11(9):e049376. doi: 10.1136/bmjopen-2021-049376. PMID: 34521667; PMCID: PMC8441224.

Siegel DA, Reses HE, Cool AJ, Shapiro CN, Hsu J, Boehmer TK, Cornwell CR, Gray EB, Henley SJ, Lochner K, Suthar AB, Lyons BC, Mattocks L, Hartnett K, Adjemian J, van Santen KL, Sheppard M, Soetebier KA; MAPW1, Logan P, Martin M, Idubor O, Natarajan P, Sircar K, Oyegun E, Dalton J, Perrine CG, Peacock G, Schweitzer B, Morris SB, Raizes E. Trends in COVID-19 Cases, Emergency Department Visits, and Hospital Admissions Among Children and Adolescents Aged 0-17 Years - United States, August 2020-August 2021. MMWR Morb Mortal Wkly Rep. 2021 Sep 10;70(36):1249-1254. doi: 10.15585/mmwr.mm7036e1. PMID: 34499628.

Vega-Fernández AG, Zevallos-Vargas BM, Flores-Figueroa FDP, Holguín-Plasencia JC, Centeno-Fuentes LMG, Ayquipa-Gil SA, Lescano-Alva RA, Arrasco-Castro KP, Alvarado-Herrera HA, Zafra-Alegre WR, Idrogo-Cayotopa EJ, Reyes-Carranza CP, Ramírez-Gamarra LK, Peña-Estrella JG, Pardo-Carrasco AM, Suárez-Rebaza SA. Clinical and epidemiological characteristics of mothers with COVID-19 and their neonates: vertical transmission. Medwave. 2021 Aug 30;21(7):e8454. Spanish, English. doi: 10.5867/medwave.2021.07.8454. PMID: 34519722.

## **Genetics**

Kohler JN, Kelley EG, Boyd BM, Sillari CH, Marwaha S; Undiagnosed Diseases Network, Wheeler MT. <u>Genetic counselor roles in the undiagnosed diseases network research study: Clinical care, collaboration, and curation.</u> J Genet Couns. 2021 Aug 10. doi: 10.1002/jgc4.1493. Epub ahead of print. PMID: 34374469.

## Outcomes: survival, morbidity, quality of life

Benjamin NL, McKernan G, Izzo S, Crytzer TM, Clayton GH, Wilson PE, Houtrow AJ, Dicianno BE. <u>Factors Associated with Ambulation and Transfer Ability: A Study from the National Spina Bifida Patient Registry.</u> Am J Phys Med Rehabil. 2021 Sep 9. doi: 10.1097/PHM.000000000001879. Epub ahead of print. PMID: 34508059.

ElHassan NO, Sharma M, Akmyradov C, Kaiser JR, Goudie A, Nembhard WN. Childhood Educational Outcomes of Children Born with Gastroschisis. J Pediatr. 2021 Sep 6:S0022-3476(21)00871-4. doi: 10.1016/j.jpeds.2021.08.086. Epub ahead of print. PMID: 34499945.

Jill Glidewell M, Farr SL, Book WM, Botto L, Li JS, Soim AS, Downing KF, Riehle-Colarusso T, D'Ottavio AA, Feldkamp ML, Khanna AD, Raskind-Hood CL, Sommerhalter KM, Crume TL. <u>Individuals aged 1-64 years with documented congenital heart defects at healthcare encounters, five U.S. surveillance sites, 2011-2013</u>. Am Heart J. 2021 Aug;238:100-108. doi: 10.1016/j.ahj.2021.04.007. Epub 2021 May 3. PMID: 33951414.

# **Recommendations from readers**

Liu S, Evans J, Boutin A, Luo W, Gheorghe M, Auger N, Arbour L, Moore A, Joseph KS, Little J. <u>Time trends, geographic variation and risk factors for gastroschisis in Canada: A population-based cohort study 2006-2017</u>. Paediatr Perinat Epidemiol. 2021;00:1-10.

## **News from ICBDSR Executive Committee and ICBDSR Members**

## Online Self-Paced Course on Birth Defect Surveillance and Prevention

The online course remains available for interested professionals. The course has been developed by the International Centre on Birth Defects (ICBD Centre) and supported in part by funding from the National Center on Birth Defects and Developmental Disabilities, US Centers for Disease Control and Prevention, through Agreement with the Task Force for Global Health. The course is designed for clinicians, epidemiologists, public health professionals, and anyone interested in understanding birth defects and improving their prevention and care. The course includes videos, quizzes, a discussion forum, and publications/resources. It is available in English and Spanish. To date, more than **500 trainees** from **65 countries** have joined the online course. Additional information is available at <a href="http://www.icbdsr.org/online-self-paced-course-on-birth-defect-surveillance-and-prevention/">http://www.icbdsr.org/online-self-paced-course-on-birth-defect-surveillance-and-prevention/</a>. The registration form is available at <a href="http://www.icbdsr.org/course-registration">www.icbdsr.org/course-registration</a>. Once registered, you will receive an email with guidance on how to register in the course platform <a href="http://www.icbdsrtraining.org">www.icbdsrtraining.org</a> and how to self-enroll in the self-paced course in either English or Spanish.

# **Meetings and Conferences**

**Structural Birth Defects Trainee Symposium** (Virtual symposium), November 2, 2021 10am-6pm ET <a href="https://www.sdbonline.org/12th structural birth defects conference">https://www.sdbonline.org/12th structural birth defects conference</a>

**2021** American Academy of Pediatrics National Conference & Exhibition (virtual conference), 8-11 October 2021. https://aapexperience.org/

**Global Experts Meeting on Pediatrics & Neonatology:**"Recent advancements and emerging technologies for Pediatrics", 25-27 April 2022, Las Vegas, USA <a href="https://frontiersmeetings.com/conferences/pediatrics/">https://frontiersmeetings.com/conferences/pediatrics/</a>

**16<sup>th</sup>Congress of the European Society of Contraception and Reproductive Health,** 25-28 May 2022, Ghent, Belgium - Challenging times, are we ready? Novel approaches to sexual and reproductive health. https://escrh.eu/event/16th-esc-congress/

Website: <a href="www.icbdsr.org">www.icbdsr.org</a>
Facebook: <a href="www.iacebook.com/ICBDSR">www.iacebook.com/ICBDSR</a>
Instagram: <a href="https://www.instagram.com/icbdsr/">https://www.instagram.com/icbdsr/</a>
Twitter: <a href="@icbdsr">@icbdsr</a> <a href="https://twitter.com/ICBDSR">https://twitter.com/ICBDSR</a>

You are receiving this Monthly Newsletter because your email address is included in the ICBDSR mailing list.

To unsubscribe, kindly reply back to this email by putting in the subject UNSUBSCRIBE