



International Clearinghouse for Birth Defects Surveillance and Research Monthly Newsletter

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UPDATE ON 2020 ICBDSR ANNUAL MEETING

Due to the COVID-19 pandemic, the 47th ICBDSR Annual Meeting has been postponed to **October 10-13, 2021**. The meeting venue remains the Relais Bellaria Hotel & Congressi in Bologna (Italy). Updates on the annual meeting will be posted on the [ICBDSR website](https://www.icbdsr.org).

NEWS AND UPDATE ON COVID-19

COVID-19 is an emerging, rapidly evolving situation:

- Get the full database of COVID-19 resources from WHO: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.
- Get the latest public health information from CDC: <https://www.coronavirus.gov>.
- Get the latest research from NIH: <https://www.nih.gov/coronavirus>.
- Find SARS-CoV-2 literature, sequence, and clinical content: <https://www.ncbi.nlm.nih.gov/sars-cov-2/>.

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

1. **The New Surveillance Toolkit is done – and will be available electronically**

On December 2, 2020, a special WHO-CDC-ICBDSR webinar launched the new and improved toolkit to track common birth defects worldwide. *The toolkit now includes a special visual How-To Guide to help recognize and track common serious birth defects, simply, accurately, and efficiently.* The webinar included colleagues from WHO regional offices of the Americas, South East Asia and Eastern Mediterranean, as well as various partner organizations -- March of Dimes, UNICEF, UNFPA, Child-Help International, Belgium and Muhimbili Orthopedic Institute, Tanzania.

The WHO is working to put online the materials and webinar recording. However, Clearinghouse members who would like early access to the materials, please contact Lorenzo Botto at centre@icbdsr.org

2. **Expanding the scope of public health surveillance: hearing loss in children.** Over the years, as clinicians and public health professionals focusing on birth defects, we have seen our scope of work – in the clinic and in the office – expand beyond selected structural anomalies identifiable by (or soon after) birth.

Hearing loss is increasingly recognized as a significant and modifiable condition, such that many countries have implemented hearing newborn screening. For this reason, I would like to highlight this very recent review of hearing loss in children – an efficient and readable way to get acquainted or reacquainted with this significant clinical and public health issue, which, if not already, will likely intersect at some point our current activities. <https://jamanetwork.com/journals/jama/fullarticle/2773567>
If unable to get hold of the PDF, please email Lorenzo Botto centre@icbdsr.org

What's Going on Regarding Birth Defects: 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 centre@icbdsr.org by the 1st Friday of the month

A Selection from the Recent Literature

1. Please take a look at the articles shared and recommended by Clearinghouse members and readers.

Birth defect mortality in India 1990–2017: estimates from the Global Burden of Disease data. Ujagare, D., Kar, A. *J Community Genet* (2020). <https://doi.org/10.1007/s12687-020-00487-z>

Josef Warkany's gestation of the teratology society. Wertelecki W. *Birth Defects Res* 2020 Jul 15;112(12):885-889. doi: 10.1002/bdr2.1684. PDF available upon request at centre@icbdsr.org

Chornobyl radiation—congenital anomalies: A persisting dilemma. Wertelecki W. *Congenit Anom.* 2020; 1-5. 2020; 1–5. <https://doi.org/10.1111/cga.12388>. PDF available upon request at centre@icbdsr.org

Dietary patterns of Chinese women of childbearing age during pregnancy and their relationship to the neonatal birthweight. Yan H, Dang S, Zhang Y, et al. *Nutr J.* 2020;19:89 <https://doi.org/10.1186/s12937-020-00607-y>.

2. Selected Papers, with comments from ICBD

Environmental mechanisms of orofacial clefts. Garland MA, Reynolds K, Zhou CJ. *Birth Defects Res.* 2020 Nov; 112(19):1660-1698. doi: 10.1002/bdr2.1830. Epub 2020 Oct 30. PMID: 33125192 <https://pubmed.ncbi.nlm.nih.gov/33125192/>

The origin of orofacial clefts and the associated multifactorial patterns of risk are still incompletely understood. This timely review examines selected metabolic pathways, signaling mechanisms and behavioral risk factors that may underpin the occurrence of at least a portion of orofacial clefts.

A Comprehensive Assessment of the Associations Between Season of Conception and Birth Defects, Texas, 1999–2015. Benavides E, Lupo PJ, Langlois PH, Schraw JM. *Int J Environ Res Public Health.* 2020 Sep 29;17(19):7120. doi: 10.3390/ijerph17197120. PMID: 33003294 <https://pubmed.ncbi.nlm.nih.gov/33003294/>

Associations between season of conception and occurrence of birth defects have been variably reported in the literature. Part of the interest is the notion that such associations may provide clues to environmental and perhaps preventable exposures. Also, detecting such associations above the overall statistical ‘noise’ of birth defect occurrence would suggest a rather large effect of such exposures. This study is notable for its broad scope and large sample sizes. Among the interesting findings is the identification of an association with Hirschsprung disease, a clinically demanding condition whose pathogenesis raises interesting questions of potential gene-environment associations.

3. Other notable papers

Cancer risk in individuals with major birth defects: large Nordic population based case-control study among children, adolescents, and adults. Daltveit DS, Klungsoyr K, Engeland A, Ekbohm A, Gissler M, Glimelius I, Grotmol T, Madanat-Harjuoja L, Ording AG, Sæther SMM, Sørensen HT, Troisi R, Bjørge T. *BMJ.* 2020 Dec 2;371:m4060. doi: 10.1136/bmj.m4060. PMID: 33268348.

Risk of non-syndromic orofacial clefts by maternal rural-urban residence and race/ethnicity: A population-based case-control study in Washington State 1989–2014. Kapos FP, White LA, Schmidt KA, Hawes SE, Starr JR. *Paediatr Perinat Epidemiol.* 2020 Dec 1. doi: 10.1111/ppe.12727. Epub ahead of print. PMID: 33258502.

4. COVID-19 in Children

Zimmermann P, Curtis N. [Why is COVID-19 less severe in children? A review of the proposed mechanisms underlying the age-related difference in severity of SARS-CoV-2 infections.](#) Arch Dis Child. 2020 Dec 1;archdischild-2020-320338. doi: 10.1136/archdischild-2020-320338. Epub ahead of print. PMID: 33262177.

Public Health



World Birth Defects Day – WBDD, March 3

It's never too early to apply to be a 2021 **WBDD Partner Organization**, by completing the online application form on the WBDD website <https://www.worldbirthdefectsday.org/application-form/>.

Follow @worldbdday on Twitter <https://twitter.com/WorldBDDay> and Instagram worldbdday <https://www.instagram.com/worldbdday/>

Join WBDD page on Facebook <https://www.facebook.com/WBDDay/>
Visit WBDD website <https://www.worldbirthdefectsday.org/>

News from the ICBSR Executive Committee

The ICBSR Collaborative paper on Mortality among children with Diaphragmatic Hernia has been published in Annals of Epidemiology:

Politis MD, Bermejo-Sánchez E, Canfield MA, Contiero P, Cragan JD, Dastgiri S, de Walle HE, Feldkamp ML, Nance A, Groisman B, Gatt M, Benavides-Lara A, Hurtado-Villa P, Kallén K, Landau D, Lelong N, Lopez-Camelo J, Martinez L, Morgan M, Mutchinick OM, Pierini A, Rissmann A, Šípek A, Szabova E, Wertelecki W, Zarante I, Bakker MK, Kancherla V, Mastroiacovo P, Nembhard WN; International Clearinghouse for Birth Defects Surveillance and Research.

[Prevalence and Mortality in Children with Congenital Diaphragmatic Hernia: A Multi-Country Study.](#)

Ann Epidemiol. 2020 Nov 27;S1047-2797(20)30415-4. doi: 10.1016/j.annepidem. 2020.11.007. Epub ahead of print. PMID: 3325389

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 2016-2017 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, **464 trainees** from **61 countries** have joined the online course. Additional information is available at <http://www.icbdsr.org/online-self-paced-course-on-birth-defect-surveillance-and-prevention/>.

The registration form is available at www.icbdsr.org/course-registration. Once registered, you will receive an email with guidance on how to register in the course platform www.icbdsrtraining.org and how to self-enroll in the self-paced course in either English or Spanish.

Meetings and Conferences

3rd World Congress on Maternal Fetal and Neonatal Medicine, "from periconception to early infancy" – March 25-27, 2021, Venice, Italy. <https://www.mcascientificevents.eu/worldmfnm/>

Public Health Unit of Athens Institute for Education and Research (ATINER) 7th Annual International Conference on Public Health, June 21-24, 2021, Athens, Greece. <https://www.atiner.gr/publichealth/call>

Society for Birth Defects Research and Prevention 61st Annual Meeting, Wyndham Grand Pittsburgh Downtown, Pittsburgh, PA, USA. June 26–30, 2021. <https://www.birthdefectsresearch.org/meetings/2021/>

World Congress of Epidemiology WCE 2020 on “Methodological Innovations in Epidemiology”, has been postponed to September 3-6, 2021, Melbourne, Australia. <https://wce2020.org/>

EUROCAT Registry Leader Meeting and 15th European Symposium on Congenital Anomalies Considering the development of the pandemic in Europe, the EUROCAT Scientific Symposium scheduled to take place on July 2, 2020 in Valencia, Spain, has been postponed. Information about a new date will be available as soon as possible. JRC-EUROCAT@ec.europa.eu

