Brain Waves

Quarterly Practice Brief for NCDPI TBI Approved Providers

June 2020

We missed you at the 2020 TBI Institute in March! We'll let you know as soon as we can reschedule!

Are you due?

Are your CEU hours due at the end of June? Check your profile on the Provider Portal if you're not sure.

Not sure how to submit your CEU Documentation? View a tutorial here!

Need additional CEU hours?
Choose one of the options listed on page 2.

The NC DPI School Based Advisory Council for TBI will be meeting on June 16th. Do you have a question for the council? Let us know - TBIregistry@cidd.unc.edu

MIS-C, COVID-19 & TBI

On May 14, 2020 the Centers for Disease Control (CDC) issued an official Health Advisory regarding Multisystem Inflammatory Syndrome in Children (MIS-C) and it's relation to COVID-19.

MIS-C is a condition that causes different parts of the body to become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. It is unknown at this time what causes MIS-C, but children that have been diagnosed either had the virus that causes COVID-19 or had been around someone with COVID-19.

There have been several cases, including at least one here in NC, of previously healthy children presenting with this severe inflammatory syndrome with Kawasaki disease-like features.

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Professional Development Opportunities

- TBI Online Curriculum - Review basic information about neuroanatomy, the history and presentation of TBI, assessment practices as they relate to TBI, and school-based interventions uniquely designed to meet the needs of individual students
- BIAUSA - A variety of webinars on a variety of topics.
- Other state BIA chapters offer a variety of free webinars: BIANJ, BIAV, BIC
- BIANC Webinars - click the images below to learn more

Concussion/mTBI in North Carolina Children & Youth

Concussion Support and Management in NC Public Schools

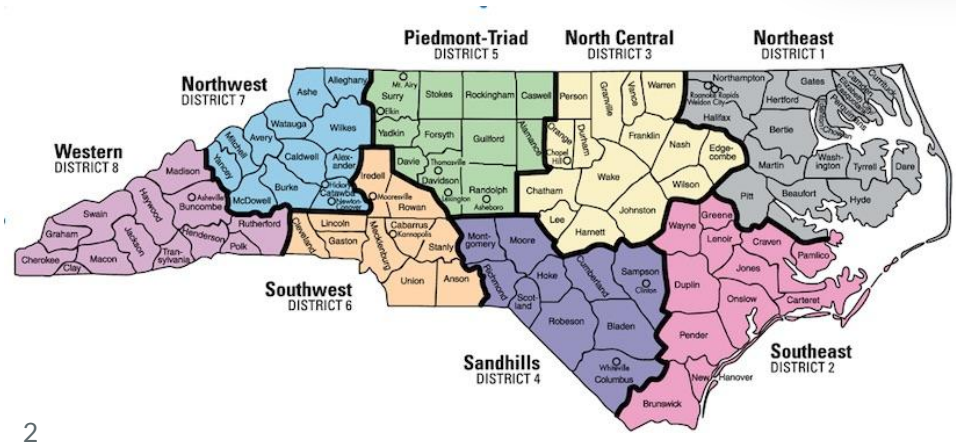
Keep moving the work forward

School Psychologists participate in designing prevention and intervention methods to address problems that impact student learning

Challenge: Participate in Brain Injury prevention activities throughout the year

Share your prevention activity ideas with your TBI Community of Practice

- **June** = Gun Violence Awareness Month
- **September** = National Child Passenger Safety Month
- **October** = Pedestrian Safety Month



Communities of Practice (CoP)

Use the links below to access your CoP. You can submit a question/topic on the forum or create an "event" to get live support from your colleagues via Google Hangout.

North Central/Northeast
Piedmont-Triad/Southwest
Northwest/Western
Sandhill/Southeast

MIS-C, COVID-19, & TBI

In the United Kingdom, 38 cases of MIS-C were identified between March 25 and May 1, 2020. Of those 38 cases, 19% had neurological symptoms. In New York State, 33 cases of MIS-C were identified between April 17 and May 13, 2020. Neurocognitive symptoms were noted in 58%.

In one report from Italy, the clinical and biochemical features of patients with Kawasaki disease diagnosed during the COVID-19 pandemic appeared to differ from the historical cohort of patients; therefore, the classification of Kawasaki-like disease. From a clinical perspective, they were older, had respiratory and gastrointestinal involvement, meningeal signs, and signs of cardiovascular involvement.

Kawasaki disease is an inflammatory disease of blood vessels. It is a leading cause of acquired heart disease in the United States. Severe forms with multi-organ involvement or neurological dysfunction are rare (less than 1%), but it can cause a type of meningitis. Also, cerebral vascular involvement has been related to large-vessel injury or cardioembolism, leading to focal brain infarction.

The standard treatment, IV immunoglobulin and aspirin, substantially decreases the development of coronary artery abnormalities.

Twenty years ago, The Effects of Kawasaki Disease on Cognition and Behavior was published in The Journal of the American Medical Association (JAMA). This cohort analytic study looked at the long-term cognitive, academic, and behavioral outcomes of children with previous Kawasaki disease. No differences were found in cognitive or academic measures, and were within normal limits. However, significant internalizing and attentional behavior problems were noted. Similar findings were reported in the 2005 article, Behaviour sequelae following acute Kawasaki disease.

It is far too early in the game to understand the neurocognitive and behavioral consequences of COVID-19 and MIS-C, but what we do know is promising. Children are responding to treatment and recovering fairly quickly, though some have spent time in intensive care units and a few have died.

Given that the expanded definition of TBI for NC DPI includes brain injury caused by infection, it behooves school psychologists to be aware, and stay abreast, of MIS-C, its relationship to COVID-19, and the potential impacts it may have on cognition and behavior within the learning environment.