What are PANDAS, PANS?

- Pediatric Autoimmune Neuropsychiatric Disorders Associated with Strep (PANDAS) and Pediatric Acute-Onset Neuropsychiatric Syndrome (PANS) are neuropsychiatric syndromes triggered by a faulty immune system response. Students may experience symptoms after a “strong stimulant” to the immune system (NIMH, 2012) such as strep infection, flu, or even the common cold. In a student with PANDAS or PANS, the immune system is thought to mistakenly react and cause brain inflammation in the basalganglia region (NIMH, n.d.; Murphy, Girardi, & Parker-Athill, 2014).

- This reaction may cause neurological, psychological, and cognitive symptoms as a result of neurological inflammation (Chang et al, 2015).

- PANDAS and PANS may be treated with anti-inflammatory medications (such as ibuprofen), antibiotics to treat or prevent infection, and immune-modulating therapies (such as steroids, intravenous immunoglobulin (IVIG), and plasmapheresis (PANDAS Network, 2014). Cognitive-behavioral therapy and additional medications may also be important components of a student’s treatment plan.

- More than other conditions, PANDAS, PANS and related conditions can produce sudden, uneven and unusual symptoms.

- PANDAS and PANS may co-occur with other autoimmune disorders, immune deficiency, or other neurological or psychiatric disorders. This can make treatment and management more complex.

Common Symptoms

- Anxiety, including separation anxiety from familiar people (parents, preferred teacher) or places (home or preferred classroom)

- Obsessions and compulsions (e.g., need to sit in a particular spot, inability to tolerate certain activities, unexplained or significant fears)

- Tics or involuntary vocalizations or movements may sometimes look like ‘fidgeting’ or hyperactivity

- Changes in handwriting and academic performance

- Reduced attention span and in ability to focus

- Changes in personality and behavior

- Changes in eating and sleep habits

- Increased sensory sensitivity
BUILDING YOUR TEAM

KEY CONSIDERATIONS FOR SUPPORT:
Collaborate • Communicate • Assess Impact
Consider Accommodations & Complimentary Services

Build a Supportive & Collaborative Team
that includes parents, teachers, special educators/specialists,
the school nurse, school psychologist, administration and other
relevant expertise.

Communicate Frequently & Share Updates with the Team
especially during winter months when flares are common. Discuss
current treatment protocols and needs for accommodations and/or
modifications.

Assess Impact of Symptoms on School Participation
Consider how symptoms may cause deficits in performance
particularly in the areas of: Attendance (due to lack of sleep,
fatigue); Cognitive issues affecting behavior, academics—including
reading, writing and math; Sensory overwhelm (presenting as motor
challenging behavior in overstimulating situations); Fine motor skills
(handwriting and task completion); Perceptual and Physical issues
(tics and other movements) that affect fine/gross motor skills; Urinary
frequency; Ability to eat normally; Social issues with peers and more.

Consider Accommodations and Modifications
Consider attendance flexibility (shorter days during an uptick in
symptoms, Skype classroom attendance during treatments, etc),
alternative activities and placements, breaks in the day, testing
modifications as needed.

Consider Complementary & Ancillary Services
Services may include Occupational therapy, Physical therapy, and
Executive Function & Social skills support. If this is a new condition for
your district, it can be helpful to talk with public or nonprofit agencies
to see what parameters of services are typically available for students
with related conditions such as traumatic brain injury (TBI), Tourette
syndrome, and encephalitis or encephalitic conditions, etc.

PANDAS/PANS may impact a student’s ability to:
• Attend and travel to all school related activities
• Sustain focused attention & executive functioning
• Adapt to transitions and stresses
• Understand & remember information
• Communicate effectively, both orally and in writing
• Behave in age-appropriate ways
• Maintain prior level of physical & mental stamina