

## District Epidemiology Report

District 3-2 Atlanta  
April - June 2018

### District Epidemiology Staff

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### ❖ Outbreak Investigations

#### **Outbreak of PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders associated with Streptococcal infections).**

One metro nurse practitioner reported a subjective increase of about 10-15 children being followed by and treated for PANDAS. All cases attended the same school and all but one case were male children. These cases presented with acute onset of behavioral issues, dietary changes, aggression, anxiety, handwriting changes, etc., who seemingly have responded well to antibiotic treatment directed at Strep.

Fulton County Office of Epidemiology (FCOE) consulted with State DPH regarding this issue. As per the latest edition of the RedBook, “An association between GAS infection and sudden onset of obsessive-compulsive behaviors, prepubertal anorexia nervosa, or tic disorders—pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS), also known as pediatric acute-onset neuropsychiatric syndrome (PANS)—has been proposed, but carefully performed prospective studies have not shown that there is a specific relationship between these disorders and GAS infections.”

Since there is no exact evidenced based recommendations for treating PANDAS with antibiotics, public health consensus was to not provide any clinical advice to this particular pediatric practice, rather direct them to the most up to date guidance from CDC (NIMH).

#### **GI Illness outbreak at a Daycare**

State epi on-call received a call regarding multiple children with diarrhea/loose stool in a daycare, and referred it to FCOE as the daycare was situated in Fulton County. While conducting the investigation with the daycare management, FCOE found that illness onset was on 5/4/18 and six children in the toddler classroom were out with complaints of loose stools. Total number of children in the daycare was about 150. FCOE provided the management with recommendations for control measures and infection control. Upon their request, OE also provided them with a formatted parent notification letter to be distributed among the parents. Observation of proper preventive measures effectively controlled the outbreak and no further cases were reported from this daycare.

## Varicella Outbreak at a private company co-headquartered in Atlanta - UPDATE

Notification through State epi on-call system was received regarding multiple varicella cases among employees at a private software management company in Atlanta, from its HR manager. This company is co-headquartered in Atlanta, GA and in London, UK, and has additional offices in Munich, Bangalore, and Hong Kong. It is a fast-growing company that surpasses 400 employees worldwide. Many of their employees grew up outside of the US. Their offices are located in Fulton County, and are spread out over two floors in the same building, with 40 employees on the 1st floor, and 100 on the 5th floor. The company had reported seven (7) varicella cases among employees on the 5th floor of the building, with onset between 4/17/18 - 4/23/18. All but one of these cases worked on the same team, R&D. Some cases reported contact with an employee with Chickenpox the previous month who thought he had picked it up from international travel. The company did not provide this person's contact information to Public Health. Cases lived in multiple Counties; Fulton (4), Cobb (2), and DeKalb (1).

State VPD Epi team and FCBOH Epi discussed outbreak over the phone with OneTrust representative and provided prevention recommendations. A general notification letter and chickenpox Q&A sheet were provided by public health for distribution to the employees. A SendSS survey was sent to Atlanta based employees. Two individuals were identified as high-risk, and were contacted by their local health district. One individual reported a rash in a household contact, their local district followed-up and this was found to be not clinically compatible with varicella. All other responders reported evidence or immunity to Varicella and/or no illnesses; with the exception of one, who was a known case.

### ❖ Individual Cases

The following 874 cases were reported among Fulton County residents during the second quarter of 2018.

Disease/condition	Number of cases
Animal Bite	174
Campylobacteriosis	30
Cholera	1
Cryptosporidiosis	6
<i>Ehrlichia chaffeensis</i>	1
Giardiasis	32
<i>Haemophilus influenzae</i> (invasive)	8
Hepatitis A (Acute)	10
Hepatitis B (Acute)	1

Disease/condition	Number of cases <i>Continuation</i>
Hepatitis B (Chronic)	85
Hepatitis C (Chronic)	365
Legionellosis	7
Lyme Disease	2
Malaria	1
Meningitis	7
Mumps	4
Pertussis	3
Rocky Mountain Spotted Fever	4
Salmonellosis	43
Shiga Toxin Producing <i>E.coli</i> (STEC)	5
Shigellosis	33
Streptococcal Disease, Group A (Invasive)	6
Streptococcal Disease, Group B (Invasive)	15
<i>Streptococcus pneumoniae</i> (Invasive)	12
Toxic Shock Syndrome (Staphylococcal)	1
Varicella (Chicken Pox)	14
Vibrios	2
Yersiniosis	2
<b>Total</b>	<b>874</b>

- **Animal Bites**

One hundred seventy four animal bite cases were reported for the second quarter. Among these cases, none was recommended for PEP for Rabies. Four animals were confined, twenty-six were destroyed. Twenty-six lab specimens were tested at Georgia Public Health Laboratories; none of these was positive for Rabies.

- **Malaria case**

A 55 year old African American, non-Hispanic male presented at the emergency department of Grady Memorial hospital during mid-April with complaints of fever, intermittent chills, night sweats for two months, and diarrhea and malaise for three days. Patient traveled to Nigeria and stayed there for 3 months (Dec-Feb). The case reported mosquito bites while in Nigeria, where several people in the community had Malaria. He was treated for Malaria while in Nigeria in January 2018. However, the medication did not cure him and the s/s relapsed. Patient was admitted to Grady Memorial hospital for

two days; tested positive for Malarial parasite (*P. ovale*) and was given anti-Malarial medications.

- **Meningitis cases**

There were seven reported cases of meningitis during this second quarter with no *Neisseria meningitides* case. Two of the cases yielded positive bacterial culture on CSF (*Staphylococcus caprae*, Alpha hemolytic *Streptococcus*); two yielded Enterovirus. Two yielded no growth on CSF culture and one did not have any lab work done. Cases range from four days old child to 56 years old adult.

- **Mumps Cases**

There were four suspect Mumps cases reported this quarter to FCBOH. Among these suspects, two (4 y/o and 11 y/o female children) tested negative for Mumps later. A 54 y/o female had positive Mumps antibodies (IgM 1.30, IgG 30.6) and GRITS search revealed history of just one dose of MMR vaccine given to her. A one y/o female child had unilateral Parotid swelling with mild upper respiratory congestion, but no fever or any other s/s; this child was seen at CHOA-Egleston but no lab test was done on her.

- **Pertussis Cases**

Among the three Pertussis cases reported during April-June, the two children cases had PCR positive nasopharyngeal swabs. Both of these cases (3 and 8 y/o males) had clinical signs and symptoms qualifying for Pertussis; and they were treated with antibiotic courses (Azithromycin). The third suspect case, a 33 y/o female did not have qualifying s/s but was tested for Pertussis by her Ob/Gyn practice as part of a prenatal checkup.

- **Shiga Toxin Positive, Shiga Toxin Producing *E.coli* (STEC) Cases**

Among the total seven cases, two of the children (12 months and 18 months old) had history of travel with the family prior to sign-symptom onset. The 12 months old child traveled to Dominican Republic and her parent reported that child did not eat beef or other type of meats but mostly ate bread. The 18 months old male child traveled to Panama City, Florida on a family trip approximately one week before his sign-symptom onset. During the trip, the father had diarrheal symptom for 4 days, but did not go to the doctor. During the trip, they stayed in a condominium in Panama City where they shopped and cooked store bought food from local grocery stores and dined out in various locations. This child had eaten restaurant food and the cooked food at home. The family used tap water to cook at the condominium and gave tap water to kid for drinking. Child also swam at the condominium swimming pool. Child's 18th-month wellness checkup coincided so checked out. Stool samples sent and the pediatrician notified of the result. Child attended a Daycare, which was notified as required.

- **Toxic Shock Syndrome case**

A 14 y/o Caucasian, non-Hispanic male child was seen at the ED of CHOA-Scottish Rite and was then admitted as inpatient. He was hit with a lacrosse ball over right thumb (plays goalie) 8 days ago. Had some bleeding under nail but did not think serious and finger seemed to be better after 2 days. During the middle of that week, his pain

increased and he was taken to urgent care, where diagnosed with a non-displaced fracture and started on antibiotic (Keflex); finger was splinted and wrapped. Within next couple of days, he developed a rash that started over legs and then had spread proximally. Child was brought to the urgent care again and then to hospital ED with abscess over dorsal aspect of the thumb. In ED, hand surgeon drained the abscess. No fever, no vomiting; drinking some but less than usual. He also had LE erythroderma, thought to be caused by TSS. MRI showed right thumb tenosynovitis, fracture, as well as edema. He was initially treated with Ceftriaxone, Vancomycin, and Clindamycin. Erythroderma resolved. Wound culture showed Clindamycin resistant MSSA. Case was followed by hand surgery and had daily whirlpool therapy with packing placed. The child remained afebrile and his oral intake improved. Case also had thrombocytopenia upon admission, thought to be due to his infection, which resolved prior to discharge.

- **Perinatal Hepatitis B cases follow up**

The primary goal of the “Perinatal Hepatitis B Prevention Program” is to identify all pregnant women infected with Hepatitis B and prevent perinatal transmission of the virus by ensuring infants born to infected women receive the recommended prophylactic treatment at birth.

There were nine cases for follow up in this second quarter. Fulton County Perinatal Hepatitis B Coordinator, epidemiology staff from FCBOH and GA DPH followed these nine pregnant Hepatitis B positive cases for their entire period of pregnancy. There was no miscarried case and no LTFU (lost to follow up) case. Among these cases, two women later found to be Hepatitis B negative through additional laboratory testing. Remainder seven cases had delivered infants and those infants were given HBIG and follow through Hepatitis B vaccines.

- ❖ **Meetings, Trainings and Presentations**

- Epi staff attended **2018 CSTE Annual Conference** from June 10 through June 14 in West Palm Beach, Florida. More than 1,500 public health epidemiologists from across the country attended this conference that included workshops, plenary sessions with leaders in the field of public health, oral breakout sessions, roundtable discussions, poster presentations and networking sessions. Attendees from across the country met and shared their expertise in surveillance and epidemiology as well as best practices in a broad range of areas including informatics, infectious diseases, immunizations, environmental health, occupational health, chronic disease, injury control, and maternal and child health.
- Epi staff participated in monthly **District Epidemiologists Conference Calls** arranged by GA DPH.

- Epi staff attended ***Metro Atlanta Epi Meetings*** scheduled every month at American Red Cross Center.
- Epi staff presented on the ***New Employee Orientation (FCBOH)***, providing an overview of the Office of Epidemiology.

❖ **Success Stories**

**Joining of two Epidemiology interns**

Two MPH student from Georgia State University have joined FCOE as Epi interns. These interns will primarily work on notifiable Enteric diseases (waterborne and foodborne). Student will be supervised in conducting case and control interviews, and acquainted with data entry, data collection and management, medical chart review, and obtaining data related to communicable disease surveillance and outbreaks.

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