

# THE EPI INVESTIGATOR



Alachua County Health Department



Improving Public Health in Our Community Through Cooperation

## Quarterly Epi Newsletter

Fall 2004

Alachua County Health Department  
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To report a disease phone or fax the  
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## Botulism Alert

Practitioners please be aware surveillance for additional possible **botulism** cases related to the 2 confirmed (Florida) and 2 possible (NJ) has not identified additional cases. However, please be on the look out for similar symptoms.

To obtain more information on the Alachua County Health Department check out our internet site at

<http://www.doh.state.fl.us/chdAlachua/index.htm>

## Central Florida Hemolytic Uremic Syndrome Cases— One Resident From Alachua County

By: Robyn Kay, MPH  
Florida Epidemic Intelligence  
Service Fellow

Hemolytic Uremic Syndrome (HUS) is a reportable medical condition in the State of Florida. Clinical characteristics of HUS include hemolytic anemia, renal injury, and low platelet count. HUS primarily occurs following a gastrointestinal illness and is most commonly associated with shiga-like toxin-producing *Escherichia coli* (SLTEC), including *Escherichia coli* O157:H7<sup>1,2,3</sup>. In addition, HUS may be related to other types of bacteria, viruses and fungi<sup>4,5</sup>.

Hemolytic Uremic Syndrome primarily affects children < 5 years of age and elderly persons<sup>6</sup>. The red blood cells are destroyed and the kidneys fail. According to the Centers for Disease Control and Prevention, approximately 2%-7% of *E. coli* O157:H7 infections lead to HUS. Four cases of Hemolytic Uremic Syndrome in children have been reported in the Northeast Florida region between April and August 2004. These children were all administered antibiotics prior to specimen collection and no bacterial, viral or parasitic organisms have been isolated with three of the four cases. Only one of these cases has been associated with *E. coli* O157:H7. All cases are recovering. No epidemiological link has been established among any of the cases. A confirmed case is defined as an acute illness diagnosed with HUS or Thrombotic thrombocytopenic purpura (TPP) in the presence of 1) anemia with microangiopathic changes on a peripheral blood smear AND 2) renal injury, evidenced by either hematuria, proteinuria, or elevated creatinine level AND 3) began within 3 weeks after onset of an episode of acute or bloody diarrhea.

A probable case is defined as an acute illness diagnosed as HUS or TPP in the presence of 1) anemia with microangiopathic changes on a peripheral blood smear AND 2) renal injury, evidenced by either hematuria, proteinuria, or elevated creatinine level in a patient who does not have a clear history of acute or bloody diarrhea in the preceding 3 weeks. A probable case is also defined as an acute illness diagnosed as HUS or TPP in the presence of 1) anemia with microangiopathic changes that have not been confirmed AND 2) renal injury, evidenced by either hematuria, proteinuria, or elevated creatinine level AND 3) began within 3 weeks after onset of an acute or bloody diarrhea.

Medical management for HUS includes IV fluids to maintain hydration, blood transfusion, or dialysis<sup>7</sup>. Severe cases of HUS may require a renal transplant. Treating an *Escherichia coli* O157:H7 with antibiotics or antimotility agents has been widely debated by researchers. Some studies have suggested that antibiotics or antimotility agents increase the risk of HUS in children with an *Escherichia coli* O157:H7 infection<sup>8</sup>.

Please remember:

- Physicians should refrain from administering antibiotics to any person that presents with diarrhea (particularly bloody diarrhea) until a stool specimen may be obtained for culture.
- If an individual presents with bloody diarrhea, specimens should be specifically tested for *Salmonella*, *Shigella*, and *Campylobacter*, and additionally *E. coli* O157:H7.
- All *E. coli* O157:H7 positive laboratory specimens should be sent to the State Laboratory in Jacksonville for confirmation.

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## HUS cont.

If you suspect that a patient has HUS or an enterohemorrhagic *E. coli* infection and the reference laboratory does not have the ability to test for shiga toxins, please contact your health department's epidemiology division so testing may be arranged through the state laboratory.

If you have any questions regarding the submission of laboratory specimens to the state laboratory or how to report a case of HUS or *E. coli* contact the Florida Department of Health Bureau of Epidemiology at 850.245.4401 for assistance.

- 1 CDC. Community Outbreak of Hemolytic Uremic Syndrome Attributable to *Escherichia coli* 0111:NM—South Australia, 1995. *MMWR* 1995; 44: 550-551, 557-558.
- 2 CDC. Epidemiologic Notes and Report Hemolytic-Uremic Syndrome associated with *Escherichia coli* 0157:H7 Enteric infections - United States, 1984. *MMWR* 1985; 34:20-21
- 3 Paton AW, Ratcliff RM, Doyle R, Seymour Murray J, Davos D, Lasner JA, and Paton JC. Molecular Microbiological Investigation of an Outbreak of Hemolytic Uremic Syndrome caused by Dry Fermented Sausage Contaminated with Shiga-like Toxin-Producing *Escherichia coli*. *J Clin Micro* 1996;34: 1622-1627
- 4 Small G, Watson AR, Evans JHC, and Gallagher J. Hemolytic uremic syndrome: defining the need for long-term follow-up. *Clinical Nephrology* 1999;52 (6); 352-356.
- 5 Parmar MS. Emedicine. Hemolytic Uremic Syndrome <http://www.emedicine.com/med/topic980.htm> Accessed August 20, 2004.
- 6 [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli\\_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm)
- 7 National Kidney Foundation Kidney Learning System (KLSTM) <http://www.kidney.org/cls/factsheets/printFS.cfm?id=72> Accessed August 20, 2004.
- 8 Bell BP, Griffin PM, Lozano P, Christie DL, Kobayahi JM, and Tarr PI. Predictors of Hemolytic Uremic Syndrome in Children During a Large Outbreak of *Escherichia coli* 0157: H7 Infections, *PEDIATRICS* Vol. 100 No. 1 July 1997, p. e12.

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## Food Safety in the Work Place

By: Kevon Jackman  
ACHD Intern

In the year 2000 Florida reported a total of 288 outbreaks and 1,757 cases of food borne illnesses. Food safety is a subject matter that we have heard about too often, but cannot seem to master. Food safety has been stressed in restaurants and cafeterias, but what about the workplace? Individuals that bring a packed lunch to their workplace still need to be educated on food safety. Each year 76 million Americans fall victim to food borne illnesses, 325,000 are hospitalized and 5,000 of them die. This means that one in every four Americans has become ill from food borne illness. Many employees do not keep their packed lunch in the office refrigerator. Despite the reason, workers need to know what foods are safe and which ones are hazardous to leave out at room temperature for the 4 to 6 hours before lunch. Remember bacteria thrive best in temperatures between 40°F and 140°F.

### Safe to leave at room temperature:

- Nuts and nut butter
- Dry soup mixes
- Self stable pudding and milk
- Raw vegetables
- Unopened fruit juices
- Bread & crackers
- Cookies
- Dry Cereals
- All raw vegetables
- All fruits
- Jam, Honey & Syrup
- Ketchup & Mustard
- Dried sausages
- Fruit pies
- Margarine & oil
- Candy

### Must be kept cold (Below 40°F):

- Meat, fish, poultry, & shellfish
- Cooked beans
- Processed meats
- Tofu or other meat substitutes
- All foods containing cheese
- Yogurt
- All cooked vegetables
- Sprouts
- Cut melons
- Cooked pasta, rice, grains or cereals
- Gravy and sauces
- Mayonnaise & butter
- Dressings & gravies
- Custards & puddings
- Milk & milk products
- Sandwiches & salads w/ meat or cooked vegetables

The first step is to refrigerate packed lunches. If there are issues with an office refrigerator, contact a manager to implement policies about tidiness, etiquette and leaving food in the refrigerator. Another option is to use an insulated lunchbox with a frozen gel pack to help keep food items cold. Freezing lunches can greatly decrease the threat of food borne illness; however, it requires a knowledge of which foods are freezer friendly. Help keep hot foods hot by using an insulated bottle for soups. Hand washing before eating can greatly reduce the chance of infection, lathering the hands with soap and warm water for 15-20 seconds. Sharing foods with individuals that are ill will increase the risk of transmission. If there are any ice machines in the workplace, ensure that the ice scoop is placed in the ice with the handle up and out of ice. Finally, an employee must monitor and make sure that group foods are not left out too long. Knowledge and precaution are the best weapons to fight the threat of food borne illness.

# Alachua County's Reportable Diseases



Disease	2004 (Jan- Dec)	2003 (Jan- Dec)	2003 Cum	Disease	2004 (Jan- Dec)	2003 (Jan- Dec)	2003 Cum
AIDS	50	46	46	Hepatitis B (includes perinatal)	126	41*	43*
Animal Bites to Humans	26	28	28	Hepatitis C	511	145*	155*
Anthrax	0	0	0	Hepatitis non-A, Non B	0	0	0
Botulism	0	0	0	Hepatitis, Other (including unspecified)	0	0	0
Brucellosis	1	0	0	Hepatitis B surface antigen + in pregnant women or child < 24 months	23	4	4
Campylobacteriosis	20	17	17	Herpes Simplex Virus in < 6mo of age	0	**	**
Chancroid	0	0	0	HIV	45	31	32
<i>Chlamydia trachomatis</i>	1001	1185	1185	Human Papillomavirus (HPV) <12 years	0	**	**
Ciguatera	0	0	0	Lead Poisoning	2	2	2
Creutzfeldt-Jakob Disease (CJD)	0	**	**	Legionellosis	1	1	1
Cryptosporidiosis	0	1	1	Leptospirosis	0	0	0
Cyclosporiasis	0	0	0	Listeriosis	0	0	0
Dengue	0	1	1	Lyme Disease	5	0	0
Diphtheria	0	0	0	Lymphogranuloma Venereum	0	0	0
Ehrlichiosis, human	1	2	2	Malaria	0	2	2
Encephalitis				Measles	0	0	0
Eastern Equine	0	0	0	Melioidosis	0	**	**
Non-arboviral	0	0	0	Meningitis (Bacterial & Mycotic)	0	7	7
Other arboviral	0	0	0	Meningococcal ( <i>Neisseria Meningitidis</i> )	3	2	2
St. Louis	0	0	0	Mercury Poisoning	0	0	0
Venezuelan Equine	0	0	0	Mumps	0	0	0
West Nile	0	1	1	Neurotoxic Shellfish Poisoning	0	0	0
Western Equine	0	0	0	Pertussis	2	0	0
<i>E.coli</i> 0157:H7	2	2	2	Pesticide-Related Illness or Injury	0	0	0
<i>E.coli</i> , Other (known sero)	1	2	2	Plague	0	0	0
Epsilon toxin of <i>Clostridium perfringes</i>	0	**	**	Poliomyelitis	0	0	0
Giardiasis (acute)	11	12	12	Psittacosis	0	0	0
Glanders	0	**	**	Q fever	1	0	0
Gonorrhea	462	547	547	Rabies Human	0	0	0
Granuloma Inguinale	0	0	0	Rabies Animal	16	14	14
<i>Haemophilus influenzae</i> , inv disease	0	0	0	Ricin Toxin	0	**	**
Hansen's Disease (Leprosy)	0	0	0	Rocky Mountain Spotted Fever	1	1	1
Hantavirus infection	0	0	0				
Hemolytic Uremic Syndrome	1	1	1				
Hepatitis A	3	12	12				

## Alachua County's Reportable Diseases Continued

Disease	2004 (Jan- Dec)	2003 (Jan- Dec)	2003 Cum	Disease	2004 (Jan- Dec)	2003 (Jan- Dec)	2003 Cum
Rubella	0	0	0	Tularemia	0	0	0
Salmonellosis	80	64	69	Typhoid Fever	0	0	0
Saxitoxin poisoning paralytic shell- fish poisonings	0	**	**	Typhus Fever	0	**	**
Shigellosis	4	61	62	Vaccinia Disease	0	**	**
Smallpox	0	0	0	<i>Vibrio</i> Infection	1	0	0
<i>Staphylococcus aureus, Vancomycin non-susceptible</i>	0	0	0	<i>V. cholerae</i> Serogroup Type 01 and non-01	0	0	0
<i>Staphylococcus</i> enterotoxin B	0	**	**	Viral Hemorrhagic Fever	0	0	0
Streptococcal Disease group A inva	0	0	0	Yellow Fever	0	0	0
<i>Streptococcal pneumoniae</i> invasive	17	10	13				
Syphilis	5	5	5	<b>Any disease outbreak</b> (e.g., in the community, hospi- tal, or other institution; or foodborne or waterborne)			
Tetanus	0	0	0	<b>Any grouping or clustering</b> of patients having similar diseases, symptoms or syndromes that may indicate the presence of a disease outbreak			
Toxoplasmosis (acute)	0	0	0				
Trichinosis	0	0	0				
Tuberculosis	0	4	6	* A change in reporting recently occurred, these num- bers are significantly higher than shown.			

\*\* New reportable, no previous years data available.

06/JS



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