Salmonellosis is an infection caused by a bacterium of the *Salmonella* species (*spp*). There are numerous serotypes of this bacterium, with different serotypes varying from country to country. This bacterium lives in the intestinal tracts of humans and other animals including birds, and reptiles. Humans can become ill after eating or having contact with foods or animals contaminated with *Salmonella*. Contact with reptiles may place one at risk for *Salmonella* infections.

Most *Salmonella* infections in humans are mild, with vomiting, diarrhea, abdominal cramping, and fever. However, infection can spread to the bloodstream, bone marrow, or nervous system, leading to severe, and sometimes fatal illness if left untreated. Such severe infections are more likely in infants, children, the elderly, and individuals with a compromised immune system.

The growing popularity of reptiles as pets has raised legitimate concerns about their impact on public health. Reptile related salmonellosis cases are increasing and pose a substantial threat to human health. In the United States approximately 93,000 (7% of all cases) per year of *Salmonella* spp. infections are attributable to pet reptile or amphibian contact. The majority of salmonellosis reptile-related cases are infants and young children. The Centers for Disease Control and Prevention (CDC) estimates that 3% of households in the United States have a reptile. Many reptiles carry *Salmonella* bacteria and shed the organisms in their feces.

All reptiles should be presumed to be carrying *Salmonella* spp. in their intestinal tract and to be continuously or intermittently shedding it in their feces. Any reptile may be contaminated with *Salmonella*, and the organisms may be present anywhere on the skin, shell, or container. Individuals become infected by ingesting *Salmonella* spp. after handling a reptile or objects contaminated by a reptile, and then failing to wash their hands properly. Increasingly rare *Salmonella* serotypes associated with reptiles, such as java, marina, stanley, poona, and chameleon are being isolated from humans in the United States.

In the United States, salmonellosis in pet turtles less than 4 inches long was the major source of human contamination from reptiles until commercial distribution was banned in 1975. The frequency of turtle associated *Salmonella* serotypes isolated from humans decreased 77% during 1970 – 1976.

By March, 1999, only three states, California, Connecticut, and Michigan, had regulations requiring pet stores to provide information about salmonellosis to persons purchasing a turtle. Two states, Kansas and Maryland, require salmonellosis information be provided to individuals purchasing any reptile. Three states, Arizona, Minnesota, and Wyoming, prohibit reptiles in day care centers and long-term care facilities. Kentucky has no specific laws regulating the sale of reptiles or provision for pet stores to provide reptile-related educational materials to their clients.

All reptile owners and pet store personnel should be aware that reptiles can carry and transmit *Salmonella* spp. Pet stores are in a unique situation to provide educational materials to consumers about the transmission of *Salmonella* spp. because most reptile owners usually inquire about, and obtain information about their reptiles from pet store personnel.

References available upon request.
Recommendations for Preventing Transmission of *Salmonella* from Reptiles to Humans

- Pet Store owners, veterinarians, and physicians should provide client education about the risk of acquiring salmonellosis from reptiles.

- Persons should always wash their hands thoroughly with soap and water after handling reptiles or reptile containers.

- Persons at increased risk of infection are children aged 5 years and under and the chronically ill.

- Pet reptiles should be kept out of households where children aged 5 years and under or where chronically ill persons live.

- Families expecting a new baby should remove the pet reptile from the home before the infant arrives.

- Pet reptiles should not be kept in child care centers.

- Pet reptiles should not be allowed to roam freely throughout the home or living area.

- Pet reptiles should be kept out of kitchens to prevent contamination. Kitchen sinks should not be used to bathe reptiles or to wash their dishes, cages, or aquariums. If bathtubs are used for these purposes, they should be cleaned thoroughly and disinfected with bleach.

(This information was provided by the Association of Reptilian and Amphibian Veterinarians and the Centers for Disease Control and Prevention.)

For more information on reptile related Salmonellosis contact the following:

Centers for Disease Control and Prevention web site at [http://www.cdc.gov/](http://www.cdc.gov/)

Association of Reptilian and Amphibian Veterinarians, Belton Animal Clinic, 511 Main St., Belton, MO 64012
The “Epi” Rapid Response Team was formed in 1987 to assist with the investigation and control of disease outbreaks in Kentucky. Its membership of trained “responders” now stands at 81. New members are added to the roster through participation in a special training course given by the Division of Epidemiology and Health Planning or by conducting an epidemiologic investigation under Division supervision. Except for the 10 state staff, all the members are employed by local health departments. Providers should contact team members in their area if an outbreak or unusual occurrence is suspected. The September 1999 annual conference was held at Rough River State Park.
DISTRICT HEALTH DEPARTMENT MEMBERS (continued from page 3)

Kentucky River District Health Dept.
Letcher County Center
Anthony Garrett, R.S.
P.O. Box 300
Corner Broadway & Webb
Whitesburg, KY  41858
606-633-2945

Lake Cumberland District Health Dept.
Christine Weyman, M.D.
500 Bourne Avenue
P.O. Box 800
Somerset, KY  42502
606-679-4416

Adair County Center
Virgie Claycomb, A.R.N.P.
904 Westlake Drive
Columbia, KY  42728
502-384-2286

Lincoln Trail District Health Dept.
Rick Molohon, R.S.
1222 Woodland Drive
P.O. Box 2609
Elizabethtown, KY  42702-2609
270-769-1601 ext. 117

Meade County Health Center
Teri Pierce, R.N.
520 Fairway Drive
Brandenburg, KY  40108
502-422-3988

Little Sandy District Health Dept.
Carter County Health Center
Cindy Rucker, R.N.
Adolescent Health Center
P.O. Box 98
Olive Hill, KY  41164
606-286-2524

North Central District Health Dept.
Henry County Center
Lloyd Penniston, R.S.
North Property Road
P.O. Box 449
New Castle, KY  40050
502-845-7995

Trimble County Center
Nancy Wason, R.N.
Millers Lane
P.O. Box 250
Bedford, KY  40006
502-255-7701

Northern Kentucky Independent District Health Dept.
Boone County Center
Carol Daniel, R.N.
Kathy Moher, Health Educator
Evie Van Herpe, R.N.
7505 Burlington Pike
Florence, KY  41042
606-525-7329

Pennyvile District Health Dept.
Caldwell County Center
Betsy McDowell, A.R.N.P.
310 Hawthorne St.
P.O. Box 327
Princeton, KY  42445
270-365-6571

INDEPENDENT COUNTY HEALTH DEPARTMENT MEMBERS

Allen County Health Dept.
Gayle Spencer, R.N.
P.O. Box 129
Scottsville, KY  42164
270-237-4423

Anderson County Health Dept.
Bill Bollinger, R.S.
208 S. Main Street
Lawrenceburg, KY  40342
502-839-4551

Boyle Health Dept.
Vicky Ratliff, R.N.
Dan Troutman, R.S.
449 S. 3rd Street
P.O. Box 398
Danville, KY  40423-0398
606-236-2053

Christian County Health Dept.
Mike Adams, R.S.
1700 Canton Street
P.O. Box 647
Hopkinsville, KY  42241-0647
270-887-4160

Clark County Health Dept.
Margaret Copenhaver, R.N.
400 Professional Avenue
Winchester, KY  40391
606-744-4482

Eullitt County Health Dept.
Mary Ann Blanton, R.S.
Ruby Morris, R.N.
181 Lees Valley Road
P.O. Box 278
Shepherdsville, KY  40165
502-543-2415 and 955-7837

Floyd County Health Dept.
Jane Bond, Health Educator
21 Front Street
P.O. Box 188
Prestonsburg, KY  41653
606-886-2788

Franklin County Health Dept.
Kendra Palmer, R.S.
502-564-7382
Denise Bingham, R.N.,
502-564-7647 ext. 4269
100 Glenns Creek Road
Frankfort, KY  40601

Greenup County Health Dept.
Eve Greene, R. N.
Ginger Miller, R.S.
U.S. 23
P.O. Box 377
Greenup, KY  41144
606-473-9638

Jefferson County Health Dept.
Garrett Adams, M.D., M.P.H.
Diane Franconia, R.N.
Carl Hall, Epidemiologist
400 East Gray Street
P.O. Box 1704
Louisville, KY  40202
502-574-6817

(Continued on page 5)
INDEPENDENT COUNTY HEALTH DEPARTMENT MEMBERS (continued from page 4)

<table>
<thead>
<tr>
<th>County Health Dept.</th>
<th>Contact Person 1</th>
<th>Contact Person 2</th>
<th>Address 1</th>
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<tr>
<td>Jessamine County Health Dept.</td>
<td>Tara Bilbrey, R.S.</td>
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<td>606-885-2310</td>
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<td></td>
<td>Paula Gullette, R.N.</td>
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<td>215 East Maple Street</td>
<td>Nicholasville, KY 40356-1203</td>
<td>606-885-2310</td>
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<td>Martin County Health Dept.</td>
<td>Glenda Grayson, Sr. Clinical Assistant</td>
<td>Main Street</td>
<td>P.O. Box 346</td>
<td>Inez, KY 41224</td>
<td>606-298-7752</td>
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<td>Mercer County Health Dept.</td>
<td>Tony White, R.S.</td>
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<td>900 North College</td>
<td>Harrodsburg, KY 40330</td>
<td>606-734-4522</td>
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<td>Monroe County Health Dept.</td>
<td>Amy Hale, R.N.</td>
<td></td>
<td>P.O. Box 247</td>
<td>Tompkinsville, KY 42167</td>
<td>502-487-6782</td>
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<td>Montgomery County Health Dept.</td>
<td>Sharon Owen, R.N.</td>
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<td>117 Civic Center</td>
<td>Mt. Sterling, KY 40353</td>
<td>606-498-3808</td>
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<td>Muhlenburg County Health Dept.</td>
<td>Joe Bean, R.S.</td>
<td></td>
<td>P.O. Box 148</td>
<td>Central City, KY 42330</td>
<td>270-754-5741</td>
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<td>Oldham County Health Dept.</td>
<td>Dottie Ochsner, R.S.</td>
<td></td>
<td>P.O. Box 35</td>
<td>Highway 146</td>
<td>502-222-3519 ext. 32</td>
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<td>Pike County Health Dept.</td>
<td>Debbie Mullins, R.N.</td>
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<td>100 River Road</td>
<td>Pikeville, KY 41501</td>
<td>606-437-5500</td>
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<td>Powell County Health Dept.</td>
<td>Joanne Campbell, R.N.</td>
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<td>P.O. Box 460</td>
<td>Stanton, KY 40380</td>
<td>606-663-4360</td>
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<td>Todd County Health Dept.</td>
<td>Norma Chapman, R.N.</td>
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<td>205 McReynolds</td>
<td>Elkhorn, KY 42220</td>
<td>270265-2362</td>
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<td>White County Health Dept.</td>
<td>Bill Patton, R.S.</td>
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<td>P.O. Box 147</td>
<td>Williamsburg, KY 40769</td>
<td>606-549-3380</td>
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<td>Woodford County Health Dept.</td>
<td>Tracey Giles, R.N.</td>
<td></td>
<td>229 North Main Street</td>
<td>Versailles, KY 40383</td>
<td>606-873-4541</td>
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**Reminder . . .**

**MARK YOUR CALENDARS**

**“EPI” RAPID RESPONSE TEAM CONFERENCE**

**May 3, 2000**

**Lake Cumberland State Park**

For more information contact:

Glyndon Powell, RN, BSN (502) 564-3261
Historical data are not available.

Disease numbers reflect only those cases which meet the CDC surveillance definition.

Contributed by: Patricia Beeler, Surveillance and Health Data Branch.
DESK REFERENCE

The following reference tools are still available from the Division of Epidemiology and Health Planning:

- Reportable Disease Desk Reference
- Medical Management Biological & Chemical Casualties Handbook
  These reference tools were previously distributed by Division of Epidemiology & Health Planning.

For more information or to request a reference tool, please call (502) 564-3418, fax (502) 564-0542, or email: sue.billings@mail.state.ky.us