Oklahoma State Department of Health
Acute Disease Service
Public Health Fact Sheet

Reye Syndrome

What is Reye syndrome?
Reye syndrome (RS) is characterized by sudden acute brain damage and liver function problems.

What is the cause of Reye syndrome?
The cause of Reye syndrome is still unknown. However, some studies have found a link between Reye syndrome and the use of aspirin during a viral illness, such as chickenpox and influenza.

Who gets Reye syndrome?
Although Reye syndrome can occur at any age, it most often affects children ages 4-12 years. Most cases that occur with chickenpox are in children ages 5-9 years. Cases that occur with the flu are usually in children 10-14 years.

What are the symptoms of Reye syndrome?
Reye syndrome often begins with vomiting, and is quickly followed by irritable or aggressive behavior. As the condition gets worse, the person may be unable to stay awake and alert. Other symptoms of Reye syndrome include: confusion, lethargy, loss of consciousness or coma, mental changes, nausea and vomiting, seizures, and unusual placement of arms and legs (decerebrate posture). Additional symptoms that may occur with this disorder include: double vision, hearing loss, muscle function loss or paralysis of the arms or legs, speech difficulties, weakness in the arms or legs.

When do symptoms appear?
Symptoms of Reye syndrome commonly occur during recovery from a viral infection (influenza, common cold, and chickenpox), but may also develop 3 to 5 days after the onset of viral illness.

Is Reye syndrome contagious?
Reye syndrome is not contagious and is not spread person-to-person.

How is Reye syndrome diagnosed?
The following tests may be used to help diagnose Reye syndrome: blood chemistry tests, head CT or head MRI scan, liver biopsy, liver function tests, serum ammonia test, and spinal tap.

What is the treatment for Reye syndrome?
There is no specific treatment for Reye syndrome. The health care provider will monitor the pressure in the brain, blood gases, and blood acid-base balance (pH). Other treatments may include: breathing support, intravenous (IV) fluids to provide electrolytes and glucose, and steroids to reduce swelling in the brain.

What can be done to prevent Reye syndrome?
Never give a child aspirin unless told to do so by your doctor. When a child must take aspirin, take care to reduce the child's risk of catching a viral illness, such as the flu and chickenpox. Avoid aspirin for several weeks after the child has received a varicella (chickenpox) vaccine.

NOTE: Other over-the-counter medications, such as Pepto-Bismol and substances with oil of wintergreen also contain aspirin compounds called salicylates. Do not give these to a child who has a cold or fever.

References:
Kaneshiro MD, Neil. "Reye Syndrome". *MedLine Plus*. Updated 01 Aug 12. Accessed 28 Jan 14. http://www.nlm.nih.gov/medlineplus/ency/article/001565.htm.