



## *Fever: How High is too High? How long is too long?*

If you have ANY concerns at ANY time during your child's illness, see your family physician or emergency medical doctor. Involvement of breathing difficulties, blood, bones, brain (encephalitis or meningitis – brain inflammation that can be bacterial or viral), eye injury and you are off to the hospital.

### **FEVER is: A healthy response. Fever is:**

A first responder of the immune system and not a feature of the virus or bacteria. A high fever means a healthy immune response and is not a measure of virulence.

Self-regulating. In a healthy human, fever will exceed its set point only in poisoning or in sunstroke. Poisoning and sunstroke are medical emergencies. Go to the hospital.

A message to the immune system to activate special systems that are normally quiet. Suppressing the fever suppresses these unique systems from acting. For example, did you know that when a fever breaks (and sweat follows), a layer of 'dermcidin' is laid down? That is an anti-microbial (antibiotic) immune system response  
<http://bit.ly/1MwojkT>

In chicken pox, when a fever breaks, sweat is produced and dermcidin prevents skin infections like Staphylococcus. So, wash the clothes but not the skin!

A unique heat environment that prevents some virus and bacteria from reproducing.

### **How High?**

|                         |  |
|-------------------------|--|
| 100-102°F (37.8 - 39°C) | low grade fevers and beneficial                |
| 102-104°F (39 - 40°C)   | moderate grade fevers and beneficial           |
| Above 104°F (40°C)      | high fevers and cause discomfort, but harmless |
| Above 105°F (40.6°C)    | higher risk of bacterial infections            |
| Above 107°F (41.7°C)    | the fever itself can be harmful                |