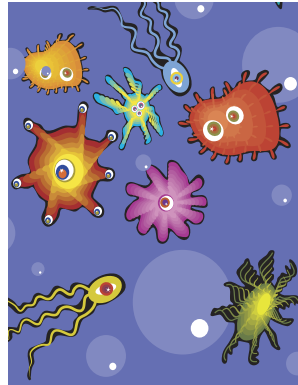


## Antibiotics: **Macrolides**

**Examples:** Zithromax,  
Erythromycin, Biaxin



**Used To Treat:** Respiratory infections, skin infections, Lyme disease, mycoplasma infections. They are often used to treat patients who are allergic to penicillins.

**How They Work:** These antibiotics work by inhibiting protein synthesis. They are bacterostatic but may be bactericidal when used in very high concentrations. They concentrate inside the infection by attaching themselves to the white blood cells that the body sends to fight the infection.

**Side Effects:** Any antibiotic can cause diarrhea, abdominal discomfort or cramping. These antibiotics may cause serious nausea. Biaxin often induces a lead taste.

### **What is an Infection?**

An infection is when bacteria that are living with us (called colonization) set up shop and start to use our resources. The pathogen (the bad guy) induces an inflammatory response from the host (that's us) and that inflammation is most often what we see on an x-ray (pneumonia for instance) or on the skin (the redness or the swelling).

## Antibiotics: the **Macrolides**



The degree of infection is a function of the specific bacteria, virus or fungus, the number of organizations involved (the inoculum), and the site infected. Clearly, the state of the host is all-important. People who are immuno-deficient are not only more vulnerable to an infection but will be more difficult to treat.

Infections may be acute or chronic. Acute means that they are immediate and these infections usually resolve in a specific amount of time. Chronic means ongoing. In that case, the best medicine may only keep the infection (contained).

