

Viral infections gave Strep bacteria killer genes

By examining decades' worth of stored bacteria samples, researchers have determined how a benign organism evolved into a deadly pathogen that causes necrotizing fasciitis, commonly known as flesh-eating bacteria disease.

Using genetic sequences from more than 3,600 strains of bacteria, scientists were able to see that it took only four steps to create the unusual microbe that spreads rapidly and destroys the body's soft tissue. Their report was published Monday in the Proceedings of the National Academy of Sciences.

Necrotizing fasciitis is caused by several types of bacteria, most commonly group A Streptococcus. (See images of Streptococcus and other microbes in the "Small, Small World" photo gallery.) An international group of researchers sequenced the genomes of group A strep bacteria in samples that had been collected from as early as the 1920s. Those sequences revealed that sometime in the past, group A strep was infected with first one virus and then soon after with another. With each infection, the bacterium gained viral genes that made group A strep more likely to cause disease.

Read the full, original story: [How Harmless Bacteria Quickly Turned Into a Flesh-Eating Monster](#)