

Bacteria or virus? Your genes can reveal what ails you

Cold and flu season are in full swing, and with them comes the question of what, exactly, is causing your sniffles. If it's a virus, like the cold and flu, an antibiotic is going to be useless. On the other hand, if you've got a bacterial infection (strep throat, for instance), odds are it could be cleared up quickly with medication. Two new papers in PLOS One outline a way to use the genetic expression of the host (read: us) to determine the nature of the pathogen. In short, our bodies activate different genes depending on what sort of infection we're combating. Ricki Lewis's post explores this and several other methods that could be used to develop a quick viral/bacterial test which could help with getting antibiotics and antivirals to those who truly need them; limiting spread by diagnosing people at the first ominous throat tickle or drip – or before; and revealing new viral variants or epidemiological trends.

Additional Resources:

- [“Measuring Genomic Response to Infection Leads to Earlier, Accurate Diagnoses,”](#) DukeHealth.org
- [“A Host Transcriptional Signature for Presymptomatic Detection of Infection in Humans Exposed to Influenza H1N1 or H3N2,”](#) PLOS One
- [“Gene Expression-Based Classifiers Identify *Staphylococcus aureus* Infection in Mice and Humans,”](#) PLOS One

View the original article here: [The Crud: Viral or Bacterial?](#)