

# the problems with antibiotic-resistant bacteria essay sample



**ASSIGN  
BUSTER**

## Abstract

The aim is to summarize, evaluate and argue the validity of information that demonstrates the issues with antibiotic-resistant bacteria. A plan to minimize/reduce these issues in the future shall be presented with explanations regarding effectiveness. The Problems with Antibiotic-Resistant Bacteria

Antibiotic-Resistance is the ability of bacteria and other microorganisms to resist the effects of the antibiotics they were once sensitive towards (MedicineNet. com, 2012). People have been prescribed antibiotics for years to prevent, reduce or eliminate infectious diseases. This consumption of these antibiotics has caused our bodies to become resistant towards treatment. Rise of Antibiotic-Resistance

When a person goes to the doctor for treatment and are prescribed an antibiotic they usually do not think that much of it. Even when the antibiotic starts not to work so well or even make you worse, you never think that you've become resistant to the antibiotic prescribed. In the 1930's there was only one class of antibiotics available but over time that has grown drastically to over 10 in the 2000's. The studies from " You Decide: What Can We Do About Antibiotic-Resistance Bacteria", show how antibiotics affect bacteria over time. From 1995 to 1998 the resistance of penicillin by the bacteria known as Streptococcus Pneumoniae increased consistently. If patients continue to become resistant to the antibiotics being prescribed then the antibiotics could become extinct in the sense that they would no longer be valuable for their intended purpose.

According to “ You Decide: What Can We Do About Antibiotic-Resistance Bacteria”, Doctors thought of this issue and came up with a logical solution. Rotating the antibiotics allows patients to receive treatment without become resistant to any particular antibiotic. I think this is a beneficial method and should continue to be done but in conjunction with developing alternative antibiotics. This way there would be a multitude of antibiotics available to a patient and they would have more options for treatment depending on their personal allergies. It is clear from studies done by researchers that slowing down antibiotics and rotating them have reduced patient consumption.

In conclusion, life is constantly changing an evolving which means discoveries are made frequently. Research and technology are highly instrumental in determining the best approach and care for patients. With medicine the goal is to heal an individual and as long as that stays the primary purpose several other antibiotics or even cures could be developed.

## References

Anitbiotic-resistant Definition available at <http://www.medicinenet.com/script/main/art.asp?articlekey=2276>. Accessed November 12, 2014.

## Step 2: The Data: The Development of Antibiotics

Monnet, D. L. (2004). Antibiotic Development and the Changing Role of the Pharmaceutical Industry. The Global Threat of Antibiotic Resistance: Exploring Roads Towards Concerted Action. Available at [http://www.dhf.uu.se/antibiotics\\_participant/new\\_pdf/industry.pdf](http://www.dhf.uu.se/antibiotics_participant/new_pdf/industry.pdf). Accessed December 10, 2004. Figure 1.

### Step 3: The Data: Antibiotic Prescriptions

Seppala, H., et al. (1997). The Effect of Changes in the Consumption of Macrolide Antibiotics on Erythromycin Resistance in Group A Streptococci in Finland. *New England Journal of Medicine* 337: 7, pp. 441-446. Figure 1.

### Step 4: The Data: Antibiotic-resistant Bacteria

Whitney, C. G., et al. (2000). Increasing Prevalence of Multidrug Resistant *Streptococcus Pneumoniae* in the United States. *New England Journal of Medicine* 343: 26, pp. 917-1924. Figure 1.

### Step 5: The Data: Antibiotic Rotation

Toltzis, P., et al. (2002). The Effect of Antibiotic Rotation on Colonization with Antibiotic-Resistant Bacilli in a Neonatal Intensive Care Unit. *Pediatrics* 110: 4, pp. 707-711. Table 1.

### Step 6: The Data: Reducing Antibiotic Prescriptions

Seppala, H., et al. (1997). The Effect of Changes in the Consumption of Macrolide Antibiotics on Erythromycin Resistance in Group A Streptococci in Finland. *New England Journal of Medicine* 337: 7, pp. 441-446. Figure 1.