

The Discovery of Penicillin:  
Breaking Barriers in Medical Treatment

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## Process Paper:

We chose our topic because we are interested in the STEM field and the topic of penicillin felt like a good point where science and history come together. We are researching the discovery of penicillin, a significant antibiotic, and its effects on humanity.

Our research process was the most important part of our project. First, we read encyclopedia articles to get a basic understanding, but we were still left with many questions regarding context and significance. We needed to have the complete story on penicillin, such as who was involved, the production process, and dates. We went through many articles about penicillin that told its story from beginning to end. Then, we needed to find penicillin's significance so we found many articles on many topics from the US National Library of Medicine, such as on penicillin's uses in World War Two and penicillin's first patient. Next, we found primary sources, such as pictures and newspapers to understand how people felt when penicillin was first given to the public. In addition, we found a lecture delivered by Alexander Fleming and used it to learn about his thoughts regarding the discovery. To support our significance, we researched how doctors treated infections before penicillin to emphasize the difference in effectiveness of treatment before and after penicillin. Furthermore, we found census data on the number of lives saved by penicillin, which was another way to support the significance of penicillin. We also found most of the scientific journal articles written by the scientists that created penicillin. Lastly, we realized that we needed to dig deeper and find more ways that penicillin has helped the world other than save lives. We found articles that showed us that penicillin started a whole new era of drug production and how it started a precedent of US involvement. We got more articles and our interviews also supported these significances. With all this research we were able to piece together the full story of penicillin.

We chose a website to share our research because it is a clean and precise way to convey our message. A website also allows us to display videos and audio clips. We started with our thesis and continued in chronological order. To end the website, we displayed our significance pages to end with a bang.

Penicillin was one of the most significant discoveries and has had a crucial impact on humanity. The antibiotic was helpful in treating many diseases and continues to assist the medical field. It broke the barrier that diseases had on human lives as people began recovering from diseases once viewed as death sentences. The discovery of penicillin not only had a great positive impact on the medical community but it also opened up a whole field of study that has resulted in the making of many more life-saving drugs. In addition, the government assistance provided by the United States for the production of penicillin set the precedent of US involvement in the medical community in the future.