Rubella Encyclopedia Article

Rubella

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Rubella Encyclopedia Article.....1

Contents.....2

Rubella.....3

Rubella

Rubella, also known as German measles, is a fairly mild virus infection that generally affects children and young adults. The symptoms include slight fever, swollen lymph glands and a slight skin rash which may or may not be present. The relative mildness of the disease belies the fact that rubella in a pregnant woman can result in tragic consequences for the fetus. If a woman has the disease, especially in the early months of pregnancy, the virus travels through the placenta and affects development of the fetus. Spontaneous abortion occurs in 10 percent of cases, but if the pregnancy comes to term, the newborn infant is likely to be born with heart disease, eye defects, deafness, mental retardation or a combination of these.

The virus that causes rubella was first grown in laboratory culture by Thomas Weller of Harvard and Children's Hospital in Boston. However, an epidemic in the United States in 1964 prompted Paul D. Parkman, a physician who had isolated and propagated the virus, to work on developing an attenuated virus suitable for a vaccine. Working with associates Harry M. Meyer, Jr. and Theodore C. Panos, Parkman developed a vaccine made from attenuated viruses grown in monkey cells. Shortly thereafter, clinical trials were begun in children and women of child-bearing age.

By 1968, three other research groups had begun developing a vaccine for rubella. Stanley A. Plotkin obtained viruses from diploid human cells, while another doctor worked with rabbit cells. At the same time, Maurice R. Hilleman grew attenuated viruses in duck cells, knowing that mammalian cells sometimes contain other viruses that can infect human cells and cause cancer. All of these vaccines were tested and used throughout the 1970s leading to a reduction in cases of rubella, although the Parkman-Meyer vaccine was more virulent and caused more side effects in adults. Since that time, the MMR vaccine has been developed that offers protection against not only rubella, but also measles and mumps. MMR vaccinations are required for school-age children in many states.