

I'm not a bot



List of sulfa drugs

1495: Europeans contract syphilis (*Treponema pallidum*) through contact with Mercury, while Chinese develop boils (furuncles, carbuncles) due to moldy soybean curd and S. American Indians treat malarial fever (*Plasmodium* spp.) with cinchona bark and ward off foot infections. 1630: Europeans use quinine from the cinchona tree to combat malaria (*Plasmodium* spp.). 1877: Louis Pasteur discovers that some microbes inhibit others, including anthrax (*Bacillus anthracis*). 1908: Gelmo synthesizes sulfanilamide, the first sulfonamide. 1908-10: Paul Ehrlich develops selective stains and synthesizes arsphenamine ("606" or Salvarsan), treating syphilis (*T. pallidum*). He coins terms "magic bullet," "chemotherapy," and "chemical knife." 1913: Eisenberg studies the bactericidal properties of azo dyes with sulfonamide grouping. 1924: Gratia & Dath conduct a systematic search for soil microorganisms, discovering actinomycetin from Actinomycetes. 1928/9: Alexander Fleming discovers that mold *Penicillium notatum* inhibits *S. aureus* colonies and later isolates penicillin, earning the Nobel Prize. 1935: G. Domagk finds therapeutic value in sulfonamides (sulfur group compounds), demonstrating broad antimicrobial activities. 1939: G. Domagk wins the Nobel Prize for his work on sulfonamides, while Rene Dubos isolates gramicidin and tyrocidin from *Bacillus brevis*, showing activity against gram-positive bacteria. By 1945, pharmacologists have developed over 5,400 derivatives of sulfanilamide. 1944/5: Selman Waksman isolates streptomycin from *Streptomyces griseus* (soil microbes), earning the Nobel Prize and introducing the term "antibiotic." 1945: Florey & Chain reevaluate and characterize penicillin, demonstrating its practical clinical value in preventing death from infection. Given article text here The production of synthetic drugs was still in its infancy at the time when Paul Ehrlich began his search for a cure for syphilis in 1905. Initially, disinfectants such as phenol and cresol were used to combat germs, but these posed significant risks to human tissues. Ehrlich's goal was to create a substance that could selectively target the syphilis parasite without harming human tissues. Through his research, he discovered that certain dyes could be effective in killing parasitic protozoa, such as trypanosomes. These findings eventually led to the development of arsphenamine, an organic arsenic compound, which proved to be a valuable treatment for syphilis and other diseases caused by spiral-shaped bacteria. However, the search for a more effective and safer alternative was ongoing. Other compounds, such as gentian violet, had been found to be effective against certain types of bacteria but were too poisonous to be administered systemically. The discovery of penicillin in the 1940s marked a significant breakthrough in chemotherapy, but it wasn't until the introduction of sulfonamido-crysoidin, or "prontosil," in 1935 that practical progress was made. This compound proved effective against streptococcal infections and paved the way for further advancements in the field of chemotherapy. Despite this success, no single drug has yet been found to be effective against all types of bacteria, highlighting the importance of continued research into selective antimicrobial agents. Infections caused by streptococci and other bacteria were long a formidable foe for medicine, but the discovery of prontosil offered new hope. Unlike its effect in a test-tube, prontosil was only effective against these pathogens when administered to an infected individual or animal. The chemical compound underwent significant changes as it broke down into sulfanilamide within the body, which proved itself to be more cost-effective and simpler to produce than the original drug. Sulfanilamide's applications extended beyond streptococcal infections, also showing promise in treating epidemic meningitis, gonorrhea, and various parasitic diseases. Subsequent modifications led to the creation of more potent compounds such as sulfapyridine, sulfadiazine, and sulfaquinoxidine. The soldiers' health was compromised due to inadequate dosage of Atabrine. To ensure they took the yellow tablets, medics supervised them while they were being administered. Plasma is the liquid part of blood that contains water and essential proteins. It plays a crucial role in maintaining blood pressure, clotting, and immunity. In 1938, Dr. Charles Drew developed a plasma collection system which made it possible to store blood for longer periods. During World War II, blood was in high demand due to heavy casualties. The Blood for Britain project collected 14,500 units of plasma within five months under Dr. Drew's supervision. His research improved the effectiveness of plasma transfusions on battlefields. In response to concerns about U.S. involvement in World War II, the American armed forces requested a similar blood collection system. Dr. Drew became the Director of the first American Red Cross Blood Bank and established an efficient plasma collection program that remains a model for today's volunteer blood donation initiatives. Dried plasma was instrumental in reducing deaths from bleeding on World War II battlefields. By September 1945, the American Red Cross had collected over 13 million units of blood, most of which were converted into plasma. General Dwight D. Eisenhower praised the contributions of blood and plasma donors. At war's end, nearly 1.3 million plasma units were returned to the American Red Cross and made available to civilian hospitals. The use of morphine as a painkiller during World War II was widespread, with opium poppy plants mainly grown in Turkey and India providing the source material. The ancient Chinese had already experienced addiction issues from opium smoking in the 17th century. However, advances like the hypodermic syringe in the American Civil War made morphine injections a reliable option. Squibb developed a morphine syrette, a small tube-like device containing morphine that could be easily administered by medics on the front lines. This innovation allowed for controlled dosing and reduced addiction risks compared to smoking or eating opium. The use of morphine syrettes became standard in medical treatment during World War II, with injections often combined with physical exhaustion to induce unconsciousness, allowing patients to recover in hospitals. Experimental research with arsenic-based treatments provided a significant boost to further studies in chemotherapy due to their successes in treating spirochaetic and trypanosome infections like relapsing fever, syphilis, and African sleeping sickness. Other metal salts have also shown promise in addressing specific types of inflammation - for instance, antimony salts have been effective against certain tropical diseases. Notably, Bayer's "Plasmochin" and "Atabrin" preparations for malaria and their "Germanin" (Bayer 205) treatment for tropical sleeping sickness have yielded impressive results. Bismuth salts have also emerged as a reliable remedy for syphilis, largely replacing mercury. However, despite these advancements in targeting protozoa and spirochaete-related diseases, little progress had been made in using chemical substances to combat infections caused by true bacteria like cocci and bacilli. As a result, serotherapy was considered the most practical approach for treating such infections. The development of gold salt treatments marked an important phase in chemotherapy's evolution. While these salts showed some efficacy against bacterial infections, their effects were inconsistent and often marred by severe poisoning symptoms when high doses were administered. In recent years, various drug manufacturers have endeavored to create less toxic yet effective gold preparations. The I.G. Farbenindustrie Aktiengesellschaft (Igefa) research laboratories at Elberfeld also investigated gold preparations as part of a broader effort to find an agent effective against streptococcal infections. This research was led by Professor Gerhard Domagk and involved Dr. Mietzsch and Dr. Klarer, who synthesized various chemical compounds including sulphonamide compounds for testing. Prontosil was tested among other substances and subsequently named after its discoverer, Domagk. The first experiments with Prontosil were conducted in December 1932. Mice infected with a specific strain of haemolytic streptococci were given the bacterial strain 10 times lethal dose plus Prontosil 1 1/2 hours later. On December 24th, 1932, it was found that mice treated with Prontosil survived, whereas controls died. This led to the discovery of Prontosil's effectiveness in treating various infections. The latest breakthroughs in medical treatment point to sulphonamide preparations as the top solution for urinary tract infections caused by colon bacteria, also showing promise against undulant fever and other bacterial infections. The discovery of Prontosil has opened up new possibilities for treating infectious diseases. Despite initial expectations, efforts to combine sulphonamides with other compounds have led to rapid successes. Notably, Uliron, a new active sulphonamide preparation, has been developed, and a compound of pyridine and sulphonamide, known as M. & B. 693 or Sulphapyridine, has proven effective against pneumonia. Simultaneously, researchers are investigating the mode of action and side effects of these preparations. This unprecedented expansion in chemotherapy was made possible by the groundwork laid by Domagk and his colleagues, who have paved the way for effective treatment of previously fatal diseases. Reports from around the world are pouring in with remarkable therapeutic results from sulphonamide preparations, saving thousands of lives each year. The Nobel Prize awarded to Gerhard Domagk in 1939 for discovering the antibacterial effects of Prontosil has honored a discovery that represents a revolution in medicine. Despite initial challenges, Professor Domagk's work has been recognized with the gold medal and diploma in 1947. I am proud to inform you that our esteemed institution, The Caroline Institute, has chosen to confer upon you the Nobel Prize in recognition of your groundbreaking work with sulphonamides. Your research has ushered in a revolutionary era in combating infectious diseases, a vision initially conceived by Paul Ehrlich through his pioneering use of Salvarsan in a remarkable instance. With your tireless efforts, this concept has evolved into an acknowledged reality, fostering optimism that the future holds promise for the eradication of infectious diseases via chemical compounds. On behalf of The Caroline Institute, I extend heartfelt congratulations and kindly request that you accept the medal and diploma presented to you by His Majesty the King.

Examples of sulfa based drugs. List of common sulfa drugs. List of sulfa drugs antibiotics. List of drugs that have sulfa in them. Sulfa drug. List of drugs to avoid with sulfa allergy. Complete list of sulfa drugs. List of sulfa drugs pdf. List of sulfa based drugs. List of sulfa containing drugs. Sulfa allergy list of sulfa drugs.