

## Timeline of Clinical Research Atrocities

- 1900: Walter Reed injects 22 Spanish immigrant workers in Cuba with the agent for yellow fever paying them \$100 if they survive and \$200 if they contract the disease.
- 1906: Congress passes the Pure Food and Drug Act creating the Food, Drug and Insecticide Administration later shortened to the FDA.
- 1906: Dr. Richard Strong, a professor of tropical medicine at Harvard, experiments with cholera on prisoners in the Philippines killing thirteen.
- 1915: U.S. Public Health Office induces pellagra in twelve Mississippi prisoners.
- 1919-1922: Testicular transplant experiments on five hundred prisoners at San Quentin.
- 1931: 75 children die in Lubeck, Germany from pediatrician's experiment with tuberculosis vaccine.
- 1931: Germany issues "Regulation on New Therapy and Experimentation."
- 1932-1972: U.S. Public Health Service study in Tuskegee, Alabama of more than 400 black sharecroppers observed for the natural course of untreated syphilis.
- 1939: Third Reich orders births of all twins be registered with Public Health Offices for purpose of genetic research.
- 1939-1945: Dr. Ishii experiments on thousands of inmates at Ping Fan Prison in Manchuria, known as Unit 731.
- 1941: Sterilization experiments at Auschwitz.
- 1941-1945: Typhus experiments at Buchenwald and Natzweiler concentration camps.
- 1942: High altitude or low pressure experiments at Dachau concentration camp.
- 1942: Harvard biochemist Edward Cohn injects sixty-four Massachusetts prisoners with beef blood in U.S. Navy-sponsored experiment.
- 1942-1943: Freezing experiments at Dachau concentration camp.
- 1943: Freezing experiment on sixteen mentally disabled patients at University of Cincinnati Hospital.
- 1942-1944: U.S. Chemical Warfare Service conducts mustard gas experiments on thousands of servicemen.
- 1942-1945: Malaria experiments at Dachau concentration camp on more than twelve hundred prisoners.
- 1943-1944: Phosphorus burn experiments at Buchenwald concentration camp.
- 1944: Manhattan Project injection of 4.7 micrograms of plutonium into soldiers at Oak Ridge.
- 1944: Seawater experiment on sixty Gypsies given only saltwater to drink at Dachau concentration camp.
- 1944-1946: University of Chicago Medical School professor Dr. Alf Alving conducts malaria experiments on more than 400 Illinois prisoners.
- 1945: Manhattan Project injection of plutonium into three patients at Billings Hospital at University of Chicago.
- 1946: Opening of Nuremberg Doctors Trial.
- 1947: Judgment at Nuremberg Doctors Trial including ten point Nuremberg Code which begins: "The voluntary consent of the human subject is absolutely essential."
- 1949-1953: Atomic Energy Commission studies of mentally disabled school children fed radioactive isotopes at Fernald and Wrentham schools.
- 1953: Newborn Daniel Burton rendered blind at Brooklyn Doctor's Hospital during study on RLF and the use of oxygen.



1953-1957: Oak Ridge-sponsored injection of uranium into eleven patients at Massachusetts General Hospital in Boston.

1953-1970: U.S. Army experiments with LSD on soldiers at Fort Detrick, Md.

1954-1974: U.S. Army study of 2300 Seventh-Day Adventist soldiers in 150 experiments code named "Operation Whitecoat."

1956: Dr. Albert Sabin tests experimental polio vaccine on 133 prisoners in Ohio.

1958-1960: Injection of hepatitis into mentally disabled children at Willowbrook School on Staten Island in an attempt to find vaccine.

1958-1962: Spread of radioactive materials over Inupiat land in Point Hope, Alaska in Atomic Energy Commission field study code named "Project Chariot."

1959-1962: Harvard Professor Henry A. Murray conducts psychological deconstruction experiment on 22 undergraduates including Theodore Kaczynski, the result of which, at least according to writer Alton Chase, may have turned Kaczynski into the Unabomber.

1962: Thalidomide withdrawn from the market after thousands of birth deformities blamed in part on misleading results of animal studies; the FDA thereafter requires three phases of human clinical trials before companies can release a drug on the market.

1962-1980: Pharmaceutical companies conduct phase one safety testing of drugs almost exclusively on prisoners for small cash payments.

1962: Injection of live cancer cells into elderly patients at Jewish Chronic Disease Hospital in Brooklyn.

1962: Stanley Milgram conducts obedience research at Yale University.

1963: NIH supported researcher transplants chimpanzee kidney into human in failed experiment.

1963-1973: Dr. Carl Heller, a leading endocrinologist, conducts testicular irradiation experiments on prisoners in Oregon and Washington giving them \$5 a month and \$100 when they receive a vasectomy at the end of the trial.

1966: U.S. Army introduces bacillus globigii into New York subway tunnels in field study.

1971: Dr. Zimbardo conducts Psychology of Prison Life experiment on students at Stanford University.

1987: Supreme Court decision in *United States v. Stanley*, 483 U.S. 669, holding soldier given LSD without his consent could not sue U.S. Army for damages.

1991: World Health Organization announces CIOMS Guidelines which set forth four ethical principles: respect for persons, beneficence, nonmaleficence and justice.

1998: Three children die at St. Jude Children's Hospital in Memphis during participation in clinical trial for acute lymphoblastic leukemia.

1999: Veterans Administration shuts down all research at West Los Angeles Medical Center after allegations of medical research performed on patients who did not consent.

1999: Year-old Gage Stevens dies at Children's Hospital in Pittsburgh during participation in Propulsid clinical trial for infant acid-reflux.

1999: 18-year-old Jesse Gelsinger dies after being injected with 37 trillion particles of adenovirus in gene therapy experiment at University of Pennsylvania. His death triggers a still-ongoing reevaluation of the conflicts of interest plaguing human subject research.

2001: Ellen Roche, a 24 year-old healthy volunteer, dies after inhaling hexamethonium in an asthma study at Johns Hopkins Medical Center. OHRP shuts down all research at Hopkins for four days.

2003: FDA reports that, for the past four years, experiments on cancer patients were conducted at Stratton Veterans Affairs Medical Center by Paul Kornak who had no valid medical license and who repeatedly altered data and committed numerous violations of the protocols..