



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

Scientific Integrity at Risk: The Food and Drug Administration

About the Food and Drug Administration (FDA)

The federal government first began to address food and drug safety in 1862, when President Abraham Lincoln appointed Charles M. Wetherill as the first employee of the United States Department of Agriculture's Bureau of Chemistry. The agency traces its modern history back to 1906 with the passage of the Food and Drugs Act, legislation made necessary by rampant pharmaceutical misconduct and highly unsanitary food production techniques. This year, the FDA celebrates the hundredth anniversary of its regulatory authority.

The U.S. Food and Drug Administration (FDA) is responsible for protecting and advancing public health through the regulation of drugs, food, vaccines, medical devices, cosmetics, and the blood supply. According to the FDA, the agency monitors more than \$1 trillion worth of consumer goods annually—products that account for 25 cents of every American consumer dollar spent.

By 2001, The FDA's scientific and non-scientific staff had expanded to 9,100, with an annual budget of \$1.294 billion. Two thirds of FDA employees work in the Washington, D.C., area, while one third work in more than 150 field offices and laboratories.

The FDA mission statement calls for "protecting the public health by assuring the safety, efficacy, and security" of the products it approves. The agency is also charged with "helping the public get the accurate, science-based information they need to use medicines and foods to improve their health." Unfortunately, scientists at the agency are concerned that science no longer plays this crucial role in the FDA's regulatory decisions.

A Few Recent Examples of Abuses of Science at the FDA

Anti-depressants

In February 2004, the Food and Drug Administration prevented one of its top experts from testifying at an agency public hearing convened to address the potential risk of increased suicide rates amongst children who take antidepressants.ⁱ Dr. Andrew Mosholder, the agency's lead investigator expert in charge of an FDA analysis of 22 studies on children and anti-depressants, had concluded that children taking certain anti-depressants were twice as likely to become suicidal compared to those given a placebo. After being scheduled to present at the public hearing, Dr. Mosholder was removed from the agenda by the FDA. The House Energy and Commerce Subcommittee on Oversight and Investigations released documents in September 2004 that showed that the FDA had forced Dr. Mosholder to remove information about the risks associated with antidepressants from records he was submitting to Congress and, additionally, to conceal the deletions.ⁱⁱ

Vioxx

In September 2004, pharmaceutical company Merck pulled their pain medication Vioxx from the market after clinical trials showed an increased risk of heart attack and stroke in those taking the pill.ⁱⁱⁱ Subsequently, Dr. David Graham, associate science director of the Office of Drug Safety at the Food and Drug Administration who was working on a separate agency review of Vioxx, alleged that FDA officials tried to suppress and delay the results of his work that came to a similar conclusion.^{iv} Dr. Graham claimed that the agency was "virtually incapable of protecting America"^v and "the review and clearance process had been turned into a battleground, full of contention and intimidation because our managers, the people who fill out our performance evaluations, had created a system where it was taking a great risk to stand firm in our

scientific beliefs."^{vi} His study indicates that between 88,000 and 139,000 people had heart attacks or strokes and about 55,000 died as a result of taking the pain medication.^{vii}

Emergency Contraception

In 2003, an FDA science advisory panel voted 23 to 4 to recommend making Plan B emergency contraception available over the counter.^{viii} An internal agency memo suggested that FDA professional staff were overruled by senior officials.^{ix} Numerous FDA officials and medical advisers to FDA involved in the approval process call the move an almost unprecedented repudiation of government scientific expertise. The drugmaker submitted a revised proposal, prompted by the FDA, to give over the counter access to women 17 and older. In August 2005, then-acting FDA Commissioner Lester Crawford delayed a decision indefinitely by sending the application into a rule-making process. A subsequent Government Accountability Office report deemed the Plan B approval process highly unusual, with an atypical level of involvement by senior FDA officials.^x

Ketek

In April 2001, a FDA panel recommended 7 to 3 to approve the Sanofi-Aventis drug Ketek (telithromycin) for streptococcus pneumonia, which affects approximately 4 million Americans annually.^{xi} Since concerns remained over liver toxicity, Aventis conducted "Study 3014" at the request of the FDA, a study that was later found to be fraudulent. Doctors were receiving \$400 for each patient they signed up, signatures and patient data were forged, and ninety percent of the participants at one study site did not even receive the drug.^{xii} Even after a report in the *Annals of Internal Medicine* linked serious liver toxicity to Ketek, the FDA continued to cite Study 3014 in publicly released safety information and stated that "based on the pre-marketing clinical data it appeared that the risk of liver injury with Ketek was similar to that of other marketed antibiotics."^{xiii} Ketek was approved in 2004 for treatment of sinusitis, bronchitis and pneumonia.^{xiv} In 2006, officials in the Office of Drug Safety (ODS) found 110 cases of liver problems since the 2004 approval of Ketek, including liver failure and four deaths, and recommended that the FDA withdraw Ketek from the market.^{xv} Agency officials also estimated that Ketek caused acute liver failure at about four times the rate of other antibiotics.^{xvi} Despite recommendations and warnings from agency scientists, the FDA allowed pediatric trials using children as young as six months to proceed.^{xvii} Meanwhile, the FDA ignored congressional requests for administrative files, a briefing, and interviews with special agents investigating the matter. The FDA also failed to provide an April 27, 2006 letter informing staff of their right to speak to and cooperate with Congress.^{xviii} Early in June 2006, Sanofi-Aventis finally "paused" pediatric clinical trials of Ketek.^{xix}

ⁱ G. Harris, "Expert Kept from Speaking at Antidepressant Hearing", *New York Times*, April 16, 2004

ⁱⁱ S. Vedantam, "FDA Told Its Analyst to Censor Data on Antidepressants", *Washington Post*, September 24, 2004

ⁱⁱⁱ "Merck Withdraws Vioxx; FDA Issues Public Health Advisory", *FDA Consumer Magazine*, November-December Issue, 2004

^{iv} M. Kaufman, "FDA Official Alleges Pressure to Suppress Vioxx Findings," *Washington Post*, October 8, 2004

^v G. Harris, "FDA Failing in Drug Safety, Official Asserts," *New York Times*, November 19, 2004

^{vi} G. Harris, "Drug-Safety Reviewer Says FDA Delayed Vioxx Study," *New York Times*, November 4, 2004

^{vii} *Ibid.*

^{viii} FDA, Nonprescription Drugs Advisory Committee and the Advisory Committee for Reproductive Health Drugs, December 16, 2003, Transcript available at www.fda.gov/ohrms/dockets/ac/03/transcripts/4015T1.htm

^{ix} M. Kaufman, "Staff Scientists Reject FDA's Plan B Reasoning," *Washington Post*, June 18, 2004

^x M. Kaufman, "Decision on Plan B Called Very Unusual," *Washington Post*, October 13, 2005

^{xi} Wire Reports, "Panel clears drug for pneumonia, urges study," *The Dallas Morning News*, 3rd ed., April 27, 2001.

^{xii} C. Gibson and B. Ross, "Drug Safety; Safety Questions," *ABC World News Tonight* 6:38 PM EST, ABC News Transcripts, June 14, 2006.

^{xiii} *Ibid.*, information in letter from <http://www.fda.gov/cder/drug/infopage/telithromycin/qa.htm>.

^{xiv} Associated Press, "FDA approves new antibiotic; Ketek added to medical arsenal to fight pneumonia," *The Houston Chronicle*, April 2, 2004.

^{xv} G. Harris, "Halt is Urged for Trials of Antibiotic in Children," *New York Times* June 8, 2006.

^{xvi} *Ibid.*

^{xvii} *Ibid.*

^{xviii} "FDA Finally Cooperates With Grassley's Ketek Review" *Drug Industry Daily*, Vol. 5 No. 100, May 22, 2006.

^{xix} "Sanofi-aventis Announces Update to Ketek ® (Telithromycin) U.S. Prescribing Information" PR Newswire US, 29 June 2006.