A LOOK INTO U.S. DRUG SUPPLY SAFETY

The Pew Health Group's report After Heparin: Protecting Consumers from the Risks of Substandard and Counterfeit Drugs addresses the implications of a U.S. pharmaceutical supply that has become increasingly globalized, outsourced and complex. Medicines originate in factories all over the world, moving into the American marketplace through networks that can involve numerous processing plants, manufacturers, suppliers, brokers, packagers and distributors.

The number of drug products made **OUTSIDE** of the United States from 2001 to 2008.1

The United States imports the most pharmaceuticals and medicines² by weight from China: **188 MILLION POUNDS** in 2009.3

Chinese pharmaceutical raw material exports to the U.S. represent a \$2.2 billion business **EACH YEAR.**4

of the pharmaceutical executives who responded to a 2010 survey consider raw material sourcing from foreign suppliers to be a SERIOUS OR MODERATE RISK.5



80 PERCENT of active ingredients

and bulk chemicals used in U.S. drugs come

from foreign countries,11

U.S. patients are manufactured abroad. 12,13

How often, on average, the Food and Drug Administration inspects drug manufacturing plants:8 DOMESTIC EVERY **2-3 YEARS** SITES **EVERY FOREIGN** SITES 9 YEARS

10% ACTIVE DRUG U.S.

ONLY 10% of the active pharmaceutical ingredient factories listed in generic drug applications are in the United States.9

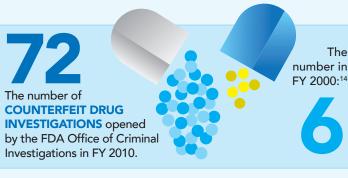
40% are located in India.



The FDA can order the recall of food but **NOT DRUGS**.

94% of American voters want the FDA to have this authority.10







Wholesaler

The shipment of your birthday present can be tracked from distribution to delivery, **BUT** there is no comprehensive national system to track a package of drugs from the manufacturing plant to your pharmacy.

PEW PRESCRIPTION PROJECT

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REFERENCES

- ¹ FDA estimates. Autor, Deborah M., Director, CDER Office of Compliance. U.S. Food and Drug Administration. "Globalization: Challenges and Recent Case Studies." Presentation at DCAT Week, March 18, 2009. http://www.dcat.org/pages/internal_DCATWeekRecap.aspx. Accessed May 4, 2011.
- ² The category of pharmaceuticals and medicines is so defined by the North American Industry Classification System (NAICS). NAICS 3254: Pharmaceuticals and medicines may include substances for both human and veterinary use.
- ³ Source of original data: United States Census Bureau, Foreign Trade Division
- ⁴ NSD Bio Group. Potential Health & Safety Impacts from Pharmaceuticals and Supplements Containing Chinese-Sourced Raw Ingredients. Prepared for the United States China Economic and Security Review Commission. April 2010. http://www.uscc.gov/researchpapers/2010/NSD_BIO_Pharma_Report--Revised_FINAL_for_PDF--14_%20April_2010.pdf accessed April 14, 2010.
- ⁵ Axendia Report. Achieving Global Supply Chain Visibility, Control & Collaboration in Life Sciences: 'Regulatory Necessity; Business Imperative". October 2010.
- ⁶ U.S. Food and Drug Administration. Update to FDA Alert about Stolen Insulin. August 26, 2009. http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm180320.htm. Accessed November 12, 2010.
- According to an FDA affidavit. Ciolek, Michelle M. Special Agent, Office of Criminal Investigations, Food and Drug Administration. Affidavit in support of search warrant.. July 21, 2009. USA v. Altec Medical Inc and RX healthcare Inc. Document number: 8:09-cr-00814-WMC
- ⁸ U.S. Government Accountability Office (September 2010). Drug Safety: FDA Has Conducted More Foreign Inspections and Begun to Improve Its Information on Foreign Establishments, but More Progress Is Needed. Appendix 1: Comments from the Department of Health and Human Services (Publication No. GAO-10-961).
- 9 Based on FDA estimated data. Woodcock, Janet, MD. Director, Center for Drug Evaluation and Research, U.S. Food and Drug Administration. "CDER Workload and Resources." Presentation at Stakeholder Meeting on Prescription Drug User Fee Act (PDUFA) Reauthorization. August 5, 2010.
- ¹⁰ Hart Research Associates / Public Opinion Strategies. Americans' Attitudes On Drug Supply Safety. March/Arpril 2010.
- ¹¹ FDA estimates. U.S. Government Accountability Office (September 2010). Drug Safety: FDA Has Conducted More Foreign Inspections and Begun to Improve Its Information on Foreign Establishments, but More Progress Is Needed. Appendix 1: Comments from the Department of Health and Human Services (Publication No. GAO-10-961)..
- FDA estimates. Hamburg, Margaret. Commissioner, U.S. Food and Drug Administration. Testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, U.S. House of representatives. April 13, 2011. http://republicans.energycommerce.house.gov/Media/file/Hearings/Oversight/041311/Hamburg.pdf. Accessed April 27, 2011.
- 13 FDA estimates. U.S. Government Accountability Office (March 1998). Food and Drug Administration: Improvements Needed in the Foreign Drug Inspection Program (Publication No. GAO/HEHS-98-21).
- ¹⁴ Bernstein, Ilisa. Deputy Director, Office of Compliance, Center for Drug Evaluation and Research, FDA. Presentation at the Pew Health Group conference "After Heparin: A Roundtable on Ensuring the Safety of the U.S. Drug Supply." March 15, 2011.