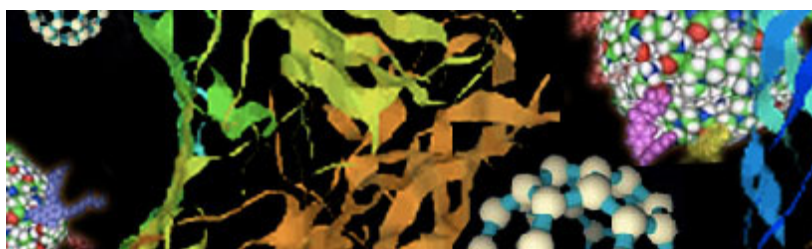


Nanotechnology Programs at FDA



The U.S. Food and Drug Administration (FDA) regulates a wide range of products, including foods, cosmetics, drugs, devices, veterinary products, and tobacco products some of which may utilize nanotechnology or contain nanomaterials. Nanotechnology allows scientists to create, explore, and manipulate materials measured in nanometers (billionths of a meter). Such materials can have chemical, physical, and biological properties that differ from those of their larger counterparts.

FDA Activities

FDA staff are involved in many activities intended to build regulatory science knowledge, facilitate collaborations and partnerships with stakeholders, and establish a flexible, product-focused, science-based approach to regulation of products that involve nanomaterials or applications of nanotechnology. We undertake these efforts to facilitate innovation, help ensure timely and clear communication regarding FDA's nanotechnology activities, and to fulfill FDA's mission to safeguard the public's health. For more information about specific activities, see:

- Nanotechnology Task Force (</science-research/nanotechnology/nanotechnology-task-force>)
- Nanotechnology Task Force Report (</science-research/nanotechnology/nanotechnology-task-force-report-2007>)
- Nanotechnology Guidance Documents (</science-research/nanotechnology/nanotechnology-guidance-documents>)
- Nanotechnology Partnerships at FDA (</science-research/nanotechnology/nanotechnology-partnerships-fda>)

National Activities

FDA is a member agency in the National Nanotechnology Initiative (NNI) (<https://www.nano.gov/>), a federal research and development program established to coordinate the multi-agency efforts in nanoscale science, engineering, and technology. The goals of the NNI are to:



1. Maintain a world-class research and development program aimed at realizing the full potential of nanotechnology;
2. Facilitate transfer of new technologies into products for economic growth, jobs, and other public benefit;

3. Develop educational resources a skilled workforce, and the supporting infrastructure and tools to advance nanotechnology; and
4. Support responsible development of nanotechnology.


FDA Centers are conducting research within programs that support their specific regulatory priorities for nanotechnology products. Participation in the NNI provides FDA and other regulatory and research funding agencies the opportunity to define their research needs.

International Activities

FDA works with international stakeholders, including regulatory agencies, to share perspectives and information on the regulation of nanotechnology products. FDA also participates in international forums including the:

- International Organization for Standardization (ISO) (<https://www.iso.org/home.html>)  (<http://www.fda.gov/about-fda/website-policies/website-disclaimer>) disclaimer icon (<http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/default.htm>)
- Organisation for Economic Co-operation and Development (OECD) (<http://www.oecd.org/index.htm>)  (<http://www.fda.gov/about-fda/website-policies/website-disclaimer>) disclaimer icon (<http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/default.htm>)

ResourcesForYou

- FDA Publications (/science-research/nanotechnology/selected-fda-publications-related-application-characterization-effects-and-evaluation-nanotechnology)
- FDA's Approach to Regulation of Nanotechnology Products (/science-research/nanotechnology/fdas-approach-regulation-nanotechnology-products)
- Nanotechnology Fact Sheet (/science-research/nanotechnology/nanotechnology-fact-sheet)
- Article by FDA Commissioner Margaret A. Hamburg in Science, April 2012 (<http://www.sciencemag.org/lookup/doi/10.1126/science.1205441>)  (<http://www.fda.gov/about-fda/website-policies/website-disclaimer>)
- Nanotechnology Regulatory Science Research Plan (/science-research/nanotechnology/2013-nanotechnology-regulatory-science-research-plan)

Related Links

- FDA Response to Citizen Petition filed by International Center for Technology Assessment et al. (2012) (<http://www.regulations.gov/#!documentDetail;D=FDA-2006-P-0213-0013>)

FDA Nano Programs

- Office of the Commissioner (/science-research/nanotechnology/office-commissioner-nanotechnology-programs)

- [Center for Biologics Evaluation and Research \(/science-research/nanotechnology/center-biologics-evaluation-and-research-nanotechnology-programs\)](#)
- [Center for Drug Evaluation and Research \(/science-research/nanotechnology/center-drug-evaluation-and-research-nanotechnology-programs\)](#)
- [Center for Devices and Radiological Health \(/science-research/nanotechnology/center-devices-and-radiological-health-nanotechnology-programs\)](#)
- [Center for Food Safety and Applied Nutrition \(/science-research/nanotechnology/center-food-safety-and-applied-nutrition-nanotechnology-programs\)](#)
- [Center for Veterinary Medicine \(/science-research/nanotechnology/center-veterinary-medicine-nanotechnology-programs\)](#)
- [National Center for Toxicological Research \(/science-research/nanotechnology/national-center-toxicological-research-nanotechnology-programs\)](#)
- [Office of Regulatory Affairs \(/science-research/nanotechnology/office-regulatory-affairs-nanotechnology-programs\)](#)