



## HEALTH IN ALL POLICIES: FOOD

### Support Safe Food Production

Safe food production and processing practices help reduce animal-to-human disease transmission and crop diseases. Good agricultural and food production policies that include health considerations and take a Health in All Policies approach can lead to safer and healthier food.

#### Changes in Food Production

Over the last 50 years, the method of producing food has shifted dramatically from small scale farming methods to a system of large, intensive operations that focuses on efficiency, high volume production, and profitability.<sup>1</sup> Examples of this are seen in concentrated animal feeding operations (CAFOs), where large number of animals are raised in confined areas.<sup>2</sup> With the changing food industrial complex, newer health risks have also emerged, warranting a more targeted focus on food safety and worker health in food production policies. To keep up with these changes, the food safety regulatory system, which is diverse and spans multiple agencies, also has to streamline its processes and delineate roles and responsibilities to assist with effective communication and coordination between the various players involved in food safety.<sup>3</sup>

Most state governments have at least some role in regulating food safety, often working through their health agencies and agriculture departments. States are the primary link between federal agencies and on-the-ground efforts to respond to illness outbreaks, and they are playing an increasingly larger role in inspecting food manufacturing facilities and farms.

Agriculture policies that influence food safety do not always take health into consideration. In several states, the state health agency's role is limited because food safety regulation is under the state agriculture department's purview exclusively. The U.S. Department of Agriculture/Food Safety and Inspection Services (USDA/FSIS) monitors state inspection programs, which inspect meat and

poultry products sold only within the state in which they were produced. The 1967 Wholesome Meat Act and the 1968 Wholesome Poultry Products Act require state inspection programs to be "at least equal to the federal inspection program."<sup>4</sup> If states choose to end their inspection programs or cannot maintain this standard, FSIS must assume responsibility for inspection within that state. As of January 17, 2014 only 27 states have meat and poultry inspection programs. The remaining states have given up their meat or poultry inspection programs, or both.<sup>5</sup> As a result, states may not receive timely information on meat- and poultry-related inspections and recalls.<sup>6</sup> This division of food safety responsibilities, along with privacy restrictions, has at times resulted in a breakdown of communications between the various federal, state, and local agencies during a foodborne disease outbreak.

#### Confidentiality Agreements Between FDA and State Agencies

The Food and Drug Administration (FDA) has oversight of 80 percent of the U.S. food supply, but is legally bound to only share certain non-public information with regulatory partners who have signed a non-disclosure and confidentiality agreement. Until an agreement is in place, information may not be shared in a timely manner, preventing effective intelligence gathering and an integrated response.

In an effort to improve communication and share data, especially during a foodborne outbreak, FDA's Division of Federal-State Relations coordinates confidentiality agreements, also called 20.88 agreements, for state and local government agencies.<sup>7,8</sup>

Under the 20.88 agreement, FDA can rapidly share non-public information, including

confidential commercial information and FDA pre-decisional information, with local and state agencies responsible for food inspection programs and laboratories regarding food-related product information, inspections, enforcement actions, and foodborne illness investigation data and traceback information.

According to FDA's latest estimates, just over half of STHAs are covered under a 20.88 confidentiality agreement or through a commissioning process. FDA's goal is to have every state covered under this confidentiality agreement to aid in a coordinated response effort in the event of a foodborne outbreak.

### Improving Food Production through a One Health Approach

The health of humans, animals, and crops plays a pivotal role in ensuring that food remains safe. The increasingly complex nature of food production underscores the need for a comprehensive One Health approach to food safety.<sup>9</sup>

The One Health approach to food safety has been defined as “the collaborative effort of multiple disciplines—working locally, nationally, and globally—to attain optimal health for people, animals and the environment.”<sup>6</sup> Partners in this approach include federal, state, and local health and agricultural staff, veterinarians, medical doctors, and academics. One Health is an evolving, interdisciplinary way of approaching complex health issues through recognizing the interconnectedness of human health, animal health, and the environment.<sup>9</sup>

This concept can be applied to alleviate problems in food production involving large livestock herds, flocks of birds, or schools of fish that are raised in close quarters with farm workers, which may promote ideal conditions for disease emergence and spread. The paradigm shift to One Health can help reveal important insights into sources, reservoirs, and factors underlying emergence of infectious diseases; trace and disrupt pathways that lead to food contamination; and contribute to creating systems needed to anticipate and prevent adverse health impacts associated with emergence and spread of novel, emerging, or

reemerging foodborne diseases.<sup>6</sup> These insights can inform efforts both to reduce contamination for a safer end product, as well as farm and ranch workers' risks and exposures.

The Food Safety Modernization Act incorporates One Health principles by recognizing the advantages of developing an integrated, whole systems approach to food safety. One Health is also central to FDA's overall approach to improving food safety. For example, FDA's Office of Foods and Veterinary Medicine was created to integrate its activities with FDA's Center for Food Safety and Applied Nutrition and Center for Veterinary Medicine.<sup>9</sup>



### Reducing Drug Residues in Milk and Cull Dairy Cows

Preventing drug contamination of milk and meat is a critical daily function for dairy farmers and producers. Drug residues in meat and dairy products occur because of inadequate farm management practices, such as failure to maintain treatment records or identify treated animals. Although beta-lactam drugs are routinely tested, other drugs that are used on dairy farms are not tested. According to a recent survey, dairy cull cows accounted for 8 percent of all cattle slaughtered and were responsible for 90 percent of cattle violative residues from inspector-generated samples.

FDA accepts no drug residues in milk or meat. The Grade “A” Pasteurized Milk Ordinance that state regulatory agencies use to implement their grade “A” milk programs requires that all bulk milk tankers be sampled and analyzed for

beta-lactam drug residues before the milk is processed. When a bulk milk pickup tanker is found to be positive for drug residues, the regulatory agency of the state in which the testing was conducted will oversee the disposal of the raw milk.<sup>10</sup> USDA's Food Safety and Inspection Service has also implemented a program at slaughter facilities to identify the animals most likely to have drug residues. Animals that display signs of injury, injection site lesions, or signs of illness are tested and withheld from slaughter.<sup>11</sup>

### Programs & Guidance to Reduce Drug Residues

Health agencies can help reduce the risk of drug residues by promoting judicious use programs in the poultry, cattle, and dairy industry. These programs represent federal and state efforts to help safeguard the public's health.

#### *Food Animal Drug Residue Avoidance Databank (FARAD)*

FARAD is a congressionally-mandated risk-management program that is supported by the USDA. This computer-based decision support system is designed to provide producers, extension specialists, and veterinarians with practical information on how to avoid environmental contaminant residues and antibiotic residues in food.<sup>13</sup>

#### *National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS)*

NARMS is a U.S. public health surveillance system that tracks antimicrobial resistance in foodborne and other enteric bacteria. NARMS is an interagency partnership among CDC, FDA, USDA, and state and local health departments. In 2004, NARMS launched a program called [Get Smart: Know When Antibiotics Work on the Farm](#) to promote appropriate antibiotic use in veterinary medicine and animal agriculture.<sup>14</sup>

#### *The Judicious Use of Medically Important Antimicrobial Drugs in Food-Producing Animals*

In 2012, FDA released a [final guidance for industry](#) that recommends the judicious use of therapeutic antibiotics as a part of good veterinary practice and the phasing out of certain antibiotics used to enhance animals' growth or feed efficiency. This guidance helps veterinarians, farmers, and animal producers take steps to protect public health and properly use medically important antibiotics in food-producing animals.<sup>15</sup>

<sup>1</sup> Pew Commission on Industrial Farm Animal Production. "Putting Meat on the Table: Industrial Farm Animal Production in America." Available at: [http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Industrial\\_Agriculture/PCIFAP\\_FINAL.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Industrial_Agriculture/PCIFAP_FINAL.pdf). Accessed 1-10-2014.

<sup>2</sup> EPA. "What is a CAFO?" Available at <http://www.epa.gov/region7/water/cafo/>. Accessed 1-10-2014.

<sup>3</sup> Association of State and Territorial Health Officials. "Integration of the Food Safety System Position Statement." Available at: <http://www.astho.org/Policy-and-Position-Statements/Position-Statement-on-Food-Safety-System-Integration/>. Accessed 1-10-2014.

<sup>4</sup> FDA. "Regulatory Information: Legislation." Available at <http://www.fda.gov/RegulatoryInformation/Legislation/>. Accessed 1-10-2014.

<sup>5</sup> United States Department of Agriculture. Food Safety and Inspection Service. Regulations & Policies. Listing of Participating States. April 2012. Available at: <http://www.fsis.usda.gov/wps/portal/fsis/topics/inspection/state-inspection-and-cooperative-agreements/states-operating-their-own-mpi-programs>. Accessed 1-10-2014.

<sup>6</sup> United States Department of Agriculture, Food Safety and Inspection Service. "Listing of States Without Inspection Programs." Available at: <http://www.fsis.usda.gov/wps/portal/fsis/topics/inspection/state-inspection-and-cooperative-agreements/states-without-state-mpi-programs>. Accessed 1-10-2014.

<sup>7</sup> FDA. "Overview of Commissioning and Information Sharing Agreements with State and Local Government Officials." Available at: <http://www.fda.gov/downloads/ForFederalStateandLocalOfficials/UCM358066.pdf>. Accessed 1-10-2014.

<sup>8</sup> FDA. "20.88 Agreements." Available at: <http://www.fda.gov/ForFederalStateandLocalOfficials/CommunicationbetweenFDASateLocalandTribalOfficials/ucm250396.htm>. Accessed 1-10-2014.

<sup>9</sup> Institute of Medicine. "Improving Food Safety Through a One Health Approach: Workshop Summary." Available at: <http://www.onehealthinitiative.com/publications/IOM%20One%20Health%20Workshop%20Summary.pdf>. Accessed 1-10-2014.

<sup>10</sup> FDA. "Grade 'A' Pasteurized Milk Ordinance, 2009 Revision." Available at: <http://www.fda.gov/downloads/Food/GuidanceRegulation/UCM209789.pdf>. Accessed 1-10-2014.

---

<sup>11</sup> National Milk Producers Federation. "Milk and Dairy Beef Drug Residue Prevention: Producer Manual of Best Management Practices." Available at:

[http://dairylea.com/Portals/0/Documents/2013+Residue+Manual\\_WEB.pdf](http://dairylea.com/Portals/0/Documents/2013+Residue+Manual_WEB.pdf). Accessed 1-10-2014.

<sup>12</sup> Abt Associates. "Country and Economic Assessment for Aflatoxin Contamination and Control in Tanzania." Available at: <http://www.aflatoxinpartnership.org/~media/Files/Projects/Aflatoxin%20microsite/Background/Tanzania%20Country%20Assessment.pdf>. Accessed 1-10-2014.

<sup>13</sup> Food Animal Residue Avoidance Databank. Available at: <http://www.farad.org/>. Accessed 1-10-2014.

<sup>14</sup> CDC. "National Antimicrobial Resistance Monitoring System for Enteric Bacteria." Available at: <http://www.cdc.gov/narms/>. Accessed 1-10-2014.

<sup>15</sup> FDA. "Evaluating the Safety of Antimicrobial New Animal Drugs with Regard to Their Microbiological Effects on Bacteria of Human Health Concern." Available at: <http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/UCM052519.pdf>. Accessed 1-10-2014.