UNITED STATES ANIMAL HEALTH ASSOCIATION - 2006

RESOLUTION: **26 APPROVED**

SOURCE: COMMITTEE ON PUBLIC HEALTH AND RABIES

SUBJECT MATTER: STANDARDIZATION OF POINT SOURCE CONTAMINATION DETECTION, DETERMINATION, AND INVESTIGATION METHODS

.

DATES: MINNEAPOLIS, MINNESOTA, OCTOBER 12-18, 2006

BACKGROUND INFORMATION:

The *Escherichia coli* 0157:H7 outbreak associated with fresh spinach in the Fall of 2006 underscores the need for standardized methods to detect, investigate, and attribute point-source contamination. This outbreak follows numerous others where the relationship between foodborne illness and point-source contamination was not completely understood or thoroughly investigated. Past examples are other leafy green vegetable outbreaks since 1995 where the source of contamination was not identified, and the *E. coli O157:H7* outbreak that occurred at a county fair in New York where cattle were initially implicated but a faulty septic system was ultimately identified as the source. Additionally, agriculture operations need better scientific information and guidance to enhance environmental protection, animal health and public health

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal Plant and Health Inspection Service (APHIS), the Department of Health and Human Services (DHHS), Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDC) and the Environmental Protection Agency (EPA) to work together to develop validated standardized methods to detect, investigate, and attribute point source contamination of water, crops, and food stuffs.

USAHA also urges USDA, Agricultural Research Service (ARS) to make development of methods of prevention, surveillance, and mitigation of point source contamination a priority.

RESPONSE:

Department of Health and Human Services (DHHS), Food And Drug Administration (FDA), Center For Food Safety And Applied Nutrition

Regarding USAIIA's Resolution 26 and specific to produce safety, you may be interested in FDA's "Guide to Produce Farm Investigations," and the Agency's training course supporting the Guide's recommendations. The Guide provides instructions for conducting on-farm investigations, focusing specifically on the detection and documentation of practices that may lead to the contamination of produce. The Guide is posted on the Agency's website at http://www.fda.gov/ora/inspect ref/igs/farmirivcstigation.html. For your convenience, I have enclosed a copy of the Guide, and an outline of the contents of the supporting training course.

Department of Health and Human Services (DHHS), Center for Disease Control and Prevention (CDC)

The CDC agrees with the spirit and intent of Resolution 26 urging CDC to work with its federal counterparts to develop standard operating procedures for detecting, investigating the source of contamination of water, crops, and food stuffs. CDC and state and local counterparts are primarily responsible for outbreak detection and investigation at the point of consumption and as such are best positioned to identify causative agents and food stuffs that have been contaminated by these agents. Determining how the food stuffs were contaminated may need to involve FDA and FSIS and others. FDA and FSIS and their state/local couterparts are responsible for tracebacks and in-plant and on-farm investigations. CDC agrees that those investigations should be multidisciplinary and is happy to provide support to our sister agencies' investigation teams as appropriate.

United States Department of Agriculture (USDA), Agricultural Research Services (ARS)

ARS agrees in principle with Resolution 26, specifically on the need to develop and validate standardized methods for epidemiological investigations. Current ARS research in these areas includes studying the migration of pathogens through soil, quantifying environmental pathogen loading by vertebrate sources, characterizing predisposing conditions for hydrological transport of pathogens to produce fields, determining if concentrations of non-0157 *E. coli* predict an increased risk of contamination with *E. coli* 0157 in water, identifying in-field mechanism(s) of produce contamination, creating a molecular subtyping database of *E. coli* 0157 strains to characterize the genetic relatedness of environmental and outbreak-associated isolates, and developing and disseminating educational materials for agricultural producers about microbial water quality, potential impacts on down-stream stakeholders, and effective best management practices for improving water quality.