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TRENDS IN INCIDENCE OF ZOONOTIC FOODBORNE DISEASES IN THE UNITED STATES, 2010-2019

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Zoonotic foodborne diseases are infections of the gastrointestinal tract that occur as a result of the ingestion of food containing pathogens that are transmitted between non-human animals and people. In the United States (U.S.), foodborne pathogens are responsible for approximately 48 million cases of disease every year. All these cases are associated with an economic and public health burden to the country. Additionally, with the growing concern about food safety and zoonotic diseases, it is imperative to keep these illnesses under surveillance in order to develop an efficient program for control and prevention. Thus, this study aimed to examine trends in the occurrence of nationally notifiable zoonotic foodborne diseases during 2010-2019. For this purpose, zoonotic foodborne disease data were retrieved from the Centers for Disease Control and Prevention's Wide-ranging Online Data for Epidemiologic Research and Morbidity and Mortality Weekly Report from 2010 through 2019. Incidence rates were calculated as the number of cases for each disease divided by the U.S. population and multiplied by 100,000. The diseases analyzed in this study were salmonellosis, Shiga toxin-producing Escherichia coli (STEC) infection, campylobacteriosis, listeriosis, and vibriosis; during the time of this study, all of them were considered nationally notifiable infectious diseases. The results show that from 2010 to 2019 the incidence of vibriosis more than tripled and the incidence of STEC infection more than doubled. Campylobacteriosis became a nationally notifiable disease in 2015, and since then, the number of cases of this disease has progressively increased from 54,556 to 71,509 in 2019. Listeriosis accounted for the lowest incident rates, ranging from 0.23 to 0.28. The highest incidence of salmonellosis occurred in 2018 with a total number of cases of 60,999. Zoonotic foodborne diseases are a growing public health concern that is intimately associated with the consumption of animal products. The data show that the incidence of zoonotic foodborne diseases is not decreasing; on the contrary, there was an increase in the incidence rates from 2010 to 2019 for most diseases. This indicates that greater public health efforts are necessary to control these illnesses.