Prevalence Of Listeria And Salmonella Contamination In Fda Recalled Foods

Authors : Oluwatofunmi Musa-Ajakaiye, Paul Olorunfemi M.D MPH, John Obafaiye

Abstract : Introduction: The U.S Food and Drug Administration (FDA) reports the public notices for recalled FDA-regulated products over periods of time. It study reviewed the primary reasons for recalls of products of various types over a period of 7 years. Methods: The study analyzed data provided in the FDA's archived recalls for the years 2010-2017. It identified the various reasons for product recalls in the categories of foods, beverages, drugs, medical devices, animal and veterinary products, and dietary supplements. Using SPSS version 29, descriptive statistics and chi-square analysis of the data were performed. Results (numbers, percentages, p-values, chi-square): Over the period of analysis, a total of 931 recalls were reported. The most frequent reason for recalls was undeclared products (36.7%). The analysis showed that the most recalled product type in the data set was foods and beverages, representing 591 of all recalled products (63.5%).In addition, it was observed that foods and beverages represent 77.2% of products recalled due to the presence of microorganisms. Also, a sub-group analysis of recall reasons of food and beverages found that the most prevalent reason for such recalls was undeclared products (50.1%) followed by Listeria (17.3%) then Salmonella (13.2%). Conclusion: This analysis shows that foods and beverages have the greatest percentages of total recalls due to the presence of undeclared products listeria contamination and Salmonella contamination. The prevalence of Salmonella and Listeria contamination suggests that there is a high risk of microbial contamination in FDA-approved products and further studies on the effects of such contamination must be conducted to ensure consumer safety.