

SOCIAL FACTORS INFLUENCING THE FORMATION OF SALMONELLOSIS MORBIDITY IN UZBEKISTAN

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Salmonellosis remains a significant public health concern in many countries, including Uzbekistan. The persistence and adaptability of *Salmonella* spp. in diverse ecological environments, as well as their ability to infect a wide range of hosts — including fish, amphibians, reptiles, birds, and mammals — is attributed to their exceptional genetic plasticity. This adaptability enables them to thrive in varied environmental conditions and maintain their pathogenic potential across different populations.

In the 1990s, Uzbekistan experienced major political and socio-economic transformations, including the transition from a centralized to a market-oriented economy. These changes directly impacted public health infrastructure, particularly in the areas of food safety, environmental hygiene, and disease surveillance. One of the key consequences was the privatization of food production and distribution systems, especially within the poultry industry. This led to the emergence of numerous small-scale and privately owned food businesses, often operating with limited regulatory oversight.

Simultaneously, the reform of the sanitary-epidemiological service resulted in a notable reduction in the frequency and comprehensiveness of inspections and laboratory testing at food handling and preparation facilities. The weakening of control measures has contributed to an increased risk of foodborne infections, particularly salmonellosis.

Epidemiological data demonstrate a clear seasonal trend in salmonellosis incidence, with the highest number of cases typically recorded during the summer months, peaking in July. This seasonal rise may be linked to increased ambient temperatures, which favor bacterial growth, as well as to more frequent outdoor food consumption and less rigorous adherence to food storage guidelines during this period.

Social factors, including lifestyle changes, economic disparities, food habits, and insufficient public awareness regarding hygiene practices, play a crucial role in the formation of salmonellosis morbidity. These factors are particularly influential among school-aged children (7–14 years) and adolescents (15 years and older), who represent the most affected age groups. The frequent consumption of ready-to-eat street foods and fast food items — such as grilled chicken, burgers, and pizzas — by these age groups significantly increases the risk of exposure to *Salmonella*. In many cases, these foods are prepared and sold in conditions that do not meet established hygienic standards, with inadequate refrigeration and cross-contamination being common issues.

Furthermore, poor food handling practices, limited access to clean water, and lack of health education among food handlers contribute to the persistence of transmission chains in both urban and rural communities. Inadequate public health messaging and limited enforcement of food safety regulations further exacerbate the situation.

In conclusion, the current epidemiological landscape of salmonellosis in Uzbekistan underscores the importance of addressing social determinants of health, particularly in the context of food safety and hygiene. Enhanced public health interventions — including routine inspections, comprehensive food safety education programs, and stricter regulatory oversight — are essential to mitigate the spread of salmonellosis and protect vulnerable population groups, especially during the seasonal rise in cases.

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