Contamination of powdered infant formula by Enterobacter sakazakii and other pathogens will be considered in the following text with a description of the bacteria and their route of contamination as well as their pathological sequels together with preventive measures. E.sakazakii is a gram negative rod within the family Enterobacteriaceae. E. sakazakii in powdered infant formula has been implicated in outbreaks with sepsis, and infections of the central nervous system causing meningitis, cysts, brain abscess and necrotizing enterocolitis. Mortality has been reported to be as high as 50% but has decreased to less than 20% in the recent years. For those who survive subsequent developmental delay and hydrocephalus is a well recognized sequels. Enterobacter species are biochemically similar to Klebsiella, but unlike Klebsiella, it has has been found to be more resistant to osmotic and dry stress. Although exact virulence mechanisms are unknown, it is known that a small percentage of E.sakazakii cells can survive for extended periods in dehydrated powdered infant formula.

While the organism has been detected in different types of food, only powdered infant formula has been linked to outbreaks of diseases. Disease caused by E. sakazakii in infants has been associated with the consumption of commercially prepared non-sterile infant formula, and contamination has been linked back to either the infant formula itself or formula preparation equipment like the blenders. The organism has not been found in drinking water sources used to prepare the formula. There is no evidence for person-person or more general environmentally transmissions. Development and distribution of educational documents related to powdered infant formula to caregivers of infants in the home, day care and health-care facilities and health-care professionals for infants should be encouraged.