Chocolate has already been involved in several outbreaks of salmonelosis, and in some of them there has been contamination from this pathogen in cocoa ingredients. The objective of this study was to evaluate the *Salmonella* development during cocoa drying and storage steps. The cocoa beans were inoculated during fermentation or the drying process. Daily, 100g of cocoa beans were inoculated with 3-4 log MPN g⁻¹ of a pool of 5 *Salmonella* serotypes (Eastbourne, Enteritidis, Oranienburg, Senftenberg, Typhimurium). After 6 days of drying at 28-32°C, the samples showed water activity of 0.73 and moisture of 8%. At the end of the drying process, the *Salmonella* count increased between 0.22 and 0.91 log MPN g⁻¹ in most of the samples inoculated during the fermentation process. In the samples inoculated at the beginning of the drying process, the *Salmonella* final count increased by 0.67 log MPN g⁻¹. Samples inoculated after 24 and 48h had no count change during the drying step, whereas samples inoculated after 72, 96 and 120h showed a decrease from the initial count. After 30 days of storage at room temperature, the water activity was 0.68. In the samples inoculated during fermentation, reductions from 0.93 to 1.87 log MPN g⁻¹ were observed, while the samples inoculated during drying showed a reduction between 1.95 and 2.72 log MPN g⁻¹. Based on the results, we conclude that *Salmonella* development during cocoa drying or storage steps is closely related to the moment of contamination, and can be affected by pH and water activity.