



ASSESSMENT OF THE BACTERIAL POLLUTION IN THE DISTRIBUTION NETWORK/ CASE STUDY OF SOUK AHRAS TOWN, ALGERIA

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Abstract. The provision of safe drinking water has been one of humanity's most successful public health interventions and is a defining aspect of a developed country. The pathogens that may be transmitted through contaminated drinking-water are diverse. The contamination of drinking water by pathogens causing diarrhoeal disease is the most important aspect of drinking water quality. In this paper, the bacterial pollution were assessed to predict the risk of contamination of the drinking water; several points at different time were collected and analyzed in the distribution system. The study area is part of the main distribution of the City of Souk Ahras called "Faubourg". Based on the results a hurry strategy seems urgent to protect the drinking water quality and to avoid the consequences of contamination.

Keywords: Drinking water distribution system; bacterial pollution; waterborne disease, Souk Ahras (Algeria).

1 Introduction

Water has become one of mainly cause of disease and mortality in the world. In fact, according to the World Health Organization (OMS, 2004), every year we count the following:

- 30 million people die as a result of an epidemic or contagion due to water pollution;
- 02 million people die from diarrheal diseases;
- 01 million people die of malaria.

Table 1 shows the evolution of the epidemiological situation of various waterborne infections during the 1983-1992 period in Algeria. It should be noted that these different diseases usually evolve in a random way. This is undoubtedly due to the way of life of the population, which is mainly dependent on the way of how water is supplied and stored.



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