

## Health hazards in Central Asia on Afghanistan example

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### ABSTRACT

Afghanistan is the country located in Central Asia which is characterized by the worst epidemiological parameters in the region, and also in the world. The illness profile is dominated by vector-, respiratory-, water- and food-borne diseases. Malnutrition is common. The situation can even be worse due to catastrophic disasters, mainly droughts and floods. To make the picture of hazards complete, one has to include mines and unexploded ordnance scattered in hundreds of square kilometers of the Afghan territory. Their number is estimated at 7 to 10 million, which makes Afghanistan one of the most mined countries in the world. This is a review article on the health hazards in Central Asia, based on the Afghanistan example.

**Keywords:** Afghanistan, Central Asia, health hazards, public health, epidemiology

### INTRODUCTION

Traveling to Afghanistan nowadays is truly health- and life-threatening.<sup>1,2</sup> Destroyed country infrastructure, low sanitary and epidemiologic conditions, low level of medical assistance (lack of medical personnel, shortage of basic medicines and hygienic means) - all contribute to the dissemination of many infectious and non-infectious diseases.<sup>3,5</sup> More than 70% of the health care functioning in Afghanistan is dependent on the help of foreign humanitarian organizations.<sup>6,8</sup> Afghanistan is a region of an extreme danger of terrorist and criminal attacks. Bomb attacks, thefts, kidnappings mostly directed against Stabilization Forces soldiers and humanitarian organization workers have become the order of the day. Remains of the wartime are visible in the whole territory of the country with mines and unexploded shells posing the highest danger. Just traveling on Afghan roads is extremely dangerous because of their catastrophic technical condition and notorious disobedience of traffic rules by local riders.<sup>1,9</sup>

In July 2005 the population of Afghanistan was assessed at

30 millions but these data are only approximate because of regular migrations of Afghans abroad, mainly to Pakistan and Iran (during the last three decades approximately 5 million Afghan people have emigrated, and 3.1 million of these have returned), and also within the country (approximately 2 million of internal refugees during the civil war, nowadays the internal displacements are estimated at 200.000 people).<sup>10,11</sup> Afghanistan is a country of a highest population growth rate, estimated at 4.77% per year in 2005. The total fertility rate is 6.75 children per Afghan woman. In 1979, 15.682.000 inhabitants lived in the country, so during the last 25 years the population has grown by more than 90% in spite of the high mortality rate caused by warfare, famine and diseases. According to the United Nations calculations, the birth rate the number of Afghans may have reached 97 million by 2050! An average Afghan is very young. In 2005 as many as 44.7% of the population were below 14 years of age, 52.9% in the age range 15-64, and only 2.4% were over 65 years old. The mean age of an average Afghan is 17.56 years. The population health status parameters place Afghanistan among the poorest countries in the world. The total mortality rate is estimated at 2.07% (20.7 deaths/1000 inhabitants per year), infant mortality rate (under 1 year old) - 16.3% (163 deaths/1000 live births), that of children younger than 5 years - 25.7% (257 deaths/1000 live births). Life expectancy at birth of an average Afghan is estimated at 43 years only, and one per four Afghan children dies before being 5 years old.<sup>10,12,14</sup>

This is a review article based on current reports and fact sheets focusing on the health hazards found so far in Afghanistan.

### Infectious diseases

Afghanistan is considered to be a country where the risk of infectious diseases occurrence is very high. This situation results mainly from contamination of water and soil, limited access to uncontaminated drinking water, catastrophic status of plumbing, water and sewage treatment plants, limited access to health-care institutions, lack of basic medicines and medical equipment.<sup>3,15</sup> Other health hazards come from numerous asymptomatic carriers of infectious diseases among local population, mass migrations of people (inside and outside the country), overcrowding in refugee camps, large territory of endemic areas, and high number of vectors of infectious diseases.<sup>16,17</sup>

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