

## ***Root Causes and the Ways of Rodent Outbreaks Control: A case study***

**Javad Salimi<sup>1\*</sup>, Jalil ChinSari<sup>1</sup>, Javid Kondori<sup>1</sup>, Mohsen Attar AbdolAbadi<sup>1</sup>, Hosein Eshgi<sup>1</sup>, Mohamad Abbasi<sup>2</sup>, Fatemeh Barjasteh-Askari<sup>3</sup>, Mojtaba Davoudi<sup>3</sup>**

- 1- Department of Environmental and Occupational Health Engineering, Health Deputy, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran
- 2- Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran
- 3- Department of Environmental Health Engineering, School of Public Health, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran

**\*Corresponding Address:** Environmental and Occupational Department of Health Deputy, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran

**Email address:** Salimij1@thums.ac.ir

### ***Abstract***

Due to their special environments, rural areas are susceptible to rodent outbreaks. Extensive damage to agricultural produce, equipment and buildings on the one hand and outbreaks of zoonotic diseases on the other are among the health and economic impacts of a rodent outbreak. Failure in controlling such events may even result in social issues, such as, village abandonment and mass migration to suburban areas. One such rodent outbreak occurred in 2015 in a village of Torbat Heydariyeh County, Razavi Khorasan province. This report explains both the root causes of the event as well as the efforts which resulted in the control of the outbreak within a couple of weeks.

**Keywords:** Passive defense, Torbat Heydariyeh, Rodent outbreak, Environmental management