National Surveillance for Human Rabies Cases—Ethiopia, 2010

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Outline

• Background
• Methods
• Results and Discussion
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Background(1)

• Rabies is a widely distributed viral zoonotic disease

• Reporting and Surveillance are poor, WHO’s primary estimates indicate that each year over 50,000 deaths from rabies occur worldwide

• About 98% of human rabies cases occur in developing countries (Africa and Asia)
In Ethiopia, rabies is one of the notifiable diseases in humans by the FMoH. It is believed to result in a significant loss of human life annually, however, comprehensive surveillance data are lacking. The purpose of this report is to characterize the epidemiology of suspected human rabies cases and to assess the effectiveness of surveillance.
Methods

• The integrated diseases surveillance system collects data on:
  - human rabies exposure and
  - human rabies fatalities from 9 regional states and 2 city administrative health bureaus

• Case based and weekly summary reports are collected from respective health bureaus and entered to central data base system
• Number of anti-rabies vaccine distributed
Results and Discussion

• In 2010, a total of 750 human rabies exposures and 18 Human rabies fatal cases were reported from regions

• Ethiopian Health and Nutrition Research Institute (EHNRI) distributes 20,000 rabies post exposure prophylaxis courses
3.75% (750/20,000) of the expected Rabies exposure cases
Monthly distribution of Human Rabies Exposure cases in Ethiopia, 2010

- Closely parallels with the peak seasons of animal rabies in Ethiopia
• Incidence of human rabies to be 2.9 cases per 100,000 population
• Previous reported incidence 18.6 cases per 100,000 population
Summary (1)

• The highest number of exposure to rabies and human fatal rabies cases were reported from Oromia regional state

• The highest incidence of human rabies was observed in Addis Ababa city

• However, surveillance data are reported from only 5 regions and 1 city administration which limits the representativeness and completeness of the reports
• Reports of sporadic outbreaks, and the rabies consultation service at EHNRI, suggests the occurrence of higher than reported rates of both human rabies exposure and human rabies mortality in Ethiopia

• The case detection rate of this surveillance system is low and most likely underestimates the actual magnitude of the problem

• There is a need to improve human rabies surveillance system at all levels of the public health system
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