## Tetanus treatment and prevention in Rajkot community, Pakistan

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# Introduction

- Tetanus is endemic in equines in Pakistan.
- Prophylactic intervention or early diagnosis and therapeutic treatment is imperative for survival.

# Aims:

To record the outcome of tetanus infected animals admitted to Brooke Gujranwala equine welfare centre between January 1999 and December 2009.

To record the impact of a community vaccination and awareness program in Rajkot community of Gujranwala district.



Figure 1: Tetanus affected animal showing flaring of nostrils and erect ears.

# Outcome of tetanus cases admitted to Brooke Gujranwala Equine Welfare Centre between January 1998 and December 2009 Recovered Euthanised (Euthanised at admission) Died (Died during treatment)

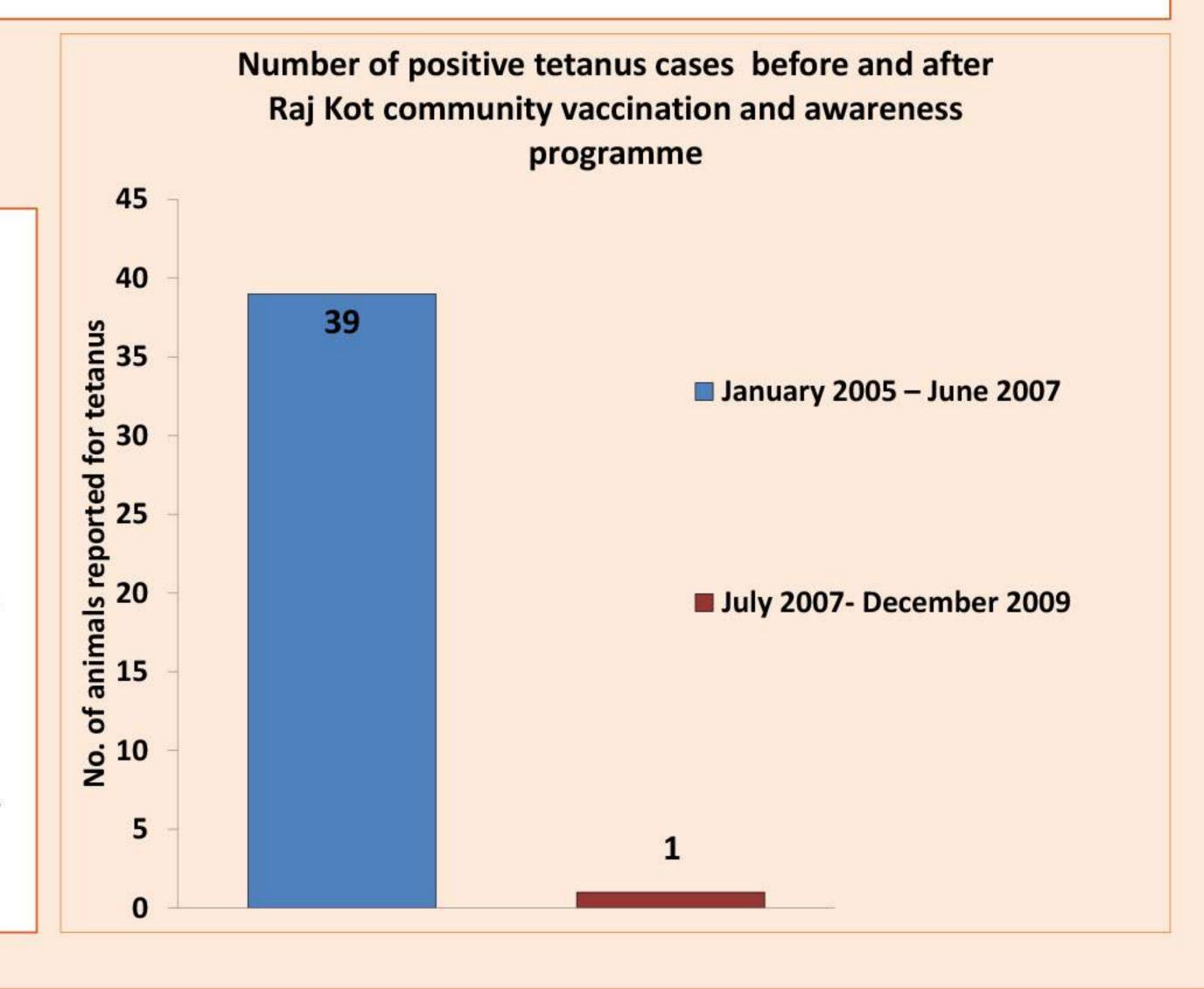
## Community vaccination and awareness programme

April 2007, Rajkot community:

- In one community a selected service provider was trained to provide a tetanus vaccine.
- 67 donkeys, 14 horses and 4 mules were given complete course of three primary vaccines.
- Horses and mules were vaccinated with 80 IU anti tetanus toxoid IM, 40 IU anti tetanus toxoid IM for donkeys twice at a six week intervals with a booster dose after one year.
- Awareness sessions on the cause, severity and treatment of tetanus were delivered in routine community meetings.

## Protocol for treatment

- Horses and mules were given 30000 IU anti-tetanus serum BID IV, 22000
   IU/kg procaine (benzyl) penicillin BID IM; 40 mg diazepam BID IM.
- Donkeys were given 15000 IU anti-tetanus serum BID IV; 20000 IU/kg procaine (benzyl) penicillin BID IM; 20 mg diazepam BID IM.
- Treatment frequency was reduced gradually in a three week period.
   Animals were rehydrated with intravenous saline as per requirement.
- Management practices assisted recovery (plugged ears, animal kept in dark room ).
- Animals with advanced clinical signs (locked jaw) were euthanized at admission.





# **Conclusions**

- Successful treatment of tetanus is possible in some cases.
- A community vaccination and awareness programme was associated with a substantial reduction in cases presented for treatment to Gujranwala equine Welfare Centre.