

# Interepidemic Rift Valley Fever Virus Seropositivity, Northeastern Kenya

## Technical Appendix 2

### Binary Logistic Regression Analysis to Predict Rift Valley Fever Virus seropositivity

#### Logistic Model 1

Outcome variable: Rift Valley fever seropositivity (coded as 0 vs. 1)\*

Predictor variable	Variable type	Point estimate (CI)	p value
Age	Continuous	1.039 (1.017–1.062)	0.001
Location (Sogan-Godud vs. Gumarey)	Dichotomous	0.241 (0.092–0.628)	0.004
Gender (male vs. female)	Dichotomous	2.782 (1.176–6.581)	0.020
Disposal of aborted animal	Dichotomous	2.779 (1.026–7.525)	0.044
Constant		0.119	0.005

\*CI, confidence interval. Goodness-of-fit:  $\chi^2$  analysis of observed vs. predicted values indicating model is well fit to observed values. Hosmer and Lemeshow test, step 1:  $\chi^2$ , 8.813; degrees of freedom, 8; p value, 0.358.

#### Logistic Model by Location, Gumarey

Outcome variable: Rift Valley fever seropositivity\*

Predictor variables	Variable type	Point estimate (CI)	p value
Gender	Dichotomous	3.454 (1.17–10.19)	0.025
Discarded aborted animal fetus	Dichotomous	15.12 (4.45–51.35)	0.0001
Ill family member	Dichotomous	18 (1.35–246.97)	0.029
Constant		0.029	0.0001

\*CI, confidence interval. Goodness-of-fit:  $\chi^2$  analysis of observed vs. predicted values indicating model is well fit to observed values. Hosmer and Lemeshow test, step 1:  $\chi^2$ , 5.493; degrees of freedom, 2; p value, 0.064.

#### Logistic Model by Location, Sogan-Godud

Outcome variable: Rift Valley fever seropositivity

Predictor variables	Variable type	Point estimate (CI)	p value
Age	Continuous	1.054 (1.019–1.091)	0.0001
Constant		0.01	0.0001

\*CI, confidence interval. Goodness-of-fit:  $\chi^2$  analysis of observed vs. predicted values indicating model is well fit to observed values. Hosmer and Lemeshow test, step 1:  $\chi^2$ , 9.318; degrees of freedom, 7; p value, 0.231.