

Additional file 6: Parameter values used in between-farms transmission models.

Reference	Subtype	Value	Sources
Average duration of the latent period (from onset of infection to onset of infectiousness) in days			
Pelletier et al. [46]	H5N1 HP	5	Assumed
Rorres et al. [51]	H5N2 HP	4	Estimated
Rorres et al. [52]	H5N2 HP	5	[128]
Bonney et al. [53]	H5N2 HP	3	Assumed
Salvador et al. [57]	H5N6 HP	Min: 1 – Max: 2	[62, 95, 124, 129]
Andronico et al. [60]	H5N8 HP	1	Estimated
Dorigatti et al. [62]	H7N1 HP	2	[127]
Smith and Dunipace [64]	H7N3 HP	2	Boender et al. 2007
Stegeman et al. [65]	H7N7 HP	2	[127, 130, 131]
Le Menach et al. [66]			
Boender et al. [67]			
Bavinck et al. [68]			
Average duration of the infectious period (from onset of infectiousness to culling) in days			
Delabougline et al. [37]	H5N1 HP	Min: 4 – Max: 13	Assumed
Ssematimba et al. [44]	H5N1 HP	Min: 7.9 – Max: 12	Assumed/Estimated
Pelletier et al. [46]	H5N1 HP	10	Assumed
Rorres et al. [51]	H5N2 HP	7	Assumed
Rorres et al. [52]	H5N2 HP	7	[128]
Bonney et al. [53]	H5N2 HP	17.22 (16.57-17.87)	Estimated
Dorigatti et al. [62]	H7N1 HP	11.82 (6-26)	Estimated
Stegeman et al. [65]	H7N7 HP	Min: 6.9 (3.9-9.9) – Max: 13.8 (9.9-17.6)	Estimated
Le Menach et al. [66]	H7N7 HP	Min: 6 – Max: 10	Assumed
Boender et al. [67]	H7N7 HP	7.47 (7.2-7.8)	Estimated
Seymour et al. [71]	H7N7 HP	6.4	Estimated
Average duration of the incubation period (from onset of infection to reporting) in days			
Delabougline et al. [37]	H5N1 HP	Min: 3 – Max: 12	Assumed
Kim et al. [38]	H5N1 HP	Min: 2.5 – Max: 7.2	Estimated
Kim and Cho [39]	H5N1 HP	Min: 2 – Max: 8	[96, 115, 121, 132, 133]
	H5N8 HP		
	H5N6 HP		
Hill et al. [42, 43]	H5N1 HP	7	Estimated
Ssematimba et al. [44]	H5N1 HP	7	Assumed
Bonney et al. [53]	H5N2 HP	8	Assumed
Lee et al. [58]	H5N6 HP	Min: 2 – Max: 4	Assumed
	H5N8 HP		
Salvador et al. [57]	H5N6 HP	Min: 10 – Max: 14	Assumed
Andronico et al. [60]	H5N8 HP	7	Estimated
Dorigatti et al. [62]	H7N1 HP	7	[134]
Smith and Dunipace [64]	H7N3 HP	Min: 3 – Max: 9	Assumed
Stegeman et al. [65]	H7N7 HP	6	Assumed
Le Menach et al. [66]			
Boender et al. [67]			
Bavinck et al. [68]	H7N7 HP	Min: 4 – Max: 12	Assumed

Reference	Subtype	Value	Sources
Average duration of the clinical period (from reporting to culling) in days			
Delabougline et al. [37]	H5N1 HP	1	Assumed
Salvador et al. [57]	H5N6 HP	Min: 1 – Max: 3	Assumed
Andronico et al. [60]	H5N8 HP	5.2	Estimated
Smith and Dunipace [64]	H7N3 HP	Min: 0 – Max: 9.56	Estimated
Le Menach et al. [66]	H7N7 HP	Min: 1 – Max: 6	[127]
Transmission parameter			
Delabougline et al. [37]	H5N1 HP	Min: 1.4×10^{-8} – Max: 40×10^{-8} farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Kim et al. [38]	H5N1 HP	0.429 (daily probability)	Estimated
Hill et al. [42, 43]	H5N1 HP	Min: $1.71 (0.586\text{-}3.63) \times 10^{-10}$ – Max: $1.06 (0.0729\text{-}3.78) \times 10^{-7}$ farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Retkute et al. [34]	H5N1 HP	$0.99 (0.76\text{-}1.12) \times 10^{-6}$ farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Ssematimba et al. [44]	H5N1 HP	Min: 0.08 (0.06-0.10) – Max: 0.11 (0.08-0.20) day $^{-1}$	Estimated
Bonney et al. [53]	H5N2 HP	0.0061 (0.0025-0.0137) farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Lee et al. [58]	H5N6 HP	Min: 0.00007 – Max: 0.00707 farm $^{-1} \cdot \text{day}^{-1}$	Estimated
	H5N8 HP		
Salvador et al. [57]	H5N6 HP	0.0012 (0.0001-0.1) farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Andronico et al. [60]	H5N8 HP	Min: 0.23 (0.16-0.31) – Max: 0.53 (0.37-0.72) day $^{-1}$	Estimated
Dorigatti et al. [62]	H7N1 HP	Min: 0.0009 (0.0005-0.0013) – Max: 0.0155 (0.0078-0.0232) farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Smith and Dunipace [64]	H7N3 HP	Min: 0 – Max: 0.00238 farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Stegeman et al. [65]	H7N7 HP	Min: 0.17 (0.1-0.2) – Max: 0.47 (0.3-0.7) day $^{-1}$	Estimated
Le Menach et al. [66]	H7N7 HP	Min: 0.076 – Max: 0.336 farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Boender et al. [67]	H7N7 HP	0.002 (0.0012-0.0039) farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Bavinck et al. [68]	H7N7 HP	$1.7 (1.5\text{-}2.0) \times 10^{-4}$ farm $^{-1} \cdot \text{day}^{-1}$	Estimated
Backer et al. [70]	H7N7 HP	0.0039 (0.0023-0.0076) farm $^{-1} \cdot \text{day}^{-1}$	Estimated
R₀			
Delabougline et al. [37]	H5N1 HP	Min: 0.55 – Max: 15.7	Estimated
Kim and Cho [39]	H5N1 HP	Min: 0.03 (0-0.98)	Estimated
	H5N8 HP	Max: 2.20 (1.51-3.16)	
	H5N6 HP		
Ssematimba et al. [44]	H5N1 HP	Min: 0.85 (0.77-1.02) – Max: 0.96 (0.72-1.20)	Estimated
Lee et al. [58]	H5N6 HP	1.3427	Estimated
	H5N8 HP		
Smith and Dunipace [64]	H7N3 HP	4.8	Estimated
Stegeman et al. [65]	H7N7 HP	Min: 1.2 (0.6-1.9) – Max: 6.5 (3.1-9.9)	Estimated
Le Menach et al. [66]	H7N7 HP	Min: 1.5 (1-2.5) – Max: 5.2 (4-6.9)	Estimated
Bavinck et al. [68]	H7N7 HP	1.33	Estimated

When several values were used, minimum and maximum values are indicated. For estimated parameter values, the mean and 95% confidence or credible interval (when reported) are indicated.