

Table S4. Overview of duck species experimentally inoculated with highly pathogenic avian influenza H5 H5 GsGd viruses (part 1 of 2)

Species	Type of duck	Host age	Virus	Subtype	Clade	Culture method	Route of		Dose of inoculation	Volume (ml)	Clinical signs	Mortality
							inoculation					
Mallard	dabbling	adult	A/broiler duck/Kr/Buan2/2014	H5N8	2.3.4.4	egg	IN or CON		10 ^{6.5} EID50	0.1	no or mild	no
Mallard	dabbling	adult	A/chicken/Kr/IS/2006	H5N1	2.2	egg	IN or CON		10 ^{6.5} EID50	0.1	no or mild	no
Mallard	dabbling	adult	A/mandarin duck/PSCC24-24/2010	H5N1	2.3.2.1	egg	IN or CON		10 ^{6.5} EID50	0.1	no or mild	no
Baikal teal	dabbling	adult	A/broiler duck/Kr/Buan2/2014	H5N8	2.3.4.4	egg	IN		10 ^{6.5} EID50	0.1	no	yes
Mallard	dabbling	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	no	no
Tufted duck	diving	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	yes	unspecified
Common pochard	diving	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	yes	yes
Common teal	dabbling	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	no	no
Eurasian wigeon	dabbling	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	no	no
Gadwall	dabbling	8-11 mo	A/turkey/Turkey/1/2005	H5N1	2.2.1	egg	IT and IO		10 ⁴ TCID50	3	no	no
Mallard	dabbling	2 wk	A/turkey/Minnesota/12582/2015	H5N2	2.3.4.4	egg in BHI	IN or CON		10 ² ; 10 ⁴ ; 10 ⁶ EID50	0.1	no	yes
Mallard	dabbling	2 wk	A/chicken/Iowa/13388/2015	H5N2	2.3.4.4	egg in BHI	IN or CON		10 ² ; 10 ⁴ ; 10 ⁶ EID50	0.1	no	no
Mallard	dabbling	2 wk	A/northerin pintail/Washington/40964/2014	H5N2	2.3.4.4	egg in BHI	IN or CON		10 ² ; 10 ⁴ ; 10 ⁶ EID50	0.1	no	no
Mallard	dabbling	2 wk	A/gyrfalcon/Washington/40188-6/2014	H5N8	2.3.4.4	egg in BHI	IN or CON		10 ² ; 10 ⁴ ; 10 ⁶ EID50	0.1	no	no
Mallard	dabbling	2 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN or CON		10 ² ; 10 ⁴ ; 10 ⁶ EID50	0.1	yes	yes
Mallard	dabbling	2 wk	A/northerin pintail/Washington/40964/2014	H5N2	2.3.4.4	egg in BHI	IN		10 ⁶ EID50	0.1	yes but 0 dpi not shown	no
Mallard	dabbling	2 wk	A/gyrfalcon/Washington/40188-6/2014	H5N8	2.3.4.4	egg in BHI	IN		10 ⁶ EID50	0.1	yes but 0 dpi not shown	not specified
Mallard	dabbling	2 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN		10 ⁶ EID50	0.1	yes	yes
Mallard	dabbling	6 wk	A/goose/Shandong/k1204/2009	H5N5	2.3.4.4	MDCK	IN		10 ⁶ TCID50	0.1	not specified	no
Mallard	dabbling	6 wk	A/goose/Guangdong/k0103/2010	H5N5	2.3.4.4	MDCK	IN		10 ⁶ TCID50	0.1	not specified	no
Mallard	dabbling	6 wk	A/quail/Jiangsu/k0104/2010	H5N5	2.3.4.4	MDCK	IN		10 ⁶ EID50	0.1	yes	no
Mallard	dabbling	6 wk	A/duck/Jiangsu/k1203/2010	H5N8	2.3.4.4	MDCK	IN		10 ⁶ TCID50	0.1	not specified	no
Mandarin duck	dabbling	adult	A/broiler duck/Kr/Buan2/2014	H5N8	2.3.4.4	egg	IN or CON		10 ^{6.5} EID50	0.1	no	no
Mandarin duck	dabbling	adult	A/chicken/Kr/IS/2006	H5N1	2.2	egg	IN or CON		10 ^{6.5} EID50	0.1	no	no
Mandarin duck	dabbling	adult	A/mandarin duck/Kr/PSC24-24/2010	H5N1	2.3.2.1	egg	IN or CON		10 ^{6.5} EID50	0.1	no	no
Redhead	diving	10-16 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Wood duck	dabbling	10-16 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN		10 ⁶ EID50	0.1	yes	yes
Blue-winged teal	dabbling	10-16 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Northern pintail	dabbling	10-16 wk	A/whooper swan/Mongolia/244/2005	H5N1	2.2	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Mallard	dabbling	10-16 wk	A/duck meat/Anjang/2001	H5N1	0	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Redhead	diving	10-16 wk	A/duck meat/Anjang/2001	H5N1	0	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Wood duck	dabbling	10-16 wk	A/duck meat/Anjang/2001	H5N1	0	egg in BHI	IN		10 ⁶ EID50	0.1	yes	yes
Blue-winged teal	dabbling	10-16 wk	A/duck meat/Anjang/2001	H5N1	0	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Northern pintail	dabbling	10-16 wk	A/duck meat/Anjang/2001	H5N1	0	egg in BHI	IN		10 ⁶ EID50	0.1	no	no
Tufted duck	diving	5 mo	A/duck/Hong Kong/21091/2011	H5N1	2.3.2	MDCK	IT and IO		10 ⁴ TCID50	3	yes	yes

Table S4. Overview of duck species experimentally inoculated with highly pathogenic avian influenza H5 H5 GsGd viruses (part 2 of 2)

Species	Virus excretion	Virus excretion	Virus excretion	Days postinoculation	Virus replication (IHC)	Virus replication (VI)	Reference
	Pharynx	Cloacal	Method		Samples organs	test done, result int	
Mallard	yes	yes	TCID50/0.1ml per day or tissue	3	no	yes, pos int (pancreas)	Kang et al. 2015
Mallard	yes	no	TCID50/0.1ml per day or tissue	3	no	yes, neg int	Kang et al. 2015
Mallard	yes	no	TCID50/0.1ml per day or tissue	3	no	yes, neg int	Kang et al. 2015
Baikal teal	yes	yes	TCID50/0.1ml per day or tissue	3	no	yes, pos int (pancreas)	Kang et al. 2015
Mallard	yes	no	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, neg int	yes, neg int	Keawcharoen et al. 2008
Tufted duck	yes	no	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, neg int	yes, pos int	Keawcharoen et al. 2008
Common pochard	yes	yes	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, neg int	yes, pos int	Keawcharoen et al. 2008
Common teal	yes	yes	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, neg int	yes, neg int	Keawcharoen et al. 2008
Eurasian wigeon	yes	no	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, neg int	yes, pos int	Keawcharoen et al. 2008
Gadwall	yes	no	TCID50/ml and vRNA Ct value per day or tissue; AUC 0-4 dpi	4	yes, pos int	yes, pos int	Keawcharoen et al. 2008
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	3	yes, excl int	no	DeJesus et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	3	yes, excl int	no	DeJesus et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	nd	nd	nd	DeJesus et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	nd	nd	nd	DeJesus et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	nd	nd	nd	DeJesus et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	4	yes, neg int	yes, excl int	Pantin-Jackwood et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	4	yes, neg int	yes, excl int	Pantin-Jackwood et al. 2016
Mallard	yes	yes	qPCR used to calculate EID50/ml per day or tissue	4	yes, pos int (autonomic ganglia enteric tract)	yes, excl int	Pantin-Jackwood et al. 2016
Mallard	yes	yes	TCID50 per day or per gram	5	no	yes, excl int	Zhao et al. 2013
Mallard	yes	yes	TCID50 per day or per gram	5	no	yes, excl int	Zhao et al. 2013
Mallard	yes	yes	EID50 per day or per gram	5	no	yes, excl int	Zhao et al. 2013
Mallard	yes	yes	TCID50 per day or per gram	5	no	yes, excl int	Zhao et al. 2013
Mandarin duck	yes	yes	TCID50/0.1ml per day in figure	3	no	yes, pos int (pancreas) and proventriculus	Kang et al. 2017
Mandarin duck	yes	yes	TCID50/0.1ml per day in figure	3	no	yes, neg int	Kang et al. 2017
Mandarin duck	yes	yes	TCID50/0.1ml per day in figure	3	no	yes, neg int	Kang et al. 2017
Redhead	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Wood duck	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	7 and 8	yes, pos int (muscular plexus of small intestines)*	yes, excl int	Brown et al. 2006
Blue-winged teal	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Northern pintail	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Mallard	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Redhead	yes	no	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Wood duck	yes	yes	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	not specified	yes, pos int (muscular plexus of small intestines)*	yes, excl int	Brown et al. 2006
Blue-winged teal	yes	no	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Northern pintail	yes	no	EID50/ml per tissue; EID50/ml for average max titer; duration (days)	nd	no	yes, neg int	Brown et al. 2006
Tufted duck	yes	yes	TCID50/ml and vRNA Ct value per day or tissue	4	yes, pos int (=pancreas)	yes, pos int (proventriculus, duodenum, pancreas, jejunum, colon)	Bröjer et al. 2015