

Supplemental Table 3. Raw data for each sample. AmPV = Avian metapneumovirus; IBDV = Infectious bursal disease virus; IBV = Infectious bronchitis virus; NDV = Newcastle disease virus. Highlighted read counts indicate samples/pathogens where near-complete (>80%) genomes were recovered.

Sample_type_country	Treatment	Total reads	Host %	Total viral reads per 100k	IBV reads per 100k	NDV reads per 100k	PicoRNAvirus reads per 100k	AmPV reads per 100k	IBDV reads per 100k	Rotavirus reads per 100k
CA156_oral_Tanzania	Untreated	154,166	16.9	22	21	1	0	0	0	0
	Custom A	235,530	2.30	4,157	4,660	107	0	0	0	0
	MAMRibo	203,035	0.56	307	300	0	0	0	0	0
CA169_oral_Tanzania	Untreated	112,475	2.02	11	0	0	0	0	0	0
	Custom A	191,578	0.6	0	0	0	0	0	0	0
	MAMRibo	150,952	0.1	0	0	0	0	0	0	0
CA172_oral_Tanzania	Untreated	139,207	0.1	0	0	0	0	0	0	0
	Custom A	188,145	0.7	0	0	0	0	0	0	0
	MAMRibo	155,804	4.1	0	0	0	0	0	0	0
CA196_oral_Tanzania	Untreated	152,756	0.5	81	81	0	0	0	0	0
	Custom A	182,607	0.3	24	24	0	0	0	0	0
	MAMRibo	155,433	1.7	1	1	0	0	0	0	0
IM09_oral_Tanzania	Untreated	142,387	23.3	1	1	0	0	0	0	0
	Custom A	143,923	0.47	1	1	0	0	0	0	0
	MAMRibo	155,490	0.22	2	2	0	0	0	0	0
IM14_oral_Tanzania	Untreated	194,238	0.8	1	1	0	0	0	0	0
	Custom A	228,283	5.6	51	50	1	0	0	0	0
	MAMRibo	182,731	0.59	2,586	2,355	231	0	0	0	0
IM59_oral_Tanzania	Untreated	292,925	0.19	314	301	13	0	0	0	0
	Custom A	157,872	2.1	45	44	1	0	0	0	0
	MAMRibo	135,707	6.1	4	3	0	0	0	0	0
IM87_oral_Tanzania	Untreated	137,833	0.14	337	337	0	0	0	0	0
	Custom A	221,779	0.12	152	152	0	0	0	0	0
	MAMRibo	139,919	0.5	2	2	0	0	0	0	0
KD137_oral_Tanzania	Untreated	113,963	11.5	0	0	0	0	0	0	0
	Custom A	126,307	1.9	95	94	1	0	0	0	0
	MAMRibo	154,073	0.39	13	13	0	0	0	0	0
KD142_oral_Tanzania	Untreated	131,299	3.5	4	4	0	0	0	0	0
	Custom A	118,631	39	3	3	2	0	0	0	0
	MAMRibo	144,204	1.6	149	35	114	0	0	0	0
KD152_oral_Tanzania	Untreated	146,089	2.6	161	24	137	0	0	0	0
	Custom A	167,153	2.1	2	0	2	0	0	0	0
	MAMRibo	185,137	8	76	76	0	0	0	0	0
KD201_oral_Tanzania	Untreated	148,274	0.5	12,887	12,880	7	0	0	0	0
	Custom A	194,382	0.15	1,567	1,567	0	0	0	0	0
	MAMRibo	84,158	1.6	63	63	0	0	0	0	0
ME121_oral_Tanzania	Untreated	170,714	1.3	0	0	0	0	0	0	0
	Custom A	140,233	0.22	1	1	0	0	0	0	0
	MAMRibo	125,759	0.24	0	0	0	0	0	0	0
ME57_oral_Tanzania	Untreated	202,665	1.5	0	0	0	0	0	0	0
	Custom A	155,463	6	0	0	0	0	0	0	0
	MAMRibo	156,477	0.35	101	88	13	0	0	0	0
ME72_oral_Tanzania	Untreated	152,736	0.08	8	7	0	0	0	0	0
	Custom A	151,497	2.5	2	2	0	0	0	0	0
	MAMRibo	219,272	2.7	5	5	0	0	0	0	0
ME73_oral_Tanzania	Untreated	123,613	0.24	565	0	565	0	0	0	0
	Custom A	178,558	0.02	189	0	189	0	0	0	0
	MAMRibo	173,122	0.3	8	0	8	0	0	0	0
ME77_oral_Tanzania	Untreated	156,792	9.3	1	1	0	0	0	0	0
	Custom A	114,634	0.27	184	3	181	0	0	0	0
	MAMRibo	151,384	0.08	15	0	15	0	0	0	0
MZ72_oral_Tanzania	Untreated	142,767	0.8	0	0	0	0	0	0	0
	Custom A	133,601	27.9	24	23	1	0	0	0	0
	MAMRibo	110,670	1.8	1,501	1,500	1	0	0	0	0
MZ73_oral_Tanzania	Untreated	181,227	1.2	1,029	1,028	1	0	0	0	0
	Custom A	102,542	2.8	0	0	0	0	0	0	0
	MAMRibo	120,598	0.5	5	5	0	0	0	0	0
MZ78_oral_Tanzania	Untreated	100,978	0.6	0	0	0	0	0	0	0
	Custom A	133,947	0.9	0	0	0	0	0	0	0
	MAMRibo	148,623	1.7	0	0	0	0	0	0	0
NT89_oral_Tanzania	Untreated	85,395	0.1	0	0	0	0	0	0	0
	Custom A	171,225	0.05	0	0	0	0	0	0	0
	MAMRibo	144,268	0.8	0	0	0	0	0	0	0
NT96_oral_Tanzania	Untreated	181,814	0.4	17	17	0	0	0	0	0
	Custom A	135,060	0.01	842	842	0	0	0	0	0
	MAMRibo	175,980	0	321	0	321	0	0	0	0
NT104_oral_Tanzania	Untreated	144,632	0.3	40	40	0	0	0	0	0
	Custom A	148,288	5.4	0	0	0	0	0	0	0
	MAMRibo	131,908	0.005	84	84	0	0	0	0	0
NT104_oral_Tanzania	Untreated	173,769	0	26	25	1	0	0	0	0
	Custom A	201,084	7	4	3	1	0	0	0	0
	MAMRibo	144,181	52.5	1	1	0	0	0	0	0
NT121_oral_Tanzania	Untreated	172,354	0.36	146	7	139	0	0	0	0
	Custom A	123,294	0.18	19	0	19	0	0	0	0
	MAMRibo	194,263	3.4	1	0	1	0	0	0	0
B034_cloacal_Tanzania	Untreated	109,981	21	13	13	0	0	0	0	0
	Custom A	74,972	1.4	2,728	2,570	0	152	0	0	0
	MAMRibo	160,393	1	892	830	62	0	0	0	0
CA124_cloacal_Tanzania	Untreated	162,923	2.6	7	6	0	0	0	0	0
	Custom A	349,920	77.4	0	0	0	0	0	0	0
	MAMRibo	369,955	14.9	0	0	0	0	0	0	0
M504_cloacal_Tanzania	Untreated	502,360	4.4	0	0	0	0	0	0	0
	Custom A	346,014	2.4	0	0	0	0	0	0	0
	MAMRibo	428,667	31.9	0	0	0	0	0	0	0
1M14_cloacal_Tanzania	Untreated	272,185	4.5	0	0	0	0	0	0	0
	Custom B	435,404	2.2	0	0	0	0	0	0	0
	MAMRibo	233,410	0.2	0	0	0	0	0	0	0
M521_cloacal_Tanzania	Untreated	1,091,309	14	0	0	0	0	0	0	0
	Custom A	892,741	0.3	0	0	0	0	0	0	0
	MAMRibo	597,023	0.2	0	0	0	0	0	0	0
1M20_cloacal_Tanzania	Untreated	508,968	0.1	0	0	0	0	0	0	0
	Custom A	383,930	6.6	0	0	0	0	0	0	0
	MAMRibo	132,786	33.7	0	0	0	0	0	0	0
B034_cloacal_Tanzania	Untreated	212,686	0.4	0	0	0	0	0	0	0
	Custom B	340,751	0.1	0	0	0	0	0	0	0
	MAMRibo	395,733	1.3	0	0	0	0	0	0	0
B066_cloacal_Tanzania	Untreated	483,917	0	0	0	0	0	0	0	0
	Custom B	88,684	0	0	0	0	0	0	0	0
	MAMRibo	478,415	0	0	0	0	0	0	0	0
B090_cloacal_Tanzania	Untreated	306,125	1.1	0	0	0	0	0	0	0
	Custom B	148,067	28.1	1,053	0	1,053	0	0	0	0
	MAMRibo	285,328	0.1	8	8	0	0	0	0	0
B090_cloacal_Tanzania	Untreated	370,506	0.1	0	0	0	0	0	0	0
	Custom B	406,844	46.1	0	0	0	0	0	0	0
	MAMRibo	197,053	37.7	0	0	0	0	0	0	0
B040_cloacal_Tanzania	Untreated	593,384	0.7	0	0	0	0	0	0	0
	Custom B	55,736	0.7	0	0	0	0	0	0	0
	MAMRibo	534,381	16.9	2	0	2	0	0	0	0
B066_cloacal_Tanzania	Untreated	98,108	40	662	0	662	0	0	0	0
	Custom B	291,217	0.7	16	16	0	0	0	0	0
	MAMRibo	331,409	0.5	5	5	0	0	0	0	0
B090_cloacal_Tanzania	Untreated	352,852	0.5	0	0	0	0	0	0	0
	Custom B	138,973	37.8	0	0	0	0	0	0	0
	MAMRibo	251,055	0.2	0	0	0	0	0	0	0
B090_cloacal_Tanzania	Untreated	528,430	0	0	0	0	0	0	0	0
	Custom B	478,401	66.6	0	0	0	0	0	0	0
	MAMRibo	112,061	47.5	0	0	0	0	0	0	0
B090_cloacal_Tanzania	Untreated	414,397	4.3	0	0	0	0	0	0	0
	Custom B	194,887	1	0	0	0	0	0	0	0
	MAMRibo	377,952	15	0	0	0	0	0	0	0
CA14_cloacal_Tanzania	Untreated	134,506	43.1	0	0	0	0	0	0	0
	Custom B	593,384	1.4	0	0	0	0	0	0	0
	MAMRibo	252,168	0.4	0	0	0	0	0	0	0
M540_cloacal_Tanzania	Untreated	252,125	0.3	0	0	0	0	0	0	0
	Custom B	406,154	3.2	0	0	0	0	0	0	0
	MAMRibo	227,045	44	0	0	0	0	0	0	0
M573_cloacal_Tanzania	Untreated	795,204	1.3	0	0	0	0	0	0	0
	Custom B	291,632	0.3	0	0	0	0	0	0	0
	MAMRibo	413,858	0.3	0	0	0	0			

	CXribo	283,691	1	46	0	46	0	0	0	0	0
SM97_cloaca_Tanzania	Untreated	443,532	62.2	0	0	0	0	0	0	0	0
	Custom B	65,939	45.7	0	0	0	0	0	0	0	0
	MAMribo	210,084	2.6	0	0	0	0	0	0	0	0
	CXribo	259,362	0.1	0	0	0	0	0	0	0	0
2306_trachea_Guatemala	Untreated	456,558	52.5	5	0	0	0	0	5	0	0
	Custom B	438,132	84	119	5	0	0	0	114	0	0
2308_bursa_Peru	Untreated	194,979	97.4	4	0	0	1	0	3	0	0
	Custom B	704,536	66.4	9,113	0	0	1,824	0	7,289	0	0
2309_bursa_Peru	Untreated	152,909	98.7	2	0	0	0	0	2	0	0
	Custom B	363,045	61.5	3,520	0	0	0	0	3,520	0	0
2310_bursa_Peru	Untreated	230,223	98.5	40	0	0	3	0	37	0	0
	Custom B	885,635	63.1	24,424	0	0	753	0	23,671	0	0
2314_choana_Mexico	Untreated	616,571	0.1	10	0	0	0	0	0	0	0
	Custom B	400,780	0.7	19,184	0	0	0	0	0	0	0
2316_cloaca_Mexico	Untreated	474,151	0.9	2	1	0	1	0	0	0	0
	Custom B	376,950	7.7	288	125	0	163	0	0	0	0
2318_cloaca_Mexico	Untreated	572,238	0.1	1	0	0	1	0	1	0	0
	Custom B	358,377	1.9	593	0	0	593	0	0	0	0
2321_choanal_Mexico	Untreated	309,551	90.7	6	6	0	0	0	0	0	0
	Custom B	459,765	41.8	9,687	9,600	0	87	0	0	0	0
2322_spleen/bursa_Mexico	Untreated	213,085	86.2	1	0	0	1	0	0	0	0
	Custom B	458,726	24	2,106	198	0	1,908	0	0	0	0
2324_spleen/bursa_Mexico	Untreated	345,291	91.9	5	0	0	1	0	4	0	0
	Custom B	409,801	39.2	8,569	0	0	109	0	8,460	0	0
2328_cloaca_Mexico	Untreated	383,046	17.5	1	0	0	1	0	0	0	0
	Custom B	479,897	8	349	38	0	311	0	0	0	0
2332_choanal/lung_Mexico	Untreated	184,406	98.2	0	0	0	0	0	0	0	0
	Custom B	329,480	44.2	177	113	0	64	0	0	0	0
2333_spleen/bursa_Mexico	Untreated	162,403	90.4	24	0	0	24	0	0	0	0
	Custom B	401,927	13.7	22,072	0	0	22,072	0	0	0	0
2334_choanal/lung_Mexico	Untreated	235,644	92	26	26	0	0	0	0	0	0
	Custom B	315,464	63.6	11,247	8	0	0	0	0	0	0
2335_spleen/bursa_Mexico	Untreated	272,404	81.4	5	0	0	2	0	0	0	0
	Custom B	367,819	50.3	12,204	8,153	0	4,051	0	0	0	0
2336_choanal/lung_Mexico	Untreated	181,888	95.9	117	0	0	0	0	0	0	0
	Custom B	319,268	25.4	42,986	0	0	0	0	0	0	0
2337_spleen/bursa_Mexico	Untreated	417,682	99.1	4	0	0	0	0	3	0	0
	Custom B	333,678	58.7	4,535	257	0	0	0	4,278	0	0
2338_choanal/lung_Mexico	Untreated	333,362	52.2	1	0	0	1	0	0	0	0
	Custom B	425,292	9	99	0	0	99	0	0	0	0
2339_choanal/lung_Mexico	Untreated	126,825	51.6	95	94	0	1	0	0	0	0
	Custom B	365,073	13.7	34,462	34,408	0	54	0	0	0	0
2340_choanal/lung_Mexico	Untreated	208,744	87.5	0	0	0	0	0	0	0	0
	Custom B	451,699	71.8	102	0	0	0	0	0	0	102
2341_spleen/bursa_Mexico	Untreated	255,910	86.8	3	2	0	1	0	0	0	0
	Custom B	381,024	41.3	9,788	6,105	0	3,683	0	0	0	0
2343_spleen/bursa_Mexico	Untreated	262,130	34.6	0	0	0	1	0	0	0	0
	Custom B	227,018	12.2	9,269	0	0	9,269	0	0	0	0
2344_choanal/lung_Mexico	Untreated	284,668	6.1	11	0	0	0	0	0	0	0
	Custom B	451,042	9.4	15,678	15,678	0	0	0	0	0	0
2345_spleen/bursa_Mexico	Untreated	102,692	35.5	0	0	0	0	0	0	0	0
	Custom B	428,986	47.8	157	126	0	31	0	0	0	0
2346_choanal/lung_Mexico	Untreated	313,277	17.1	8	8	0	0	0	0	0	0
	Custom B	543,495	5.8	40,358	40,358	0	0	0	0	0	0
2347_spleen/bursa_Mexico	Untreated	207,724	32.1	1	0	0	1	0	0	0	0
	Custom B	530,042	25.4	6,025	6,005	0	20	0	0	0	0
2348_choanal/lung_Mexico	Untreated	170,714	93.7	6	5	1	0	0	0	0	0
	Custom B	309,125	39.4	1,039	890	76	73	0	0	0	0
2349_spleen/bursa/Mexico	Untreated	236,046	95.3	2	0	0	2	0	0	0	0
	Custom B	329,315	41.8	36,823	139	0	36,684	0	0	0	0