

SUPPLEMENTAL MATERIALS

Table S1. Non-rarified list of blood-borne viruses detected in *Mus musculus*, *Rattus norvegicus*, and *Rattus rattus* collected across New Orleans, presented as the (#) number of positive pools, followed by the (%) percentage of positive pools (n = total number of pools).

Virus	<i>Mus musculus</i> (n = 32)		<i>Rattus norvegicus</i> (n = 35)		<i>Rattus rattus</i> (n = 43)	
	# Pools Positive	% Pools Positive	# Pools Positive	% Pools Positive	# Pools Positive	% Pools Positive
Adeno-associated virus	2	6.3	0	0	0	0
Anelloviridae sp.	0	0	25	71.4	41	95.3
Beihai picobirna-like virus 8	5	15.6	0	0	0	0
Chipmunk parvovirus	5	15.6	0	0	0	0
H-1 parvovirus	1	3.1	6	17.1	1	2.3
Iflaviridae sp.	1	3.1	0	0	0	0
Lymphocytic choriomeningitis virus	8	25.0	0	0	0	0
Minute virus of mice	1	3.1	0	0	0	0
Mouse kidney parvovirus	9	28.1	0	0	0	0
Mouse parvovirus 1	24	75.0	0	0	0	0
Murine adeno-associated virus 1	7	21.9	0	0	0	0
Murine adeno-associated virus 2	1	3.1	0	0	0	0
Murine adeno-associated virus [new]	16	50.0	0	0	0	0
Murine adenovirus 1	3	9.4	1	2.9	0	0
Murine adenovirus 3	0	0	2	5.7	0	0
Murine bocavirus	10	31.3	0	0	0	0
Murine chapparvovirus	0	0	2	5.7	1	2.3
Murine cytomegalovirus (strain K181)	14	43.8	0	0	0	0
Murine leukemia virus	31	96.9	0	0	4	9.3
Mus musculus polyomavirus 2	12	37.5	0	0	0	0
Rat adeno-associated virus	0	0	2	5.7	0	0
Rat bocavirus	0	0	2	5.7	2	4.7
Rat cytomegalovirus	0	0	2	5.7	4	9.3
Rat Kobuvirus MM33	0	0	1	2.9	0	0
Rat leukemia virus	0	0	1	2.9	0	0
Rat minute virus	0	0	16	45.7	2	4.7
Rat minute virus 1a	0	0	6	17.1	0	0
Rat minute virus 1b	0	0	6	17.1	0	0
Rat minute virus 1c	0	0	8	22.9	1	2.3
Rat minute virus 2a	0	0	4	11.4	0	0
Rat parvovirus 1a	0	0	5	14.3	0	0
Rat parvovirus 1b	0	0	1	2.9	0	0
Rat parvovirus 2	0	0	0	0	1	2.3
Rat parvovirus NTU1	0	0	5	14.3	5	11.6
Rattus norvegicus papillomavirus 1	0	0	1	2.9	0	0
Rodent bocavirus	4	12.5	1	2.9	0	0
Rodent hepacivirus	0	0	23	65.7	3	7.0
Rodent pegivirus	0	0	28	80.0	0	0
Rodent Torque teno virus 1	0	0	30	85.7	42	97.7
Rodent Torque teno virus 2	0	0	32	91.4	15	34.9
Rodent Torque teno virus 3	0	0	22	62.9	21	48.8
Rodent Torque teno virus 4	0	0	0	0	1	2.3
Torque teno mini virus 4	0	0	0	0	1	2.3
Torque teno mini virus 5	0	0	1	2.9	11	25.6
Torque teno virus	0	0	0	0	14	32.6
TTV-like mini virus	0	0	8	22.9	12	27.9

Figure S1. Standardized rarefied virus richness in (A) *R. norvegicus* and (B) *R. rattus* from locations where both host species have been detected versus locations where each species has been detected without the other.

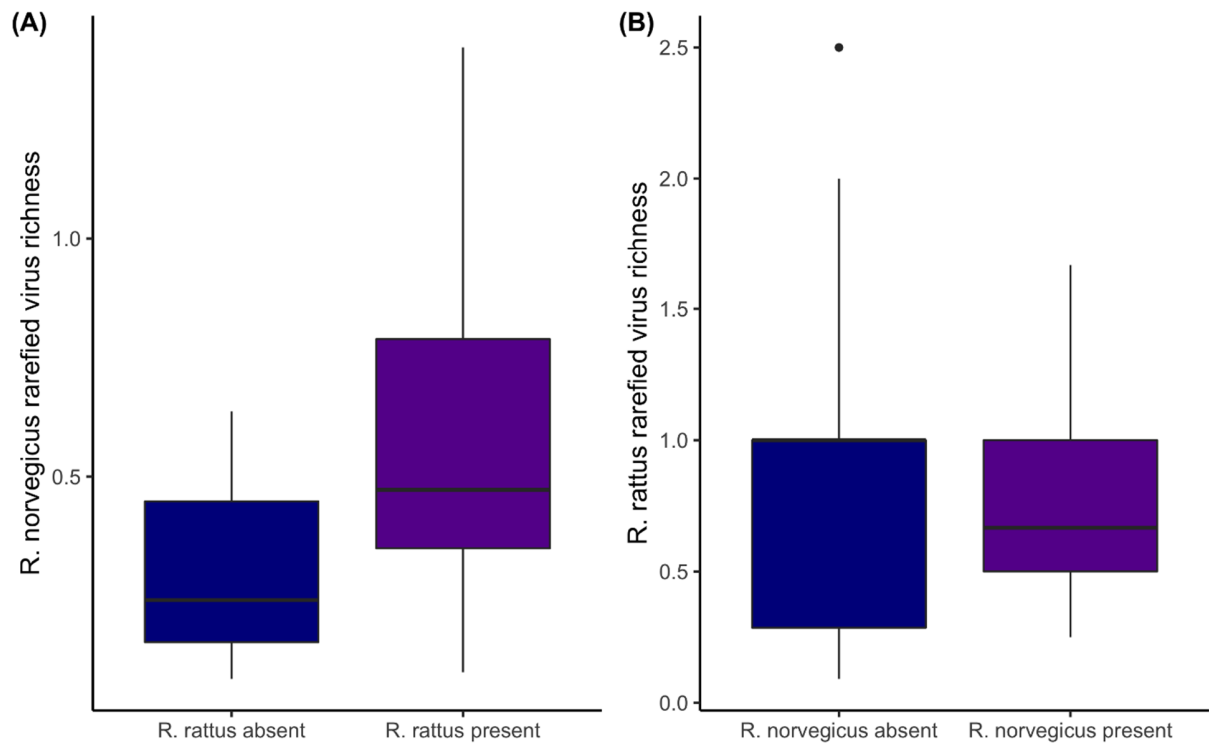


Figure S2. Linear regressions of rarified viral richness against (left) mean and (right) total abundance of each host (red = *Mus musculus*; green = *Rattus norvegicus*; blue = *Rattus rattus*) at a trapping site over all trapping seasons, with 95% confidence intervals (all, p-value > 0.05). Analyses were restricted to sites where rats and mice were trapped.

