

SUPPLEMENT

Table S1: Kaplan Meier survival probability observed for each species individually and at separate viral doses.

Species	Virus	Dose	Survival probability (%)	SE (+/-)	n	Observed Mortality
Pacific oyster (<i>C. gigas</i>)		<i>Control</i>	100	0	115	0
	SD μ var	1 x 10 ⁴	100	0	60	0
	SD μ var	1 x 10 ⁵	94.3	0.03	53	3
	SD μ var	1 x 10 ⁶	67.8	0.06	59	19
	FRA μ var	1 x 10 ⁴	98.3	0.02	59	1
	FRA μ var	1 x 10 ⁵	89.8	0.04	59	6
	FRA μ var	1 x 10 ⁶	64.9	0.06	57	20
Eastern oyster (<i>C. virginica</i>)		<i>Control</i>	100	0	119	0
	SD μ var	1 x 10 ⁴	100	0	60	0
	SD μ var	1 x 10 ⁵	100	0	61	0
	SD μ var	1 x 10 ⁶	100	0	60	0
	FRA μ var	1 x 10 ⁴	100	0	60	0
	FRA μ var	1 x 10 ⁵	100	0	60	0
	FRA μ var	1 X 10 ⁶	100	0	61	0
Hard Clam (<i>M. mercenaria</i>)		<i>Control</i>	99.1	0.01	114	1
	SD μ var	1 x 10 ⁴	100	0	60	0
	SD μ var	1 x 10 ⁵	100	0	60	0
	SD μ var	1 x 10 ⁶	98.3	0.02	59	1
	FRA μ var	1 x 10 ⁴	100	0	39	0
	FRA μ var	1 x 10 ⁵	96.6	0.02	59	2
	FRA μ var	1 x 10 ⁶	100	0	60	0

Table S2: Viral copies mg⁻¹ of tissue in spat exposed to the FRA and SD μ Var in the Dose Response study. *= mean between both viral exposures

Mortality or Survivor	Exposed spat species	Virus (μ Var)	n	Viral copies mg ⁻¹ of tissue
Mortality	Pacific oyster	SD & FRA	30	$1.1 \times 10^8 \pm 1.7 \times 10^7$ *
	Eastern oyster	SD & FRA	0	
	Hard clam	FRA	2	785 ± 25
		SD	1	254
Survivor	Pacific oyster	SD & FRA	30	$5.8 \times 10^5 \pm 5.4 \times 10^5$ *
	Eastern oyster	SD & FRA	7	11.5 ± 6 *
			23	Undetectable *
	Hard clam	SD & FRA	8	8.6 ± 3.8 *
			21	Undetectable *

Table S3: Viral copies mg⁻¹ of tissue in Pacific oyster spat mortalities and survivors treated with ‘exposed seawater’ from adult Pacific oysters, eastern oysters, and hard clams. *= mean between both viral exposures

Mortality or Survivor of Pacific oyster	‘Exposed seawater’ Treatment	Virus (μ Var)	n	Viral copies mg ⁻¹ of tissue
Mortality	Pacific oyster	SD & FRA	90	$9.5 \times 10^7 \pm 1.3 \times 10^7$ *
	Eastern oyster	SD & FRA	60	$6.0 \times 10^7 \pm 1.1 \times 10^7$ *
	Hard clam	SD	1	2.9×10^4
Survivor	Pacific oyster	SD	2	$4.5 \times 10^7 \pm 1.1 \times 10^6$
	Eastern oyster	SD	15	$4.9 \times 10^6 \pm 3.5 \times 10^6$
	Eastern oyster	FRA	9	11 ± 2.3
			31	undetectable
	Hard clam	SD & FRA	9	13 ± 11 *
		81	undetectable	

Figures:

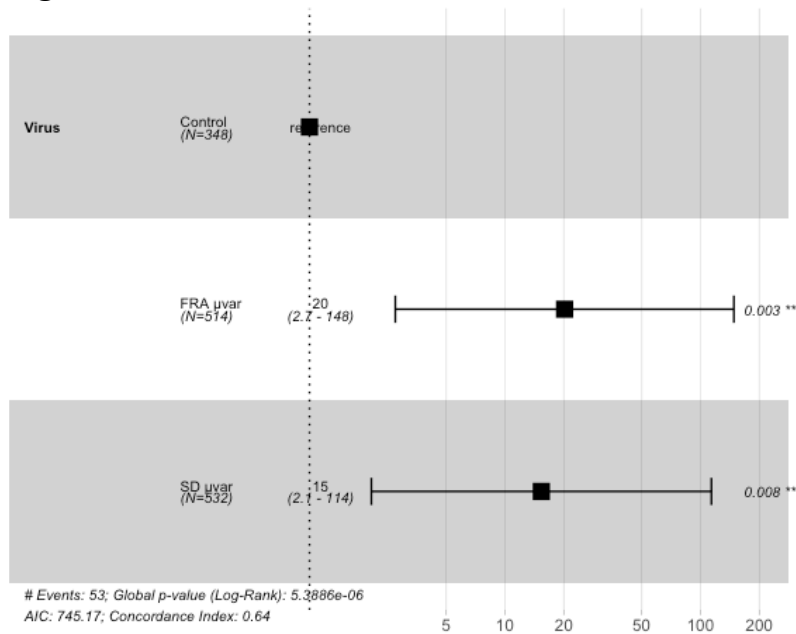


Figure S1: Cox proportional hazard showing that FRA (20 fold) & SD (15 fold) significantly increased risk of mortality compared to controls. *** $p < 0.001$

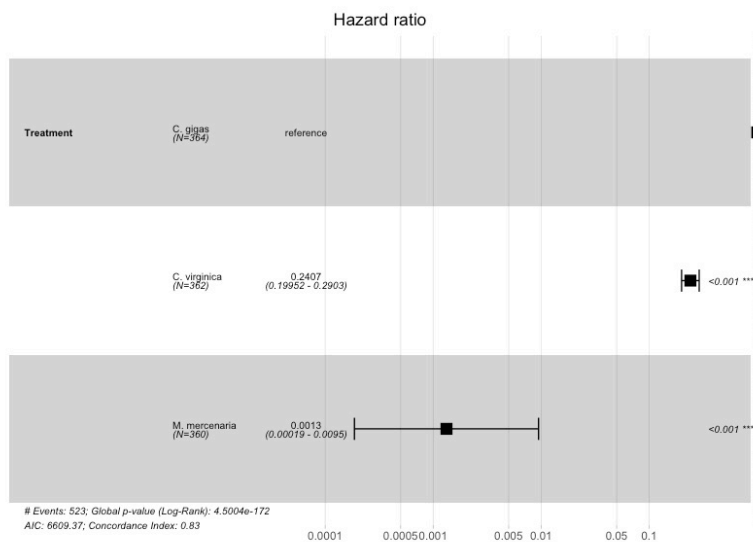


Figure S2: Cox proportional hazard ratio showing that hard clams are significantly decreasing risk of mortality (0.0013 fold) compared to eastern oysters (0.2407 fold) and Pacific oysters which are significantly increasing the risk of mortality in Pacific oyster spat. *** $p < 0.001$

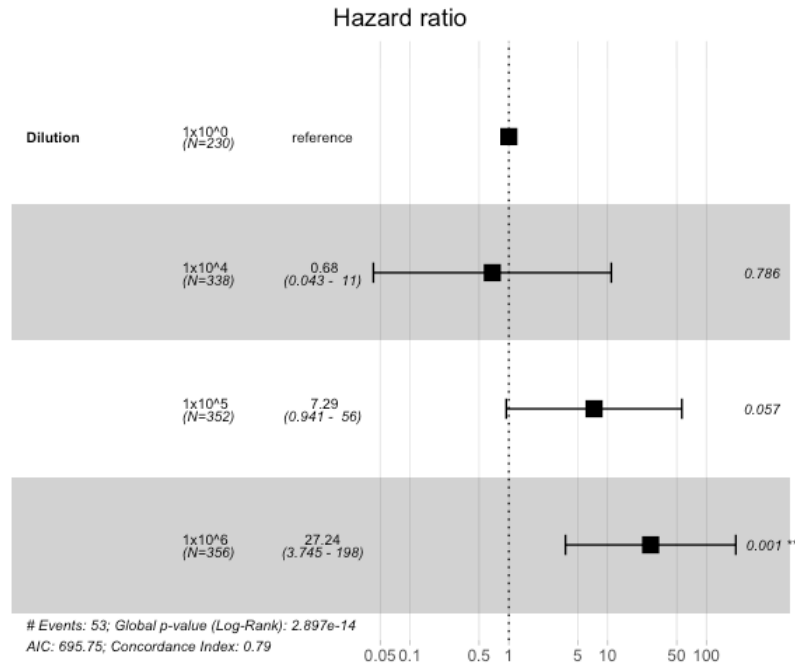


Figure S3: Cox proportional hazard ratio showing that exposure to viral dose of 1×10^6 viral copies/mL significantly increases the risk of mortality (27.24 fold) than viral doses of 1×10^5 viral copies/mL (7.29 fold), 1×10^4 viral copies/mL (0.68 fold) and compared to controls. *** $p < 0.001$.