TEXAS
GOATS

COMPARATIVE ANTIPOLIOMYELITIC ACTIVITY OF GOAT SERA AGAINST EITHER 100 LD_{50} OF [redacted] VIRUS OR VARYING DILUTIONS OF VIRUS

SERUM #	UNDILUTED SERUM VS. 100 LD_{50}	UNDILUTED SERA TESTED AGAINST $10^{-1.6}$, $10^{-2.3}$, 10^{-3} DILUTIONS	
		LD_{50}	NEUTRALIZING INDEX *
52	1/10	2.1	80
61	1/10	2.0	100
63	1/10	2.2	63
14	3/10	1.9	130
1	2/8 ✓	2.4	40
24	4/10	2.1	80
36	4/10	1.9	130
51	4/10	1.8	160
55	4/10	2.3	50
33	5/10	2.7	20 ✓
37	5/10	2.2	63
44	5/10	2.5	32 ✓
45	5/10	2.9	13 ✓
8	6/10	3.2	6
9	6/10	2.4	40
18	6/10	2.5	32
39	6/10	2.5	32
3	7/10	3.2	6
6	7/10	2.2	63
34	7/10	2.5	32

* Calculated on cumulative titer of 10^{-4} for pool Control Titers for individual tests

RESULTS OF COMPARATIVE TESTS IN WHICH UNDILUTED TEXAS GOAT SERA WERE TESTED AGAINST 100 LD50 OF [redacted] VIRUS AND VARYING DILUTIONS OF [redacted] VIRUS

SERUM	UNDILUTED SERUM VS. 100 LD50 †	MORTALITY AT INDICATED FINAL DILUTION OF VIRUS *				LD_{50}	NEUTRALIZING INDEX
		1.6	2.3	3.0	4.0		
GOAT # 52	1/10	6/8	3/7	1/7	—	2.1	80
GOAT # 61	1/10	6/6	1/8	0/7	—	2.0	100
GOAT # 63	1/10	7/8	3/8	1/8	—	2.2	63
GOAT # 14	2/10	6/8	2/8	0/7	—	1.9	130
GOAT # 1	2/8	7/8	5/8	1/8	—	2.4	40
GOAT # 24	4/10	7/8	3/7	1/8	—	2.1	80
GOAT # 36	4/10	4/8	3/7	1/7	—	1.9	130
GOAT # 51	4/10	4/8	1/8	2/8	—	1.8	160
GOAT # 55	4/10	7/7	3/8	1/8	—	2.3	50
GOAT # 33	5/10	6/7	6/8	3/8	—	2.7	20
GOAT # 37	5/10	7/8	4/8	0/8	—	2.2	63
GOAT # 44	5/10	6/8	4/8	4/6	—	2.5	32
GOAT # 45	5/10	8/8	8/8	2/7	—	2.9	13
GOAT # 8	6/10	8/8	6/8	6/8	—	3.2	6
GOAT # 9	6/10	6/8	6/8	0/8	—	2.4	40
GOAT # 18	6/10	8/8	4/8	3/8	—	2.5	32
GOAT # 39	6/10	8/8	4/7	1/8	—	2.5	32
GOAT # 3	7/10	8/8	6/8	6/8	—	3.2	6
GOAT # 6	7/10	7/8	4/8	0/8	—	2.2	63
GOAT # 34	7/10	6/8	5/8	3/8	—	2.5	32

cumulative control * POOL OF 2/15/51	MORTALITY AT INDICATED FINAL DILUTION OF VIRUS						
	1.0	2.0	2.3	3.0	4.0	5.0	
	20/20	27/20	124/128	137/147	80/148	3/20	4.0
CONTROL TEST OF 11/30/51			20/20	17/20	9/19		3.8

10/63 – Total 16% positive

4/29 – under 2 yrs of age

6/34 = 2 yrs and over

63 — 3 1/2 yrs
61 — 5 3/4 "
55 — 6 "
52 — 5 mo
51 — 10 mo
37 2 yrs
36 4 yr. 8 mos
24 4 yrs
14 — 7 mo
6 — 11 mo

Under 2 –

4/29

2 yrs + over

6/34

JAN 22 1951

TEST FOR THE PRESENCE OF [redacted] ANTIBODIES IN GOAT SERA RECEIVED FROM TEXAS 1/11/51

PURPOSE: To determine if the sera from these Texas goats contain neutralizing antibodies against Lansing virus.
In the present experiments the undiluted sera are to be tested against 100 LD_{50} of Lansing virus to determine if the sera will neutralize this dose of virus.

VIRUS: [redacted] virus: Pool II of 6/6/50 10% suspension in saline. Centrifuged 10 minutes at 2000 rpm to remove flocculent ppt.

PROCEDURE: 0.3 ml of 1:50 dilution of Lansing virus was distributed in sterile tubes. 0.3 ml of undiluted goat serum was added to the virus so that the final dilution of virus was equal to 10^{-2} or 100 LD_{50}. The tubes were shaken and incubated at room temperature for 1 hour, and then held in an ice bath during inoculation.

MICE: 18-20 gram ♀ Mayfield albino. 10 per dilution

21 sera tested — 2 neutralized 100 LD_{50}

No. 5/10 or better protection — 2 (2/8, 3/10)

JAN 22 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
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SPECIMEN	VIRUS	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
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STANDARD B & P "NoTEAR"

JAN 22 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
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JAN 22 1951

SPECIMEN	VIRUS	NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
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SERUM FROM GOAT #15	10^{-2}	5	–	–	–	–	KILLED NO DETAILS		–	–	E	D																										10/10	
+		6	–	–	–	–	–		–	–	–	PE	D																										
[redacted]		7	–	–	–	–	–		–	–	–	–	?	P		D																							
		8	–	–	–	–	–		–	–	–	–	P			D																							
		9	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	EE	D																		
		10	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	P			D		

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
P		1	?	PR	D																																		
		2	–	P	PR	D																																	
		3	–	–	PP	D																																	
		4	–	–	PP	D																																	
SERUM FROM GOAT #16	10^{-2}	5	–	–	–	–	–		–	–	PW	D																										8/10	
		6	–	–	–	–	–		–	–	–	–	?	EE P	D																								
		7	–	–	–	–	–		–	–	–	–	–	P	D																								
		8	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	P	D															
		9	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
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Q		1	–	P	D																																		
		2	–	P	D																																		
		3	–	?	D																																		
		4	–	–	D																																		
SERUM FROM GOAT #17	10^{-2}	5	–	–	D																																	9/10	
		6	–	–	P	D																																	
		7	–	–	?	EH CWS	P CWS	D																															
		8	–	–	–	–	–		–	–	–	–	EE	EE	D																								
		9	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	P	PP EE	D											
		10	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
R		1	–	–	?	D																																	
		2	–	–	–	P	PP	D																															
		3	–	–	–	?	?	D																															
		4	–	–	–	–	–		–	–	–	–	–		–	–	W	EE P	D																				
SERUM FROM GOAT #18	10^{-2}	5	–	–	–	–	–		–	–	–	–	–		–	–	–	–	?	?		?	W	PP	D													6/10	
+		6	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	?	?		?	–	P	PP	D							
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JAN 2 2 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
S		1	—	D																																			
		2	—	?	D																																		
		3	—	?	CNS	D																																	
		4	—	?	?	D																																	
SERUM FROM GOAT #19	10^{-2}	5	—	—	—	?	D																															8/10	
		6	—	—	—	—		—	—	—	—	—				D																						
+		7	—	—	—	—		—	—	—	—	—				PP EE D																						
[redacted]		8	—	—	—	—		—	—	—	—	—				—	—	—	—	—			P EE PR D															
		9	—	—	—	—		—	—	—	—	—				—	—	—	—	—			—	—	—	—	—		—	—	—	—	—	—	—	—		
		10	—	—	—	—		—	—	—	—	—				—	—	—	—	—			—	—	—	—	—		—	—	—	—	—	—	—	—		
T		1	—	P	D																																	
		2	—	?	D																																	
		3	—	—	PP	D																																
		4	—	—	P	D																																
SERUM FROM GOAT #20	10^{-2}	5	—	—	P	D																																9/10	
		6	—	—	—	P	P	D																															
+		7	—	—	—	—		—	—	PP	D																											
[redacted]		8	—	—	—	—		—	—	—	?	P	PR			D																						
		9	—	—	—	—		—	—	—	—	—				—	—	—	—	—			—	—	—	—	—		D									
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U		1	—	?	CNS	D																																
		2	—	—	?	D																																
		3	—	—	?	D																																
		4	—	—	—	P	P	PR	D																													
SERUM FROM GOAT #21	10^{-2}	5	—	—	—	P	P	P	P	D																												7/10	
		6	—	—	—	CNS	CNS	D																															
+		7	—	—	—	—		—	—	?	—	—				—	—	—	—	—			—	—	—	—	?		PP	PP	D							
[redacted]		8	—	—	—	—		—	—	—	—	—				—	—	—	—	—			—	—	—	—	—		—	TY	TY	TY	TY	TY		TY		
		9	—	—	—	—		—	—	—	—	—				—	—	—	—	—			—	—	—	—	—		—	—	—	—	—	—		—		
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
V		1	—	D																																			
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CONTROL	10^{-2}	5	—	PP	D																																	10/10	
		6	—	PP	D																																		
SALINE		7	—	PP	PP	D																																	
+		8	—	—	P	PP	D																																
[redacted]		9	—	—	PP	PP	D																																
		10	—	—	—	—	—	—	—	—	EE	D																										

JAN 24 1951

TEST FOR THE PRESENCE OF [redacted] ANTIBODIES IN GOAT SERA RECEIVED FROM TEXAS 1/11/51

PURPOSE: To determine if the sera from these Texas goats contain neutralizing antibodies against Lansing virus.
In the present experiments the undiluted sera are to be tested against 100 PD_{50} of Lansing virus to determine if the sera will neutralize this dose of virus.

VIRUS: [redacted] virus: Pool I of 6/6/50. 10% suspension [redacted]. Centrifuged 10 minutes at 2000 rpm. to remove flocculent ppt.

PROCEDURE: 0.3 ml of 1:50 dilution of Lansing virus was distributed in sterile tubes. 0.3 ml of undiluted goat serum was added to the virus so that the final dilution of virus was equal to 10^{-2} or 1/100 LD_{50}. The tubes were shaken and incubated at room temperature for 1 hour, and then held in an ice bath during inoculation.

MICE: 18-20 gram Maxfield 10 per dilution

0.05 ml of a mixture of Penicillin and Streptomycin containing 10,000 units of penicillin and 10 mg of streptomycin per ml was added to each serum and a penicillin-streptomycin control was included.

22 tested — 1 neutralized

JAN 21 1951

SPECIMEN	VIRUS	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
A		1	–	D																																			
		2	–	PP	D																																		
		3	–	PP	PP		D																																
		4	–	–	P		D																																
SERUM FROM	10^{-2}	5	–	–	P		D																																
GOAT # 22		6	–	–	–		–	–	W	D																												10/10	
		7	–	–	–		–	–	–	–	–			PP	WW PP	D																						
+		8	–	–	–		–	–	–	–	–			–	T	E E	E E	D																				
[redacted]		9	–	–	–		–	–	–	–	–			–	–	E E	E E	D																				
		10	–	–	–		–	–	–	–	–			–	–	–	E E	D																				
B		1	–	–	P		D																																
		2	–	–	? CWS		D																																
		3	–	–	–		:	P	D																														
		4	–	–	–		–	–	–	:	?	:		P E E	D																								
SERUM FROM	10^{-2}	5	–	–	–		–	–	–	–	–			–	–	–		P	D																				
GOAT # 23		6	–	–	–		–	–	–	–	–			–	–	–		W E	D																				
		7	–	–	–		–	–	–	–	–			–	–	–	–	–	?		?		E W W E	D															
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[redacted]		9	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	:	"		D										
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		3	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	P P P	D														
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SERUM FROM	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
GOAT # 24		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
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[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
D		1	–	PP	D																																		
		2	–	PP	D																																		
		3	–	P	PP		D																																
		4	–	–	?		D																																
SERUM FROM GOAT #25	10^{-2}	5	–	–	–		?	?	–	–	P	D																										
		6	–	–	–		–	–	–	–	P	D																										10/10
+		7	–	–	–		–	–	–	–	–	D																										
[redacted]		8	–	–	–		–	–	–	–	–	–		PP EE	D																							
		9	–	–	–		–	–	–	–	–	–		–	P	P EE	D																					
		10	–	–	–		–	–	–	–	–	–		–	–	E	P E	P EE	D																			
E		1	–	P	D																																		
		2	–	(NS	D																																		
		3	–	–	P		D																																
		4	–	–	W		D																																
SERUM FROM GOAT #26	10^{-2}	5	–	–	–		P W	D																															
		6	–	–	–		–	–	–	–	–	PP		D																								9/10
+		7	–	–	–		–	–	–	–	–	–		–	P	D																						
[redacted]		8	–	–	–		–	–	–	–	–	–		–	–	D																						
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		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
F		1	–	P																																		
		2	–	–	?		?	–	–	?	?	?		?	–	?	D																					
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		4	–	–	–		–	–	–	–	–	–		–	–	–	–	–			E	D																
SERUM FROM GOAT #27	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	?	?	?	?	E		D										
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+		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	D				
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
G		1	–	–	P		D																																
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		3	–	–	–		–	–	:	–	–			P EE	D																								
		4	–	–	–		–	–	–	–	–			–	P E	D																							
SERUM FROM GOAT #28	10^{-2}	5	–	–	–		–	–	–	–	–			–	–	–	–	–	N		D																	8/10
		6	–	–	–		–	–	–	–	–			–	–	–	–	–	?		D																	
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[redacted]		9	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–			–	–	–	
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H		1	–	P	D																																	
		2	–	P	D																																	
		3	–	–	–		–	–	–	–	PP WW	D																										
		4	–	–	–		–	–	–	–	WW	D																										
SERUM FROM GOAT #29	10^{-2}	5	–	–	–		–	–	–	–	?	PP EE		D																								
		6	–	–	–		–	–	–	–	–	–		P	PP EE	D																						9/10
		7	–	–	–		–	–	–	–	–	–		–	WW Eh	PP EE	D																				
+		8	–	–	–		–	–	–	–	–	–		–	–	?	?	EE	WW GE		D																	
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	?	WW E	D														
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–			–	–	–	
I		1	?	GJS	D																																	
		2	?	GJS	PR		D																															
		3	–	?	PP		D																															
		4	–	–	?		TY	TY	D	TYPHOID																												
SERUM FROM GOAT #30	10^{-2}	5	–	–	–		–	–	–	–	–			P EE	D																							8/9
		6	–	–	–		–	–	–	–	–			–	–	–	P	D																				
		7	–	–	–		–	–	–	–	–			–	–	–	–	–	?		D																	
+		8	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	P	D															
[redacted]		9	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	Eh	P PP E	D							
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SPECIMEN	VIRUS	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
J		1	–	WW	WW		D																																
		2	–	–	–		?	–	–	PP	D																												
		3	–	–	–		–	–	–	–	–	–		–	?	?	?	?	?		?	?	D																
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SERUM FROM GOAT #31	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	EE	D													
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	E	D												7/9
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		D												
+		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		P	P	EE	D									
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	
K		1	–	P	D																																	
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		3	–	–	P		D																															
		4	–	–	P		D																															
SERUM FROM GOAT #32	10^{-2}	5	–	–	WW		D																															
		6	–	–	?		?	–	–	PP	D																											10/10
		7	–	–	–		–	–	–	–	PP	D																										
+		8	–	–	–		–	–	–	–	–	E		D																								
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–			WW	WW	D															
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	P	D													
L		1	–	?	?		D																															
		2	–	–	–		PR	PR	D																													
		3	–	–	–		–	–	–	–	–	–			E	E	D																					
		4	–	–	–		–	–	–	–	–	–		–	–	?	PWP	D																					
SERUM FROM GOAT #33	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	PPR	D																				
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	?		?	?	–	–	–		–	–	–	–	–	–	–	?	–			5/10
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–			
+		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–			
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–			
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–			

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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
M		1	–	P	D																																		
		2	–	P	P		D																																
		3	–	–	P		D																																
		4	–	–	P		D																																
SERUM FROM GOAT #34	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–			P	PP EE	D															7/10
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	P	PR	D														
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–		–	–		P EE	D							
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–			
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–			
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–			
N		1	–	–	D																																
		2	–	–	PP		D																														
		3	–	–	?		D																														
		4	–	–	–		D																														
SERUM FROM GOAT #35	10^{-2}	5	–	–	–		–	–	P	D																											9/10
		6	–	–	–		–	–	–	–	–	–		P	P EE	D																					
		7	–	–	–		–	–	–	–	–	–		–	P	D																					
		8	–	–	–		–	–	–	–	–	–		–	WP EE	PP EE	P R	D																			
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–			?	uP	WP EE	D													
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–			
O		1	–	–	PP		D																														
		2	–	–	W		D																														
		3	–	–	–		–	–	–	–	PP	PP		D																							
		4	–	–	–		–	–	–	–	–	–		–	–	:	?	–	–		–	P	PR	D													
SERUM FROM GOAT #36	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–		4/10	
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–			
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–			
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–			
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–			
		10	–	–	/		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–			

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
P		1	–	?	?		–	–	–	P	D																												
		2	–	–	–		–	–	–	–	–	–		–	–	–	–	W P P E E			D																		
		3	–	–	–		–	–	–	–	–	–		–	–	–	–	E	E		E D																		
		4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	E	P	D						
SERUM FROM GOAT #37	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	D		
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	5/10	
[redacted]		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
Q		1	–	P	P P		D																														
		2	–	?	?		P P	D																													
		3	–	?	?		TY	TY	TY	TY	TY	TY		TY	TY	CNS TY	CNS TY	CNS TY	CNS TY		?	–	–	–	CNS	CNS		?	?	–	Con	D						
		4	–	–	–		?	?	P	P	D																										
SERUM FROM GOAT #38	10^{-2}	5	–	–	–		–	–	?	W W	P P	D																										6/9
		6	–	–	–		–	–	–	?	?	?		CNS EE	CNS EE	P R	D																					
[redacted]		7	–	–	–		–	–	–	–	–	–		?	?	–	–	–			P EE	D																
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		11	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–		
R		1	–	?	P P		D																														
		2	–	–	–		D																														
		3	–	–	–		–	P	D																												
		4	–	–	–		–	–	–	–	–	–		P EE	D																						
SERUM FROM GOAT #39	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	?	P P	D																				6/10
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	P EE	D														
+		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		

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SPECIMEN	VIRUS	NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
S		1	–	PP	D																																		
		2	–	P	D																																		
		3	–	P	D																																		
		4	–	–	PR	D																																	
SERUM FROM GOAT #40	10^{-2}	5	–	–	?	D																																	
		6	–	–	–	?	–	?	E	D																													
		7	–	–	–	–	–	–	–	–	?			PR	D																							10/10	
		8	–	–	–	–	–	–	–	–	–			?	W EE E	D																							
		9	–	–	–	–	–	–	–	–	–			–		D																							
		10	–	–	–	–	–	–	–	–	–			–	–	?	?	D																					
T		1	?	?	?		PP PP	D																														
		2	–	–	–		PP	D																														
		3	–	–	–		?	?	–	P INS	PR	D																										
		4	–	–	–		–	–	–	–	–	–		–	D																							
SERUM FROM GOAT #41	10^{-2}	5	–	–	–		–	–	–	–	–	–		–	–	W PP		D																				7/10
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		D																	
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		?	P E	D															
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	E	E	E			
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
U		1	–	–	–	D																																
		2	–	–	–	PR	D																															
		3	–	–	–	PR	D																															
		4	–	–	–	?	PP	PP	D																													
SERUM FROM GOAT #42	10^{-2}	5	–	–	–		–	–	–	PP EE	D																											6/10
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		D										
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
V		1	–	P	D																																		
		2	–	P	D																																		
		3	–	W	D																																		
		4	–	–	PD		D																																
SERUM FROM GOAT #43	10^{-2}	5	–	–	PP		D																															10/10	
		6	–	–	–		–	–	–	–	–			–	–	D																						
		7	–	–	–		–	–	–	–	–			–	–	W	W	W	PE EE	D																		
		8	–	–	–		–	–	–	–	–			–	–	?	–	–			?	P	PE EE	D														
		9	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–	?	PE	PE P	D							
		10	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–	–	?	PP	PR	D						
W		1	–	–	–		?	P	D																													
		2	–	–	–		–	–	PE	D																												
		3	–	–	–		–	–	–	PP	D																											
		4	–	–	–		–	–	–	–	PP EE	D																										
CONTROL	10^{-2}	5	–	–	–		–	–	–	–	?	?		P	P	D																						
		6	–	–	–		–	–	–	–	–	–		–	P	P	P	PP PP	PR		D																	
SALINE		7	–	–	–		–	–	–	–	–	–		–	–	?	?	?	P		D																	
+		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		PP EE	D																
[redacted]		9	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	?	?	P	PE EE	D												
		10	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	?		?	?	?	?	–	–	–	–				
X		1	–	–	–	P	D																															
		2	–	–	–	PP	D																															
		3	–	–	–	–	P	PP	D																													
STREPTOMYCIN-PENICILLIN CONTROL	10^{-2}	4	–	–	–	–	–	–	P	D																												
		5	–	–	–	–	–	–	P	D																												
		6	–	–	–	–	–	–	–	P	D																											
		7	–	–	–	–	–	–	–	P	D																											10/10
0.05 ml. PENICILLIN-STREPTOMYCIN		8	–	–	–	–	–	–	–	–	PE	D																										
+		9	–	–	–	–	–	–	–	–	–	PP	D																										
[redacted]		10	–	–	–	–	–	–	–	–	–	–		–	–	–	:	P PP E EE		D																		
	Swiss																																				

JAN 25 1951

TEST FOR THE PRESENCE OF [redacted] ANTI BODIES IN GOAT SERA RECEIVED FROM TEXAS 1/11/51

PURPOSE: To determine if the sera from these Texas goats contain neutralizing antibodies against Lansing virus.
In the present experiments the undiluted sera are to be tested against 100 LD_{50} of Lansing virus to determine if the sera will neutralize this dose of virus.

VIRUS: [redacted] virus: Pool V of 6/16/50. 10% suspension in [redacted]. Centrifuged 10 minutes at 2000 rpm to remove flocculant ppt.

PROCEDURE: 0.3 ml of 1:50 dilution of Lansing virus was distributed in sterile tubes. 0.3 ml of undiluted goat serum was added to the virus so that the final dilution of virus was equal to 10^{-2} or 100 LD_{50}. The tubes were shaken and incubated at room temperature for 1 hour and then held in an ice bath during inoculation.
0.05 ml of a mixture of Penicillin and streptomycin containing 10,000 units of penicillin and 10 mg of streptomycin per ml was added to each serum and a penicillin-streptomycin control was included.

MICE: 18-20 gm. ♀ Maxfield, ♂ & ♀ PRI and ♂ & ♀ Swiss

7/20 neutralized (50% or better)

Total 13/63 - neutralized

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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
A		1	–	–		D																																	
		2	–	–		P	D																																
		3	–	–		–	–	–	–	–	–		–	–	–	–	WW EE	D																				
		4	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	P EE		D											
SERUM FROM GOAT #44	10^{-2}	5	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		– –		P	P P P	D							5/10
		6	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
+		7	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
[redacted]		8	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
		9	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
		10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
B		1	–	–		?	?	–	–	–			D																									
		2	–	–		–	–	–	–	–			–	–	?	E	P EE	D WW																				
		3	–	–		–	–	–	–	–			–	–	–	–	–	–		D																		
		4	–	–		–	–	–	–	–			–	–	–	–	–	–		?	?	P	D															
SERUM FROM GOAT #45	10^{-2}	5	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	E	E	E		?	?	?	E	E	?		?	P	P	D	5/10
		6	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
+		7	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
[redacted]		8	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
		9	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
		10	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–		
C		1	S	D																																	
		2	–	P		D																																
		3	–	P		D																																
		4	–	–		–	–	–	P	P P	P																										
SERUM FROM GOAT #46	10^{-2}	5	–	–		–	–	–	?	EE	P EG		D																								10/10
		6	–	–		–	–	–	–	–	–		P P EE	D																								
+		7	–	–		–	–	–	–	–	–		–	D																								
[redacted]		8	–	–		–	–	–	–	–	–		–	P	D																						
		9	–	–		–	–	–	–	–	–		–	–	WW E	NA EE	D																				
		10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	D																

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
D		1	–	D																																			
		2	–	–		–	–	–	?	PP	D																												
		3	–	–		–	–	–	–	? W	D																												
		4	–	–		–	–	–	–	–	–	D																											
SERUM FROM GOAT #47	10^{-2}	5	–	–		–	–	–	–	–	–	–	?	P	P	D																							8/10
+		6	–	–		–	–	–	–	–	–	–	–	–	–	–	W	P E E	D																				
[redacted]		7	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	P	P P	D																		
		8	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	P	P	D											
		9	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		10	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
E		1	S	D																																	
		2	–	P		D																																
		3	–	T		D																																
		4	–	–		?		–	–	P E E	D																											
SERUM FROM GOAT #48	10^{-2}	5	–	–		–	–	–	E E	E E	P P E E		D																									9/9
+		6	–	–		–	–	–	?	?	?		?	–	–	–	P	E P		D																		
[redacted]		7	–	–		–	–	–	–	–	–		–	–	–	–	–	–		W W	D																	
		8	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	E E	D																
		9	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	W W	W A E E	D														
		10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	P P E E	D										
F		1	–	P		D																																
		2	–	–		D																																
		3	–	–		D																																
		4	–	–		PP	D																															
SERUM FROM GOAT #49	10^{-2}	5	–	–		?	?	?	–	–	–		–	E	D																							10/10
+		6	–	–		–	–	–	–	–	–		–	–	E	P E E	P P E E	D																				
[redacted]		7	–	–		–	–	–	–	–	–		–	–	?	P E E	P P E E	D																				
		8	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	EE	WW E E	PP E E	D										
		9	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	P E E	P P P	D									
		10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	P E E	D									

STANDARD B & P "NoTEAR"

STANDARD B & P "NoTEAR"

JAN 25 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
G		1	–	D																																			
		2	–	TY		D	TYPHOID																																
		3	–	P		D																																	
		4	–	–		D																																	
SERUM FROM GOAT #50	10^{-2}	5	–	–		D																																8/9	
		6	–	–		–	–	–	–	–		–	ww	P																								
		7	–	–		–	–	–	–	–		–	w	D																								
		8	–	–		–	–	–	–	–		–	–	D																								
		9	–	–		–	–	–	–	–		–	–	–	–	–	–		D																			
		10	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			?	?	–		–	–	–						
H		1	–	–		D																																
		2	–	–		–	–	–	–	–		–	–	–	:	D																						
		3	–	–		–	–	–	–	–		–	–	–	–	–	?		*	D																		
		4	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		D				
SERUM FROM GOAT #51	10^{-2}	5	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		?	?	–	–	4/10
		6	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
		7	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
		8	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
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I		1	–	–		:	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		D			
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SERUM FROM GOAT #52	10^{-2}	5	–	–		–	–	/	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	1/10
		6	–	–		–	–	–	/	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
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		8	–	–		–	–	–	/	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
		9	–	/		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–		–	–	–		–	–	–	
		10	–	/		–	–	/	–	–		–	–	/	–	–	–		–	–	–	–	–			–	–	/		–	–	–		–	–	–	

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
J		1	–	W	P	P	D																																
		2	–	–	W?	W?	W?	?	–	–			?	P	P	D																							
		3	–	–		–	–	–	–	–			–	–	PP	D																							
		4	–	–		–	–	–	–	–			–	–	–	–	–	–		D																		
SERUM FROM GOAT #53	10^{-2}	5	–	–		–	–	–	–	–			–	–	–	–	–	–		?	?	P E	D															8/10	
+ [redacted]		6	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	W E	P E	P E	P														
		7	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	P	P E	P E	D													
		8	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	?	P E	P E	D													
		9	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
		10	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
K		1	–	?		D																																
		2	–	–		P P	P R	D																														
		3	–	–		–	?	?	–	–			D																									
		4	–	–		–	–	–	–	–			R	P	E	D																							
SERUM FROM GOAT #54	10^{-2}	5	–	–		–	–	–	–	–			?	?	P	P P E E	D																					6/10	
+ [redacted]		6	–	–		–	–	–	–	–			–	–	P	P P	D																						
		7	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
		8	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
		9	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
		10	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
L		1	–	–		–	–	P P	D																													
		2	–	–		–	–	–	–	–			–	E	D																							
		3	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	P	D															
		4	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	P	P	D														
SERUM FROM GOAT #55	10^{-2}	5	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	4/10	
+ [redacted]		6	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
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		9	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		
		10	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–		

JAN 25 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
M		1	S	S		D																																	
		2	–	CoS		D																																	
		3	–	–		D																																	
		4	–	–		D																																	
SERUM FROM GOAT #56	10^{-2}	5	–	–		CoS	CoS	PR	D																													6/9	
		6	–	–		–	–	–	–	–			D																										
		7	–	–		–	–	–	–	–			–	–	–	:	PP	PP	P		D																		
+		8	–	–		–	–	–	–	–			–	–	–	–	–				–	–	–	–	–		–	–	–	–	–		–	–	–				
[redacted]		9	–	–		–	–	–	–	–			–	–	–	–	–				–	–	–	–	–		–	–	–	–	–		–	–	–				
		10	–	–		–	–	–	–	–			–	–	–	–	–				–	–	–	–	–		–	–	–	–	–		–	–	–				
N		1	–	P		D																																	
		2	–	P		D																																	
		3	–	–		D																																	
		4	–	–		D																																	
SERUM FROM GOAT #57	10^{-2}	5	–	–		PP	PP	D																															
		6	–	–		PP	D																																
		7	–	–		–	–	–	–	–		PP	D																									10/10	
[redacted]		8	–	–		–	–	–	–	–			P	P	P	D																							
		9	–	–		–	–	–	–	–			–	–	–	;	E	E	EE		D																		
		10	–	–		–	–	–	–	–			–	–	–	–	–				D																		
O		1	–	P		D																																	
		2	–	?		D																																	
		3	–	–		P	D																																
		4	–	–																																			
SERUM FROM GOAT #58	10^{-2}	5	–	–		–	–	–	–	–			–	–	?	?	:	–		PP	D																	6/10	
		6	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	P	D																
+		7	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		
[redacted]		8	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		
		9	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		
		10	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
P		1	–	P		D			Ex	–	–		–	–	–	–	–	–		–	–	–	–	–	–	D												
		2	–	?		?	D																															
		3	–	–		–	W D																															
		4	–	–		–	–	D																															
SERUM FROM	10^{-2}	5	–	–		–	–	D																															
GOAT #59		6	–	–		–	–	–	–	–	E		D																									10/10
+		7	–	–		–	–	–	–	–	–		D																									
[redacted]		8	–	–		–	–	–	–	–	–		?	P E	P E E	P E E	D																					
		9	–	–		–	–	–	–	–	–		–	–	–	–	E	W E		D																		
	Swiss	10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		?	?	–	D															
Q		1	–	–		PP	D																															
		2	–	–		–	?	?	?	D																												
		3	–	–		–	–	–	–	W D																												
		4	–	–		–	–	–	–	–	?		?	P P P	D																							
SERUM FROM	10^{-2}	5	–	–		–	–		–	–	–		–	–	?	E E	P D																					
GOAT #60		6	–	–		–	–		–	–	–		–	–	–	G E	P E E	D W W																				9/9
+		7	–	–		–	–	–	–	–	–		–	–	–	–	?			D																		
[redacted]		8	–	–		–	–	–	–	–	–		–	–	–	–	–	+		D																		
		9	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	?	W	D															
	Swiss	10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		missing 2/10/51																		
R		1	–	? W		?	?	–	–	–	–		–	–	–	?	?	?		D																		
		2	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		3	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		4	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
SERUM FROM	10^{-2}	5	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1/10
GOAT #61		6	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
+		7	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
[redacted]		8	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		9	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		10	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Swiss																																					

STANDARD B & P "NoTEAR"

JAN 25 1951

SPECIMEN	VIRUS	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
S		1	–	–		D																																	
		2	–	–		D																																	
		3	–	–		–	–	D																															
		4	–	–		–	–	?	PP EE	D																													
SERUM FROM GOAT #62	10^{-2}	5	–	–		–	–	–	EE	D																													
		6	–	–		–	–	–	–	–	E	P E	D																										8/10
		7	–	–		–	–	–	–	–	–	–	–	–	–	PE	D																					
+		8	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	eh	D														
[redacted]		9	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
	PRI	10	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
T		1	–	?		?	?	–	–	–	P	D																									
		2	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
		3	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
		4	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
SERUM FROM GOAT #63	10^{-2}	5	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	1/10
		6	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
		7	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
+		8	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
[redacted]		9	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
	PRI	10	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	
U		1	–	P		D																															
		2	–	?		?	?	W EE	D																												
		3	–	–		–	–	EE	D																												
		4	–	–		–	–	–	P EE	D																											
CONTROL	10^{-2}	5	–	–		–	–	–	EE	P D																											
		6	–	–		–	–	–	EE	PP EE	D																											10/10
		7	–	–		–	–	–	–	PP	D																											
SALINE		8	–	–		–	–	–	–	–	–		EE	D																								
+		9	–	–		–	–	–	–	–	–		–	PR	O																							
[redacted]	PRI	10	–	–		–	–	–	–	–	–		–	P	D																							

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
V		1	–	PP		D																																	
		2	–	P		D																																	
		3	–	P		D																																	
		4	–	P		D																																	
PENICILLIN-STREP.	10^{-7}	5	–	CWS		D																																	
CONTROL		6	–	–		D																																	
		7	–	–		–	–	–	PEED																													10/10	
PENICILLIN–		8	–	–		–	–	–	–	PEP		D																											
STREPTOMYCIN		9	–	–		–	–	–	–	–	–	D																											
[redacted]		10	–	–		–	–	–	–	–	–	–	–	–	:	PP EE D																							
	PRI																																					

TEXAS GOAT SERA RECEIVED 1/11/51

NO	NAME	AGE	BAP	RK. 5 SH.	
+1	J.S. Molly (F)	4-5-47 3 yr. 7 mo.	TMC	7	± ?
2.	O.N. Calico (K)	8 mo.	000	7	
3	F.T. King (Buck)	6 yrs.	TMC	7	
4	S.S. Monday (K)	3-12-50 10 mo	TMC	7	
5	F.T.-C-19-F (K)	10 mo.	03 col. 3	7	
6.	O.N. Frisky Flash (K)	11 mo	TMC	7	
7.	F.T. Sally (F)	2 yrs.	011	7	
8.	YA Beau Bebe (K)	10 mo.	TMC	7	
9.	JS Betsy (F)	8-12-47 3 yr. 6 mo.	TMC	7	
10.	ON Sandy (Bred Doe)	1 yr.	TMC	7	
11.	S.N. Harry (W)	5-29-50 8 mo.	TMC	7	
12.	F.T.-C-20-F (K)	7 mo.	TMC	7	
13.	J.S. Ruby (D)	1-25-47 3 yrs.	000	7	
+14.	S.N. Jan (K)	6-8-50 7 mo.	000	7	
15	J.S. Minnie (F)	3½ yrs. 7 mo.	TMC	7	
16	F.T. Susie (D)	2 yrs.	TMC	7	
17	F.T. Wether-2 (W)	7 mo.	TMC	7	
18	F.T. Marie (D)	1 yr. 4 mo.	TMC	7	
19	S.N. Silver (F)	3-19-46 5 yrs.	TMC	7	
20	S.N. Dick (W)	5-29-50 8 mo.	000	7	
21	F.T. Snoopy (D)	1 yr. 4 mo.	T.M.C.	8	
22.	R.A. Allie (F)	1 yr. 10 mo.	TMC	8	
23	R.A. Susie (F)	3 yrs.	055	8	
+24	S.N. Rose (F)	4-19-47 4 yrs.	000	8	
25	F.T.-C-23-F (K)	7 mo	TMC	8	

TEXAS GOAT SERA (CONT.)

NO.	NAME.	AGE	BAR	RKS SH.	
26	J.S. Cindy (D)	5-2-45 2 yrs. 7 mos.	TMC	8	
27	S.N. Cora (F)	6-5-47 3½ yrs.	TMC	8	
28	J.S. Careck (B)	1 yr. 10 mo.	TMC	8	
29	F.T. Wether-1 (W)	6 mo.	TMC	8	
30	N.J. Clemmie (F)	4 yr. 2 mo.	TMC	8	
31	J.S. Minty (F)	5-5-47	TMC	8	
32	O.N. Fawy (K)	8 mo.	TMC	8	
+33	O.N. Ground Hog (F)	2 yrs.	022	8	±
34	J.S. George (B)	2-3-48 2 yrs.	TMC	8	
35	Y.A. Junette (K)	7 mo.	TMC	8	
+36	J.S. Peggy (D)	4-11-46 4 yrs. 8 mos.	TMC	8	
+37	J.A. Baby Face (D)	5-29-49 2 yrs.	TMC	8	
38	F.T. Annie (F)	4 yrs.	TMC	8	
39	J.S. Edith (F)	8-4-47 3 yr. 5 mos.	000	8	
40	F.T. Jane (D)	2½ yrs.	000	8	
41	S.S. Sunday (K)	3-12-50 10 mos.	TMC	8	
42	J.S. Pricilla (F)	1-13-47 4 yrs.	TMC	9	
43	J.S. Frosty (K)	10 mo.	TMC	9	
+44	K.A. Topsy's (D)	1 yr. 7 mo.	TMC	9	?
+45	J.A. Anse (Buck)	6-14-46 4½ yrs.	12 yrs.	9	-?
46	F.T. Mary (F)	3 yrs.	TMC	9	
47	F.T. Dorothy (F)	6 yrs.	022	9	
48	S.N. Tom (K)	8 mo.	TMC	9	
49	O.N. Dorothy (K)	8 mo.	000	9	
50	F.T-C-5-A (D)	1 yr. 5 mo.	011	9	

TEXAS GOATS SERA (CONT.)

NO.	NAME	AGE	BAP	RK 5 SH
+51	O.N. Sunshine (K)	10 mo	TMC	
+52	F.T. Maybelle (K)	5 mo.	TMC	
53	J.S. Mildred (D)	3-13-47 2 yrs. 9 mo.	TMC	
54	K.T. Clementine (D)	2 yr. 7 mo.	TMC	
+55	J.A. Cocoa (Buck)	3-6-45 6 yrs.	TMC	
56	J.S. Reuben (Buck)	1-25-49 2 yrs.	TMC	
57	S.N. Star (K)	4-21-50 9 mo.	011	
58	KA. Allie (F)	2 yr. 4 mo.	011	
59	JA Laura (D)	1-19-47 4 yrs.	(6 typewritten) 033	
60	ON Don Juan (K)	8 mo	TMC	
+61	J.S. Rachel (D)	3-3-45 5 yrs. 4 mo.	TMC	
62	J.A. Lou Ann (F)	2-14-49 2 yrs.	TMC	
+63	F.T. Sue (D)	3½ yrs.	TMC	

+ (80)

F - Fresh
D - Dry
B - Buck
W - Wether
K - Kid

JAN 10 1951

TEST FOR EFFECT OF STREPTOMYCIN - PENICILLIN MIXTURE ON CONTAMINATION IN GOAT SERUM #28

PURPOSE: To determine if a mixture of penicillin and streptomycin will inhibit bacteria present in goat serum so that intracerebral injection of this serum will not cause death or CNS symptoms due to intercerebral infection.

PROCEDURE: 0.05 ml of a mixture containing 10,000 units of penicillin and 10 mg streptomycin per ml was added to 0.45 ml of the contaminated serum. This was incubated for 30 minutes at room temperature. 0.03 ml was injected intracerebrally into each of 5 mice. For comparison purposes 5 mice were intracerebrally injected with the untreated goat serum.

MICE: 18-20 gram Swiss mice

SPECIMEN

	UNTREATED	TREATED
Goat serum #28	1 - - - - -	1 - - - - -
	2 - - - - -	2 - - - - -
	3 - - - - -	3 - - - - -
	4 - - - - -	4 - - - - -

SUMMARY OF TEST OF MARCH 13, 1951

TEST TO DETERMINE THE NEUTRALIZING INDEX OF TEXAS GOAT SERA RECEIVED 1/11/51

SERUM	MORTALITY AT INDICATED FINAL DILUTION OF VIRUS				LD_{50}	NEUTRALIZING INDEX
	1.6	2.3	3.0	4.0		
GOAT #1 2/8 ✓ 200 LD_{50}	7/8	5/8	1/8	—	2.4	25
GOAT #14 3/10 " ✓	6/8	2/8	0/7	—	1.9	80
GOAT #24 4/10 " ✓	7/8	3/7	1/8	—	2.1	50
GOAT #36 4/10 " ✓	4/8	3/7	1/7	—	1.9	80
GOAT #51 4/10 " ✓	4/8	1/8	2/8	—	1.8	100
GOAT #52 1/10 " ✓	6/8	3/7	1/7	—	2.1	50
GOAT #55 4/10 " ✓	7/7	3/6	1/8	—	2.3	32
GOAT #61 1/10 " ✓	6/6	1/8	0/7	—	2.0	63
GOAT #63 1/10 " ✓	7/8	3/8	1/8	—	2.2	40
GOAT #33 5/10 " ✓	6/7	6/8	3/8	—	2.7	13
CONTROL	—	8/8	8/8	3/8	3.8	

MAR 13 1951

TEST TO DETERMINE THE NEUTRALIZING INDEX OF TEXAS GOAT SERA RECEIVED 1/11/51

PURPOSE: To determine the neutralizing index of Texas goat sera which in previous tests neutralized 100 LD50 of Lansing virus.

VIRUS: Lansing virus: Pool VI 2/5/51. 10% suspension in saline. Centrifuged 10 minutes at 2000 rpm to remove flocculant ppt.

PROCEDURE: 0.2 ml of undiluted serum was added to 0.2 ml of each of the following dilutions of Lansing virus in saline: 1:20, 1:100 1:500; giving final dilutions of virus 1:40, 1:200, 1:1,000. Virus control consisted of 1:200, 10^{-3}, 10^{-4} dilutions made in saline. The mixtures were shaken and incubated at room temperature for 1 hr. Tubes were kept in an ice bath during inoculation.

MICE: 18-20 gm Mayfield albino ♀ 8 per dilution

CODE	SERUM FROM	1:40	1:200	10^{-3}	10^{-4}
A	GOAT # 1	7/8	5/8	1/8	—
B	GOAT # 14	6/8	2/8	0/7	—
C	GOAT # 24	7/8	3/7	1/8	—
D	GOAT # 36	4/8	3/7	1/7	—
E	GOAT # 51	4/8	1/8	2/8	—
F	GOAT # 52	6/8	3/7	1/7	—
G	GOAT # 55	7/7	3/6	1/8	—
H	GOAT # 61	6/6	1/8	0/7	—
I	GOAT # 63	7/8	3/8	1/8	—
J	GOAT # 33	6/7	6/8	3/8	—
K	CONTROL	—	8/8	8/8	3/8

1,000 units penicillin and 1 mg of streptomycin per ml of serum were added to all sera prior to incubation.

MAR 13 1981

SPECIMEN	V/ROS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
A		1	–	P	PP	D																																	
		2	–	–	P	D																																	
		3	–	–	–	?		?	–	–	–	–			P	P	D																					
	1:40	4	–	–	–	–		–	–	–	–	–			–	–	–	P	P	D																		7/8	10^-2.4
		5	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		D																N.I.
SERUM FROM GOAT #1		6	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	P	D										"
		7	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	P	D								25
		8	–	–	–	–		–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
+		1	–	–	D																																	
		2	–	–	–	D																																	
[redacted]		3	–	–	–	–		–	–	P	PP	D																										
	1:200	4	–	–	–	–		–	–	–	–	–			–	–	–	?	D																		5/8	
		5	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	D				
		6	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
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		1	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	PP	D											
(2/8 vs 100 LD50)		2	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
		3	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
	10^-3	4	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–			1/8	
		5	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
		6	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
		7	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
		8	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				
B		1	–	P	D																																	
		2	–	–	–	P		PP	D																													
		3	–	–	–	–		PP	D																													
SERUM FROM GOAT #14	1:40	4	–	–	–	–		–	–	–	–	–			–	–	–	–	–			D	PP	P	D												6/8	10^-1.9
		5	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				N.I.
		6	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	P	D	–	–	–	–	–	–	–	–	–	–				"
+		7	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				80
[redacted]		8	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–				

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
B (CONT.)		1	–	–	–										–	–	–	–	–	P		D																		
		2	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	D														
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	1:200	4	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	2/8	
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SERUM FROM GOAT # 14		6	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
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+		1	–	–	–			–	–	–	–	–			S	S	S	D																				
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[redacted]	10^{-3}	4	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	0/7	
		5	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
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(3/10 vs. 100 LD50)		7	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
		8	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
C		1	–	–	–	W		D																															
		2	–	–	–			D																															
		3	–	–	–			D																															
	1:40	4	–	–	–			H	H	PH	PH	PPH	D																										
		5	–	–	–			–	W	PP	D																												
		6	–	–	–			–	–	D	D																												
SERUM FROM GOAT # 24		7	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	?	D										7/8	
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		2	–	–	P	PP		D																															
		3	–	–	–	PP		D																															
[redacted]	1:200	4	–	–	–	–		?	D																													3/7	
		5	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
		6	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
(4/10 vs 100 LD50)		7	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–	–	–	–		
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$10^{-1.9}$

$10^{-2.1}$ N.I. " 50

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
C (CONT.)		1	–	–	–	–		H	H	H	H	H	H		?	?	–	–	–	–		–	–	–	–	–	–		–	–	?	?	?	?		–	–		
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SERUM FROM GOAT #24	10^{-3}	4	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	1/8	
+		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
[redacted]		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
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D		1	–	P	D																																		$10^{-1.9}$
		2	–	–	D																																		
		3	–	–	–	–		–	–	–	–	–	–		–	–	–	–	P	P		D																	
	1:40	4	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		PP	D															4/8	N.I.
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		4
SERUM FROM GOAT #36		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
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		8	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
+		1	–	–	–	–		D																															
		2	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	TY	TY	TY	TY	TY		TY	TY	TY	D	TYPHOID					
		3	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	P	D								
[redacted]	1:200	4	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	PP	D						3/7	
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
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(4/10 VS 100LD50)		8	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		1	–	–	–	H		H	H	H	H	H	A		H	H	H	D																					
		2	–	–	–	–		–	–	–	P	PP	PP		D																								
		3	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
	10^{-3}	4	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	1/7	
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–		
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD_{50}
E		1	–	2		P AP		D																															$10^{-1.8}$
		2	–	–	–	–		?	:	–	–	–	–			eh	D																						
		3	–	–	–	–		–	–	–	–	–	–			–	–	–	–	E		D																	
	1:40	4	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		? D																4/8	N.I.
		5	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		"
SERUM FROM GOAT #51		6	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		100
		7	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
		8	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
+		1	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	D						
		2	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
[redacted]		3	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
	1:200	4	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	1/8	
		5	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
		6	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
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		8	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
(4/10 vs 100 LD50)		1	–	–	–	–		D																														
		2	–	–	–	–		D																														
		3	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
	10^{-3}	4	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	2/8	
		5	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
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		7	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
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F		1	–	–	P	D																																$10^{-2.1}$
		2	–	–	–	–		PP	D																													
		3	–	–	–	–		–	–	–	–	–	–			PD EE	D																					
SERUM FROM GOAT # 52	1:40	4	–	–	–	–		–	–	–	–	–	–			–	–	–	P	P		D															6/8	N.I.
		5	–	–	–	–		–	–	–	–	–	–			–	–	–	–	P		D																"
+		6	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		FP	D								50
[redacted]		7	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
		8	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		

MAR 1 3 1951

SPECIMEN	VIRUS	NO.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	MORTALITY	LD50
F (CONT.)		1	B		
		2	– – – D		
		3	– – – – – – – – – – – P D		
	1:200	4	– – – – – – – – – – – – – – P EE D		
		5	– –	3/7	
SERUM FROM GOAT # 52		6	– –		
		7	– –		
		8	– –		
+		1	– – – – – H D		
		2	– – – – – – – – – – – – – – – W PP D		
[redacted]		3	– –		
	10^{-5}	4	– –	1/7	
		5	– –		
		6	– –		
(1/10 US 100 LD50)		7	– –		
		8	– –		
G		1	– – P P WW H H H H H H ? ? D		$10^{-2.3}$
		2	– – – ? – – – P PP D		N.I. ✓
		3	– – – – – – – – – – – P – – – – – – – – – – – – – – – – – – –		
	1:40	4	– –	7/7	
		5	– –		32
SERUM FROM GOAT # 55		6	– –		
		7	– –		
		8	– –		
+		1	– – – – – – H H H H H H H D		
		2	– – – – – – – – D –		
[redacted]		3	– –		
	1:200	4	– –	3/6	
		5	– –		
		6	– –		
(1/10 US 100 LD50)		7	– –		
		8	– –		

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
G (CONT.)		1	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	P	D									
		2	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		3	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
SERUM FROM GOAT # 55	10^{-3}	4	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–								1/8	
+		5	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
[redacted]		6	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		7	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		8	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
H		1	–	–	P	D																																	$10^{-2.0}$
		2	–	–	–	?		D																															
		3	–	–	–	–		D																															
	1:40	4	–	–	–	–		?	?	E	E	D																									6/6	N.F.
		5	–	–	–	–		–	–	–	–	–		–	TY	D	TYPHOID																						11
SERUM FROM GOAT # 61		6	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		D																		
		7	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	TY	TY	D	TYPHOID												63
		8	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		D											
+		1	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	P	D														
		2	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		3	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
[redacted]	1:200	4	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–								1/8	
		5	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
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		8	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
(1/10 VS 100 LPD)		1	–	–	–	–		–	–	–	–	–	H	D																								
		2	–	–	–	–		–	–	–	–	–		?	?	?	–	–			–	–	–	–	–		–	–	–	?	?	–	–					
		3	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
	10^{-3}	4	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–								0/7	
		5	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		6	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
		7	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–									
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MAR 1 3 1951

SPECIMEN	VIRUS	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
I		1	–	D																																			
		2	–	–	P	D																																	
		3	–	–	P	PP		D																															
SERUM FROM GOAT # 63	1:40	4	–	–	–	PP		D																														7/8	$10^{-2.2}$ N.I. II 40
		5	–	–	–	–		–	–	–	–	–	–	?		P	D																					
		6	–	–	–	–		–	–	–	–	–	–	–	–	WP E	WP EE	D																					
		7	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	D																		
		8	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
+ [redacted]		1	–	–	–	–		D																															
		2	–	–	–	–		P	PP	D																													
		3	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	D										
	1:200	4	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3/8	
		5	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		6	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		7	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		8	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
(1/10 US 100 LD50)		1	–	–	–	–		–	–	D																													
		2	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
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	10^{-3}	4	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1/8	
		5	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
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		8	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
J		1	–	TY	D	TYPHOID																																	
		2	–	–	D																																	
		3	–	–	–	–		–	–	–	P	D																									
SERUM FROM GOAT # 33 [redacted]	1:40	4	–	–	–	–		–	–	–	?	E	D																								6/7	$10^{-2.7}$ N.I. II 13
		5	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–	D																	
		6	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–	?	?	E	PP E	D													
		7	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–	–	–	–	–	–				–	E	P E	D						
		8	–	–	–	–		–	–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
J (CONT.)		1	–	S	WW	AP		D																															
		2	–	–	–	–		–	P	D																													
		3	–	–	–	–		–	P	PP	PP PP	D																											
	1:200	4	–	–	–	–		–	–	–	–	W	D																										
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	P	D													6/8	
SERUM FROM GOAT # 33		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	P	D												
		7	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–				
		8	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–				
+		1	–	S	H	?H		?	H	?	?	?	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–				
		2	–	–	D																																	
		3	–	–	–	–		D																														
[redacted]	10⁻³	4	–	–	–	–		–	–	–	P	D																										
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–		3/8	
		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–			
(5/10 VS 100 LD50)		7	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–		–			
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K		1	–	D																																		10⁻³·⁸
		2	–	P	D																																	
		3	–	–	P	D																																
	1:200	4	–	–	–	–		–	P	D																												
		5	–	–	–	–		–	–	P	D																											
CONTROL		6	–	–	–	–		–	–	–	–	E	P EE	D																								
		7	–	–	–	–		–	–	–	–	–	P	D																								
		8		–	–	–		–	–	–	–	–	–	E E EE D																								
SALINE		1	–	PP EE WW ?	D																																	
		2	–	–	PP	D																																
+		3	–	–	P	D																																
[redacted]	10⁻³	4	–	–	P	PR		D																														
		5	–	–	EE	CH EE		D																														
		6	–	–	–	P		D																														
		7	–	–	–	P		D																														
		8	–	–	–	–		–	–	–	–	–	–		–	–	?	P E	D																			

MAR 19 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
K (CONT.)		1	–	–	–	PE		D																															
		2	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	P	P	P	P	D											
		3	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	D											
CONTROL	10^{-4}	4	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	3/8	
		5	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
SALINE		6	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
[redacted]		7	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–		
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SUMMARY OF TEST OF MARCH 14, 1951

TEST TO DETERMINE THE NEUTRALIZING INDEX OF TEXAS GOAT SERA RECEIVED 1/11/51

SERUM	MORTALITY AT INDICATED FINAL DILUTION OF VIRUS				LD50	NEUTRALIZING INDEX
	1.6	2.3	3.0	4.0		
GOAT # 37 ✓ 5/10 vs 200LD50	7/8	4/8	0/8	—	2.2	20
GOAT # 44 5/10 " ✓	6/8	4/8				
GOAT # 45 5/10 " ✓	8/8	8/8	2/7	—	2.9	4
GOAT # 8 6/10 " ✓	8/8	6/8	6/8	—	3.2	2
GOAT # 9 6/10 " ✓	6/8	6/8	0/8	—	2.4	13
GOAT # 18 6/10 " ✓	8/8	4/8	3/8	—	2.5	10
GOAT # 39 6/10 " ✓	8/8	4/7	1/8	—	2.5	10
GOAT # 3 7/10 " ✓	8/8	6/8	6/8	—	3.2	2
GOAT # 6 7/10 " ✓	7/8	4/8	0/8	—	2.2	20
GOAT # 34 7/10 " ✓	6/8	5/8	3/8	—	2.5	10
CONTROL	—	7/8	7/7	1/8	3.5	

TEST TO DETERMINE THE NEUTRALIZING INDEX OF TEXAS GOAT SERA RECEIVED 1/11/51

PURPOSE: To determine the neutralizing index of Texas goat sera some of which in previous test neutralized 100 LD_{50} of Lansing virus; while the remainder gave doubtful results.

VIRUS: [redacted] virus: Pool II of 2/5/51. 10% suspension Centrifuged 10 minutes @ 2000 rpm to remove flocculent ppt.

PROCEDURE: 0.2 ml. of undiluted serum was added to 0.2 ml of each of the following dilutions of Lansing virus in saline: 1:20, 1:100, 1:500; giving final dilutions of virus 1:40, 1:200, 1:1,000. Virus controls consisted of 1:200, 10^{-3}, 10^{-4} dilutions made in saline. The mixtures were shaken and incubated at room temperature for 1 hr. Tubes were kept in an ice bath during incubation.

MICE: 18-20 gm. Maxfield albino ♀ 8 per dilution

CODE	SERUM FROM	1:40	1:200	10^{-3}	10^{-4}
A	GOAT # 37	7/8	4/8	0/8	—
B	GOAT # 44	6/8	4/8		—
C	GOAT # 45	8/8	8/8	2/7	—
D	GOAT # 8	8/8	6/8	6/8	—
E	GOAT # 9	6/8	6/8	3/8	—
F	GOAT # 18	8/8	4/8	3/8	—
G	GOAT # 39	8/8	4/7	4/8	—
H	GOAT # 3	8/8	6/8	6/8	—
I	GOAT # 6	7/8	4/8	0/8	—
J	GOAT # 34	6/8	5/8	3/8	—
K	CONTROL	—	7/8	7/7	1/8

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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD_{50}
A		1	–	NPP			D																																
		2	–	CNS	CNS		D																																
		3	–	–	PP		D																																
	1:40	4	–	–	T		D																																
		5	–	–	–		D																															7/8	
SERUM FROM GOAT # 37		6	–	–	–		–	–	PPP	D																													20
		7	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	P												
		8	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–							?		–	–		
+		1	–	–	–		?	PP	D																													
		2	–	–	–		–	–	–	–	–			–	–	–	EPE	D																				
		3	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			PPP	D									
[redacted]	1:200	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	P	P	D					4/8	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		?		–	–	
		6	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
		7	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
		8	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
(5/10 US 100 LD_{50})		1	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
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	10^{-3}	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	0/8	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
		6	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–		–	–	
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B		1	–	PPP			D																															
		2	–	–	P		D																															
		3	–	–	–		–	–	–	–	P	PP		D																								
SERUM FROM GOAT # 44	1:40	4	–	–	–		–	–	–	–	–	–		EE	D																							6/8	
		5	–	–	–		–	–	–	–	–	–		–	–	P	PP	PP	D																			10
+		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	E	PP	EE	D												
[redacted]		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–		–	–	
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–		–	–	

$10^{-2.2}$ N.I. " 20

$10^{-2.5}$ N.I. "

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
B (CONT.)		1	–	w	D																																		
		2	–	–	P		?P	no food	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	P	PP	D								
		3	–	–	–		–	–	–	–	P	P		P club foot	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
	1:200	4	–	–	–		–	–	–	–	–	–		–	–	P	PP	D																					4/8	
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	?	P	PP	D						
SERUM FROM GOAT #44		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
+		1	(D)																																				
		2	–	–	–		?TY	?TY	?	?	–	–		(D)																									
[redacted]		3	–	–	–		?	–	–	–	D																												
	10^-3	4	–	–	–		–	–	–	–	–	–		–	–	–	D																						4/6	
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	D																
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	P		D											
(5/10 vs 100 LD50)		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
C		1	–	–	PP		D																																$10^{-2.9}$
		2	–	–	P		D																																
		3	–	–	–		?	?	–	–	–	–		–	–	–	D																						N. I.
	1:40	4	–	–	–		–	–	–	–	–	–		–	–	–	P	P P	PR		D																		"
		5	–	–	–		–	–	–	–	–	–		–	–	–	P		PP		D																		8/8	4
SERUM FROM GOAT # 45		6	–	–	–		–	–	–	–	–	–		–	–	–	–	T	P ETE		PP ETE	D																	
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		P	P	D																
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	P	D														
+		1	–	–	–		D																																
		2	–	–	–		D																																
[redacted]		3	–	–	–		–	–	–	?	D																												
	1:200	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		D																		8/8	
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	P	PP	PR	D														
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	WW PP	PP PP	D														
(5/10 vs. 100 LD50)		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	EE	D													
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		PP	D										

MAR 1 4 1957

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
C (CONT.)		1	(D)																																				
		2	–	–	–		PP	D																															
		3	–	–	–		–	–	–	–	–	–		–	PP	D																						
SERUM FROM GOAT # 45	10^{-3}	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	2/7	
+ [redacted]		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
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		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
D		1	–	D																																			
		2	–	PP	D																																		
		3	–	P	PP		D																																
	1:40	4	–	P	PP		D																																
		5	–	–	–		P	P	PP	PP	D																											8/8	
SERUM FROM GOAT # 8		6	–	–	–		–	–	–	P	PP	PP		D																									
		7	–	–	–		–	–	–	–	–	–		D																									
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	?	?		WW EE	D																	
+ [redacted]		1	–	D																																			
		2	–	?	D																																		
		3	–	–	D																																		
	1:200	4	–	–	PP		D																																
		5	–	–	–		–	–	–	–	–	?		PP EE	D																							6/8	
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	P		D										
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
(6/10 US 100LD50)		1	–	–	–		–	–	P EE	P EE	D																												
		2	–	–	–		–	–	–	–	WE	PE		D																									
		3	–	–	–		–	–	–	–	–	–		–	–	P	D																						
	10^{-3}	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	P		D																	6/8	
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		?	P E	D																
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	PP	D				
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		

$10^{-3.2}$ N.D. 2

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
E		1	D																																				$10^{-2.4}$
		2	–	–	WW EE		D																																N.I.
		3	–	–	?		D																																"
	1:40	4	–	–	–		D																															6/8	13
		5	–	–	–		D																																
SERUM FROM GOAT # 9		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	P	PR	D														
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–			
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–			
+		1	–	–	T		D																																
		2	–	–	–		D																																
[redacted]		3	–	–	–		–	–	PP	D W	P E	D																										
	1:200	4	–	–	–		–	–	–																														
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	P	D													6/8	
		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	E	E	P E	P E	D						
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–			
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	–	–	–	–	–	–	–			
(6/10 US 100 LD50)		1	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–		–	–	–	–	–	–	–	–	–	–			
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		3	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–		–	–	–	–	–	–	–	–	–	–			
	10^{-3}	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–		–	–	–	–	–	–	–	–	–	–		0/8	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–		–	–	–	–	–	–	–	–	–	–			
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F		1	–	?	D P																																	$10^{-2.8}$
		2	–	–	P		D																															N.I.
		3	–	–	P		D																															"
SERUM FROM GOAT # 18	1:40	4	–	–	CNS		CNS P	D PP																													8/8	10
		5	–	–	–		P	PP	D																														
[redacted]		6	–	–	–		–	–	–	–	–	–		? W	P E	D																							
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MAR 1 4 1957

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
F (CONT.)		1	–	–	CNS		D																																
		2	–	–	–		–	–	–	–	–			D																									
		3	–	–	–		–	–	–	–	–			–	–	–	–	–			?	?	–	–	–	–	EE	D										
SERUM FROM GOAT #18	1:200	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–			PE	PE	4/8	
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+ [redacted]		1	–	D																																		
		2	–	–	–		–	–	D																													
	10-3	3	–	–	–		–	–	PPP	PP	D																											
		4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–	–	–	–	–				–	–	3/8	
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(6/10 VS 100 LD50)		7	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–	–	–	–	–				–	–		
		8	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–		–	–	–	–	–				–	–		
G		1	–	–	PP		D																															
		2	–	–	P		D																															
		3	–	–	–		D																															
	1:40	4	–	–	–		D																														8/8	$10^{-2.5}$ N.I.
		5	–	–	–		–	P	D																													4
SERUM FROM GOAT #39		6	–	–	–		–	–	–	–	–			–	–	–	–	P			D																	10
		7	–	–	–		–	–	–	–	–			–	–	–	–	–			–	EE	EE PP	EE PP	D													
		8	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	?	EE	EE P		D				
+ [redacted]		1	–	–	D																																	
		2	–	–	–		PP	D																														
		3	–	–	–		–	P	D																													
	1:200	4	–	–	–		–	–	–	–	–			H	H	H	H	TY	TY		D	TYPHOID															4/7	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			D																	
		6	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	?	–	?			–	–		
(6/10 VS 100 LD50)		7	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–	–	–	–	–	–	–			–	–		
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
G (CONT.)		1	–	–	–		–	–	–	–	–			?	P	D																							
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SERUM FROM GOAT # 39	10^{-3}	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	1/8	
+ [redacted]		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	–	–	–		–	–	–		
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H		1	–	–	P		D																																
		2	–	–	T		D																																
		3	–	–	T		D																																
	1:40	4	–	–	–		D																															8/8	$10^{-3.2}$ N.I. II 2
		5	–	–	–		D																																
SERUM FROM GOAT # 3		6	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	D																
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+		1	–	–	–		D																																
		2	–	–	–		–	PP	D																														
		3	–	–	–		–	–	–	–	–				P	D																						
[redacted]	1:200	4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	?		D										6/8	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	P	P	D								
		6	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	?	?	D								
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(7/10 US 100 LD50)		1	–	–	–		CNS	CNS	CNS	CNS	CNS	D																										
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	10^{-3}	3	–	–	–		–	–	–	–	–			P	P	D																						
		4	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	PP	PP		D										6/8	
		5	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–	–		–	–	–	P	E	P	E	D			
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MAR 1 4 1957

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
I		1	–	–	D P																																		
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	1:40	4	–	–	–		–	–	–	?	?	"		D																									
		5	–	–	–		–	–	–	–	–	–		E	E	P P EE	P P EE	D																					7/8	
SERUM FROM GOAT #6		6	–	–	–		–	–	–	–	–	–		–	–	?	P P EE	P P EE	D																				20
		7	–	–	–		–	–	–	–	–	–		–	–	–	–	E E	W E E	P	D																		
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
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[redacted]	1:200	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	E	E	E P P		4/8	
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(7/10 US 100 LD50)		1	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	?	?	–	–	–			
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	10^{-3}	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		0/8	
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J		1	⓪ P		PP		D																															$10^{-2,5}$
		2	–		–		D																															N.I.
		3	–	–	–		D																															1
SERUM FROM GOAT #34	1:40	4	–	–	–		E	D													P E E	P E E	D															6/8	10
+		5	–	–	–		–	–	–	–	–	?		–	–	–	–	–	–		–	–	?	E E	P P E E	D													
[redacted]		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
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SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	LD50
J (CONT.)		1	–	–	D																																		
		2	–	–	–		PP	D																															
		3	–	–	–		–	–	–	–	–	E		D																									
	1:200	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	?	PW		D										5/8	
		5	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	?			D											
SERUM FROM GOAT # 34		6	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	–	–	–			–	–		
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+ [redacted]		1	–	–	–		–	–	–	–	–	–		–	–	–	–	P	D																			
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		3	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	P	P	P	P	D					
	10^{-3}	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–	3/8	
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(7/10 VS 10 LD50)		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–		
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K		1	TY	CNS TY	D																																	$10^{-3.5}$
		2	–	D																																		
		3	–	P																																		
		4	–	–	P	P	D																														7/8	
	1:200	5	–	–	–		–	:	PP	D																												
CONTROL		6	–	–	–		–	–	–	CNS P	D																												
		7	–	–	–		–	–	–	–	–	–		–	–	?	D																						
		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–			–	–	–	–	–			–	–		
SALINE + [redacted]		1	–	–	D																																	
		2	–	–	PP		D																															
		3	–	–	P		D																															
	10^{-3}	4	–	–	–		D																														7/7	
		5	–	–	–		PP	PP	PP	PP	PP	D																										
		6	–	–	–		–	–	TY	TY	TY	TY		D	TY PHOID																							
		7	–	–	–		–	–	–	–	E	PP E		D																								
		8	–	–	–		–	–	–	–	–	–		–	–	–	?	P	PP		D																	

MAR 14 1951

SPECIMEN	VIRUS	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 EP	20 D	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	MORTALITY	L.D.50
K (CONT)		1	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–																
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CONTROL	10^{-4}	4	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–	1/8	
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+		7	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–		
[redacted]		8	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–	–		–	–	–	–	–		–	–	–		

Punch for note book

PRESIDENT
H.T.Jenkins.

VICE PRES.
E.Edwin Young

SECRETARY
Mrs.H.T.Jenkins.

TAYLOR COUNTY MILK GOAT ASSOCIATION

Organized April 1948

ABILENE, TEXAS

January 25th, 1951,
Route 1, Box 28.

Albert B.Sabin, M.D., Director,
Children's Hospital Research Foundation,
Cincinnati, Ohio.

Dear Dr.Sabin:

You will find enclosed a sort of chart regarding the animals from which the blood specimens sent to you, were taken. I hope the material is what you need. Sorry it took me so long to get it all intact.

Just maybe now, Doctor, you don't understand Texans. I guess I can tell you this, for I am not a native. When the Association members heard of the project, everyone was very much interested.When I read your letter to them in meeting, all agreed that it wouldn't be the way Texans do things to let the Foundation pay the expense. It has been good for us to feel we have a part in something being done away from the State and for such a cause. The bottles came to us, at cost from the laboratory. Everybody, even our newspaper cooperated in giving our Veterinarians some nice publicity. Incidently, I mailed them a copy of your letter.

If in any way we can help out in the future, feel free to call upon us. We are all interested in GOATS and in the Dairy Goat Industry and we should be thrilled beyond measure if in some way she could make some sort of wonderful contribution to the world in addition to the one she is already making, in producing probably the most healthful milk on the market.

Guess I don't need to remind you, that we shall all await results of the experiments you are making with a great deal of interest.

Thanking you for giving the Taylor County Milk Goat Association an opportunity to share in your work, I am

Yours sincerely,

Mrs. E. Edwin Young

Mrs. E.Edwin Young,
Corres.Sect'y.

TAYLOR COUNTY MILK GOAT ASSOCIATION

Organized April 1948

ABILENE, TEXAS

FEEDING & HOUSING CONDITIONS OF GOATS GIVING BLOOD.

J-A.	Lou Ann	2 yrs.	Fresh.	Sow and young pig runs with these does.
"-S.	Betsy	3 yr.5 mo.	"	
" "	Minnie	3 yr.7 mo.	"	
" "	Edith	3 yr.5 mo.	"	
" "	Molly	3 yr.7 mo.	"	
" "	Priscilla	4 yrs.	"	
J-A.	Baby Face	2 Yrs.	Dry	Housed separately in small pens. Exercise space provided on occasion.
" "	Laura	4 "	"	
" "	Cocoa	6 "	Buck	
" "	Anse	4½ "	"	
J-S.	Cindy	2 yr.7 mo.	Dry	
" "	Rachel	5 yr.9 mo.	"	
" "	Ruby	7 yrs.	"	
" "	Mildred	3 yr.9 mo.	"	
" "	Peggy	4 yr.8 mo.	"	
" "	Reuben	2 yrs.	Buck	Same care as above Bucks.
" "	George	3 yrs.	"	
" "	Careck	1 yr.10 mo.	"	

The above animals are fed Purina Goat Chow and Alfalfa Hay. Commercial Mineral mixtures are kept before them as well as fresh water from automatic drinking fountains. All are lot fed-no grazing. Barns afford protection from wind and weather. SALT.

Y-A.	Beau Bebe	10 mo.	Kid.	Lot fed. Purina Goat Chow Alfalfa Hay-some Peanut Hay Mineral mixture-Salt-Soda Fresh Water.
" "	Junette	7 mo.	"	
"-S	Frosty	10 mo.	"	

These animals have barn protection from wind and weather. The entire lot of them are spoiled. They belong to us.

S-S.	Sunday	10 mo.	Kid	These animals have been feed almost exclusively on prairie hay, with a small amount of alfalfa. Commercial minerals, salt, sulphur salt. Fresh water and barn for housing.
" "	Monday	10 mo.	"	

R-A. Susie 3 yrs. Fresh

This animal is fed Purina Goat Chow, Alfalfa hay, Salt, Soda, plenty fresh water -Oats are also fed with the Goat chow. Barn for housing. Chickens are allowed to run with the goats on this place.

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TAYLOR COUNTY MILK GOAT ASSOCIATION

Organized April 1948

ABILENE, TEXAS

FEEDING AND HOUSING CONDITIONS OF GOATS GIVING BLOOD--PAGE 2

F-T.	C-5-F	1 yr.5 mo.	Dry
" "	C-23-F	7 mo.7 "	kid
" "	Maybell	5 mo.	"
" "	C-20-F	7 "	"
" "	C-19-F	10 "	"
" "	Wether (1)	6 "	
" "	Wether (2)	7 "	
" "	Marie	1 yr.4 mo.	Dry
" "	Jane	2 yr.6 mo.	"
" "	Susie	2 yrs.	"
" "	Minnie	4 " 6 "	"
" "	Sue	3 " 6 "	"
" "	Snoopy	1 yr.4 "	"
" "	Dorothy	6 yrs	Fresh
" "	Annie	4 yrs	"
" "	Sally	2 "	"
" "	King	6 yrs.	Buck

These animals (fresh) are fed Paymaster Ration for goats,as is the buck.Dry animals & wethers some oats and all have alfalfa hay.When available pasture. Fresh water and minerals as well as salt.

K-T.	Clemmie	4 yr.2 mo.	Fresh
" "	Clementine	2 yr. 7 mo.	Dry
" A	Topsys'	1yr.7mo	"
" "	Allie	2 Yr.4 mo.	Fresh

These animals are fed Red Chain Dairy Goat Feed. Peanut hay with occasional bundles of Hegari. Salt, plenty of water. They have access to mesquite thicket with native grass when it rains.

H-A. Allie 1 yr. 10 mo. Fresh.

Red Chair Dairy Goat Feed,some oats, alfalfa hay, salt, minerals and plenty fresh water.

S-N.	Rose	4 yrs.	Fresh
" "	Cora	3½ "	"
" "	Silver	5 "	"
" "	Star	9 mo.	Kid
" "	Jan	7 "	"
" "	Harry	8 "	Wether
" "	Tom	" "	"
" "	Dick	" "	"

The above animals(fresh) are fed Red Chain Goat Feed.Wethers and doe kids fed oats.All are fed Affalfa Hay.Dr.Edward's Herd Tonic is given as well as the Watkin's minerals. All have access to salt and soda. Plenty fresh water. Because of drouth no one has any pasture.

ALL THESE GOATS HAVE SOME SORT OF PROTECTION FROM WIND AND WEATHER.

February 2, 1951

Mrs. E. Edwin Young
Route 1, Box 28
Abilene
Texas

Dear Mrs. Young:

Thank you very much for your letter of January 25. I am quite convinced now of the remarkable generosity of Texans.

The information that you sent me on the living conditions of the individual goats was just what I wanted, and I am deeply grateful. The chart that you sent me had information on 54 goats and we received blood on 64. There was no data on the following animals:

O. N. Don Juan	8 mo.
O. N. Caltea	8 mo.
O. N. Frisky Frash	11 mo.
O. N. Sandy	1 yr.
O. N. Favy	8 mo.
O. N. Ground Hog	2 yrs.
O. N. Dorothy	8 mo.
O. N. Sunshine	10 mo.
F. T. Mary	3 yrs.
J. S. Minty	5-5-47

If information can be obtained on them, particularly with regard to their grazing in open country or association with cows or other domestic animals, it would make our data more complete.

With sincere thanks,

Sincerely yours,

ABS/maj

Albert B. Sabin, M. D.

PRESIDENT
E.Edwin Young

VICE PRES.

SECRETARY
Dr.J.C.Shipman

TAYLOR COUNTY MILK GOAT ASSOCIATION

Organized April 1948

ABILENE, TEXAS
Route 1, Box 28,
February 7th,1951

Albert B.Sabin, M.D., Director
Children's Hospital Research Foundation,
Elland Ave & Bethesda,
Cincinnati, 29, Ohio.

Dear Dr.Sabin:

Just goes to show that no matter how careful a person tries to be, mistakes will creep in. Guess I have my mind on too many things.

FEEDING AND HOUSING CONDITIONS OF GOATS GIVING BLOOD

O.N.	Don Juan	8 mo.	Kid
" "	Calico	8 "	"
" "	Frisky Flash	11 "	"
" "	Sandy	1 yr.	Bred Doe.
" "	Favy	8 mo.	Kid
" "	Ground Hog	2 yrs.	Fresh
" "	Dorothy	8 mo.	Kid
O."	Sunshine	10 "	

The above animals are fed Oats, with the exception of the one in milk who gets Red Chain Dairy Goat Feed. All have alfalfa hay, a Commercial mineral also a salt-mineral concoction before them to discourage internal parasites. They have too salt and plenty of fresh drinking water. They are lot fed. No other animals are quartered on the place but a wee dog who runs at will among the herd.

FEEDING AND HOUSING CONDITIONS OF GOATS GIVING BLOOD

F.T.	Mary	3 yrs.	Fresh.

The conditions applying to the fresh does of the other does marked F.T. will apply to her. They come from the same herd. How she was overlooked I'll never know.

J.S.	Minty	5-5-47	Fresh

This doe's feeding and living conditions will be the same as the other fresh does marked J.S.

In making the chart I used the first letter of the last name of the owners for identification. The second letter marks the breed of goat. A. Alpine; N. Nubian; T. Toggenburg; S. Saanen.

Sorry my information was incomplete. If there is anything further you would like to know, which I have left out, I shall be glad to be of service. As you will note practically

PRESIDENT VICE PRES. SECRETARY

TAYLOR COUNTY MILK GOAT ASSOCIATION

Organized April 1948

ABILENE, TEXAS

all our animals are lot fed and have very little opportunity for grazing in open country. There are a few goats in the country round about who are kept with cattle and who have brush grazing, unfortunately these goats could not be made available for the tests.

Hoping this will be of use to you in your research, I am

Yours sincerely,

Mrs. E. Edwin Young

Mrs.E.Edwin Young
Corres. Secty.

FEDERAL SECURITY AGENCY • Public Health Service
NATIONAL INSTITUTES OF HEALTH • Bethesda 14, Md.

EXPERIMENTAL BIOLOGY AND MEDICINE INSTITUTE
MICROBIOLOGICAL INSTITUTE
NATIONAL CANCER INSTITUTE
NATIONAL HEART INSTITUTE
NATIONAL INSTITUTE OF DENTAL RESEARCH
NATIONAL INSTITUTE OF MENTAL HEALTH
THE CLINICAL CENTER
DIVISION OF RESEARCH GRANTS AND FELLOWSHIPS

February 13, 1951

Dr. Albert B. Sabin
The Children's Hospital Research Foundation
Elland Avenue and Bethesda
Cincinnati, Ohio

Dear Albert:

Thank you for the results obtained in testing bovine serums for antipoliomyelitic substances. First of all, let me get this off my chest - Can't you devise a test which will have a greater spread between positive and negative results? It seems to me that so many specimens gave results right on the border line that it might be advisable to classify the results in 3 categories; positive, negative, and plus-minus.

We have recorded the ages which were available on the various categories of dairy cows. The ages of the B18 cows on page 1, I believe, are available in our files in California. We are writing Dr. Luoto for this information. I am afraid that we do not have the specific ages of the Jessup calves. However, this group of calves was at least 6 months of age at the time of bleeding and were selected by Dr. Luoto for certain vaccine studies. He may have their exact ages. It was unfortunate that all of our calf specimens fell into this one category. We once had multiple specimens collected before and after colostrum and for a period of 3 months following birth from over 150 calves. As might be expected such specimens as these, which would be almost impossible to duplicate again, have been discarded by error.

Have you observed similar antibodies in beef cattle? If you are interested in large quantities of bovine bloods collected from various areas, they can, of course, be obtained with ease in local slaughter houses. We found that by wearing the proper regalia, including hip boots, that it was possible to circulate around on the killing floor of the slaughter house with Lily cups, thus collecting hundreds of specimens in a day from as many different animals. Serums extracted from clots obtained in this way were quite satisfactory for immunological tests.

Dr. Albert B. Sabin------2/13/51

Our records do not show the ages of the Beltsville, Md., cows. However, I am going to try to get this information from the Beltsville veterinarians and forward it later.

Is it possible that contaminating infections derived from the bovine serums might account for deaths among the test animals? The rare occurrence of complete protection certainly suggests that this may have happened. Of course, the records which you sent to me did not indicate whether the numerator represented paralysis or deaths.

Thanks again for the interesting information. Do not hesitate to call on me at any time that you think I can assist in these or other studies.

With best wishes,

Sincerely yours,

Bob

R. J. Huebner, M.D.
Chief, Virus & Rickettsial Section
Laboratory of Infectious Diseases
National Microbiological Institute

RJH:rb

76/78 controls succumbed

February 21, 1951

Dr. R. J. Huebner, Chief
Virus and Rickettsial Section
Laboratory of Infectious Diseases
National Microbiological Institute
National Institutes of Health
Bethesda 14, Maryland

Dear Bob:

Thank you very much for the information contained in your letter of February 13 relative to the bovine sera you sent us. I should like to reply as follows to the various questions you have raised. --

1) The results that were sent to you on the bovine sera were those of the screening test with approximately 100 LD_{50} of virus. 76 of the 78 mice used as simultaneous controls succumbed. The obviously negative sera are eliminated from consideration and more extensive tests have been carried out with a considerable number of the positive and questionable sera. The only way to sharpen up such a screening test would be by the use of a smaller amount of virus which I would not consider worthwhile because I look with suspicion on neutralization indexes of less than 100. The reason for this is that all types of sera are capable of depressing the titer of Lansing virus in mice, as compared with the results obtained with saline. Actually, if you look through the data, you will find that the number of results in which 6 out of 10 or 7 out of 10 mice die are not very frequent, except with the sera of the calves which might represent a special case.

2) There were no contaminating infections involved in the tests with your bovine sera. All those that had bacterial contamination were mixed with penicillin and streptomycin. In all tests with Lansing virus there are a certain number of mice which die without having previously been observed to be paralyzed. That is partly due to the fact that the interval between onset of paralysis and death is very brief in some mice. Accordingly, it is best to be arbitrary and count all deaths occurring after the first 24 hours as specific. We observed our mice for 35 days and when the records are examined, there are actually very few mice indeed which were found dead without previously showing paralysis.

It may interest you to know that chemical fractionation of positive cow serum shows that the antipoliomyelitic substance was associated with the same globulin fraction as is antibody.

With many thanks for your help and kindest personal regards,

Sincerely yours,

ABS/maj

Albert B. Sabin, M. D.