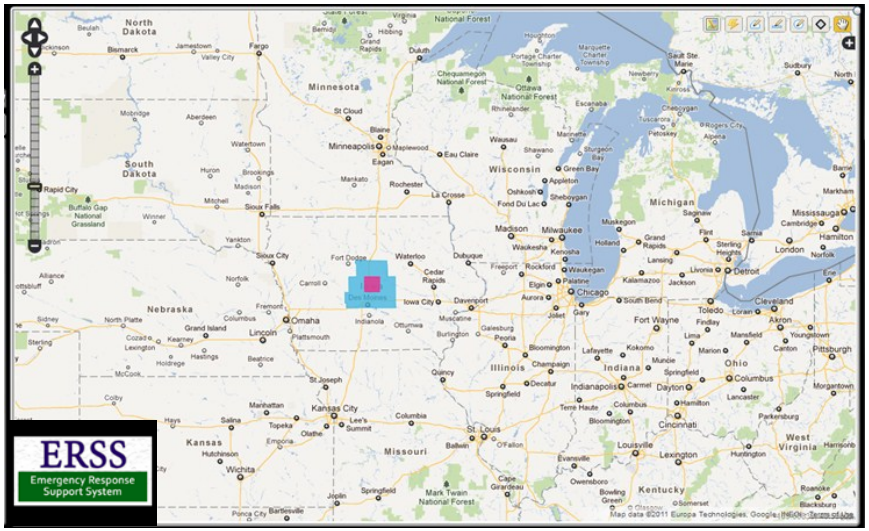
Common Operating Picture in the United States

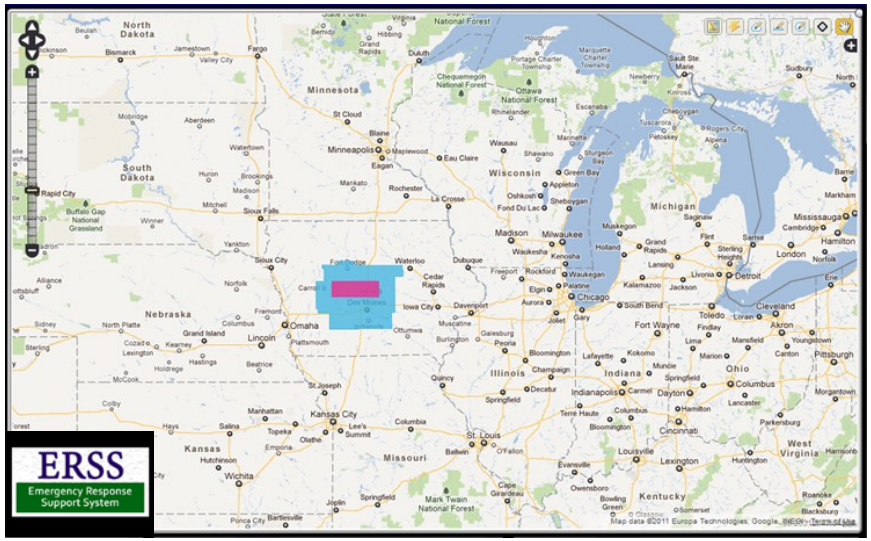
To better understand the scope of the FMD response and vaccination issue, the next section of maps and data provide information on livestock populations in the United States, starting with Iowa, from the National Agricultural Statistics Service (NASS) (2007). From a smaller Control Area to a much larger Control Area, these maps help to illustrate the magnitude of the problem—in other words, how many animals may be affected in the event of an FMD outbreak in the state. For example, even with only one infected county in Iowa, and a surrounding Buffer Zone, more than 2 million animals are affected. This common operating picture can help us work together to evaluate and assess our FMD response strategies and how much FMD vaccine we may need.



Iowa Outbreak: One Infected County

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	14,933	66,515	3,893	404
Buffer Zone (blue)	143,866	1,860,968	20,107	2,525
Total	158,799	1,927,483	24,000	2,929

Total livestock affected: 2,110,282

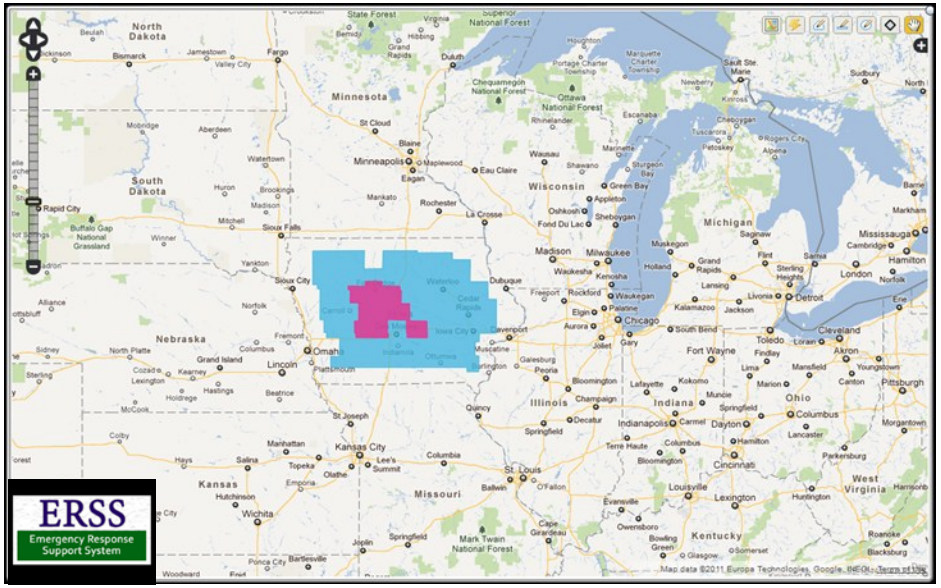


Iowa Outbreak: Three Infected Counties

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	63,548	240,484	8,067	1,025
Buffer Zone (blue)	463,637	3,534,164	32,844	6,245
Total	527,185	3,774,648	40,911	7,270

Total livestock affected: 4,342,744

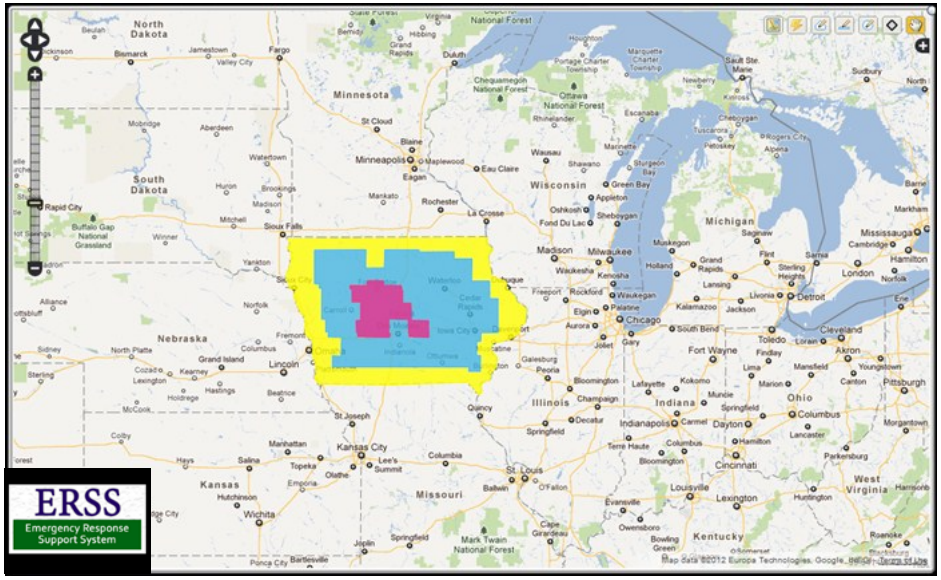
Source: NASS, 2007



Iowa Outbreak: Nine Infected Counties

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	181,106	1,567,560	18,690	3,108
Buffer Zone (blue)	1,927,955	11,423,618	133,979	23,723
Total	2,109,061	12,991,178	152,669	26,831

Total livestock affected: 15,252,908

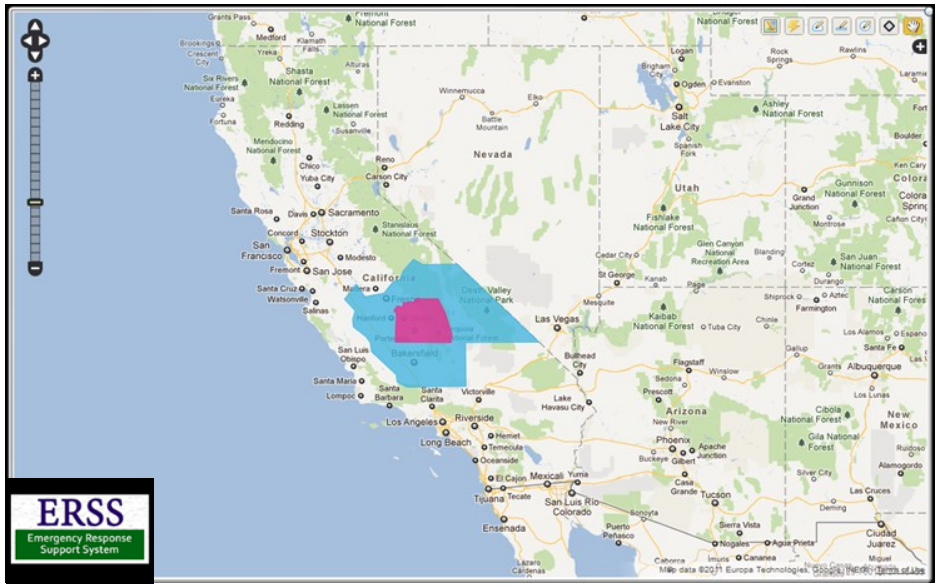


Iowa Outbreak: Nine Infected Counties + Vaccination Zone

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	181,106	1,567,560	18,690	3,108
Buffer Zone (blue)	1,927,955	11,423,618	133,979	23,723
Vaccination Zone (yellow)	1,873,283	6,225,637	101,501	19,698
Total	3,982,344	19,216,815	254,170	46,529

Total livestock affected: 23,453,329

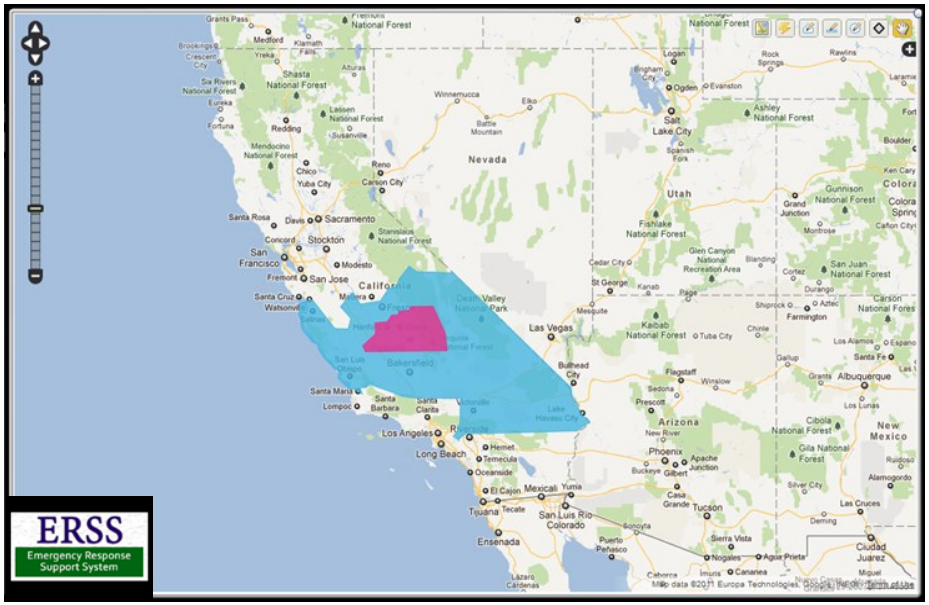
Source: NASS, 2007



California Outbreak: One Infected County

Where	Bovine	Sheep/ Goats	Operations (Bovine, Sheep, Goat)
Infected Zone (pink)	1,071,956	71,210	1,159
Buffer Zone (blue)	1,141,028	181,818	2,362
Total	2,212,984	253,028	3,521

Total cattle, sheep, and goats affected: 2,466,012



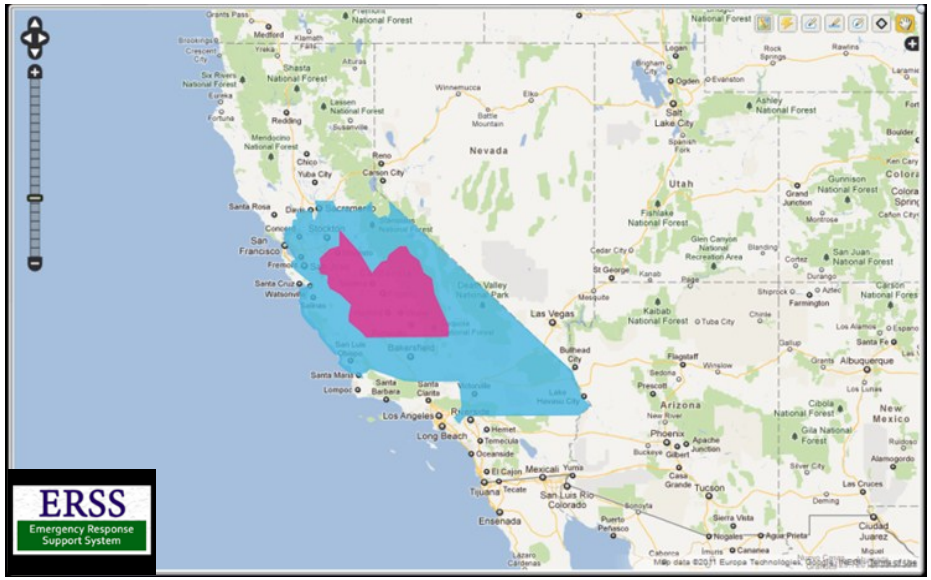
California Outbreak: Two Infected Counties

Where	Bovine	Sheep/ Goats	Operations (Bovine, Sheep, Goat)
Infected Zone (pink)	1,437,499	78,494	1,602
Buffer Zone (blue)	1,094,567	194,813	3,932
Total	2,532,066	273,307	5,534

Total cattle, sheep, and goats affected: 2,805,373

Source: NASS, 2007

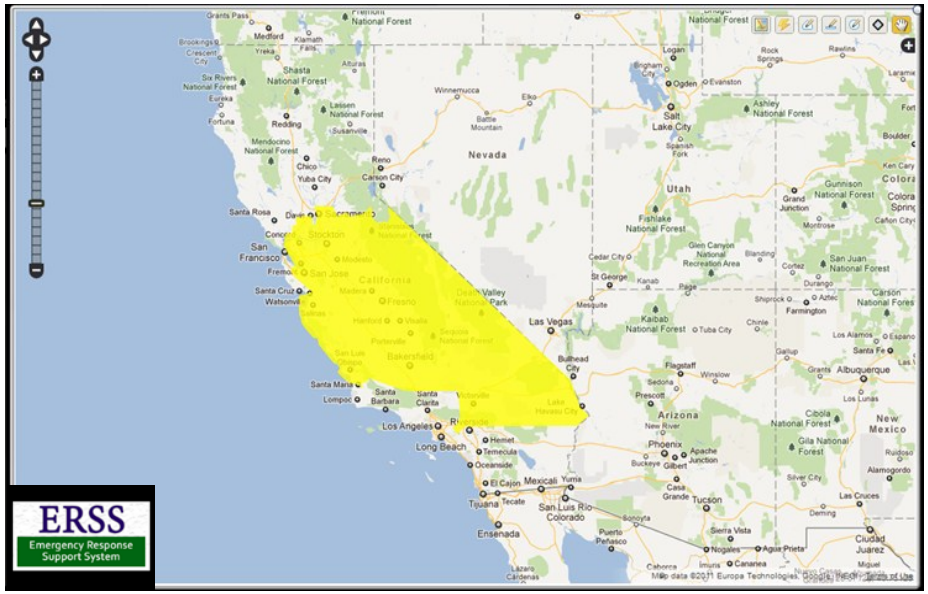
Complete county-level swine data for California is not available.



California Outbreak: Five Infected Counties

Where	Bovine	Sheep/ Goats	Operations (Bovine, Sheep, Goat)
Infected Zone (pink)	3,029,931	183,321	5,675
Buffer Zone (blue)	1,188,938	236,568	7,061
Total	4,218,869	420,389	12,736

Total cattle, sheep, and goats affected: 4,639,258



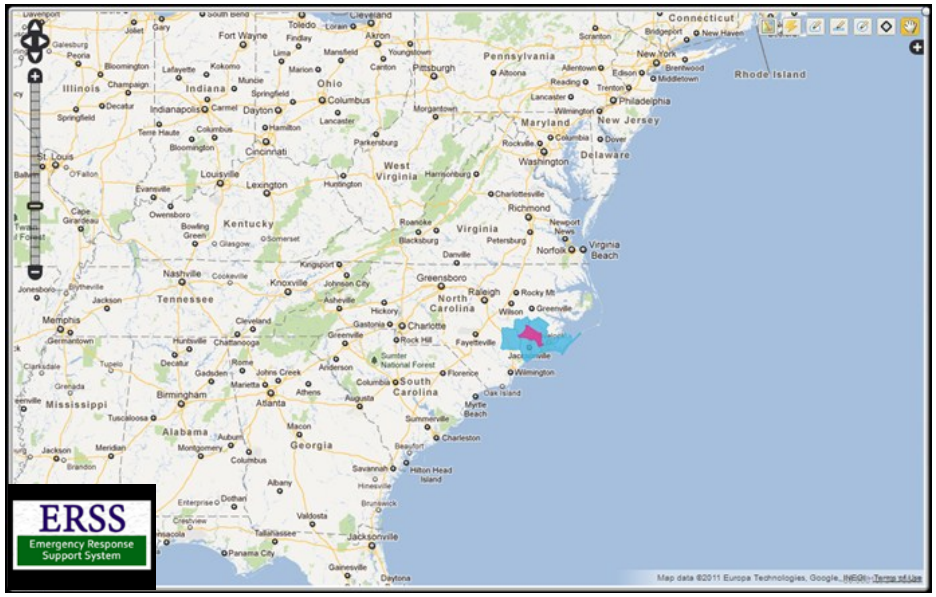
California Outbreak: Protection Vaccination Zone (23 Counties)

Where	Bovine	Sheep/ Goats	Operations (Bovine, Sheep, Goat)
Vaccination Zone (yellow)	4,218,869	420,389	12,736

Total cattle, sheep, and goats affected: 4,639,258

Source: NASS, 2007

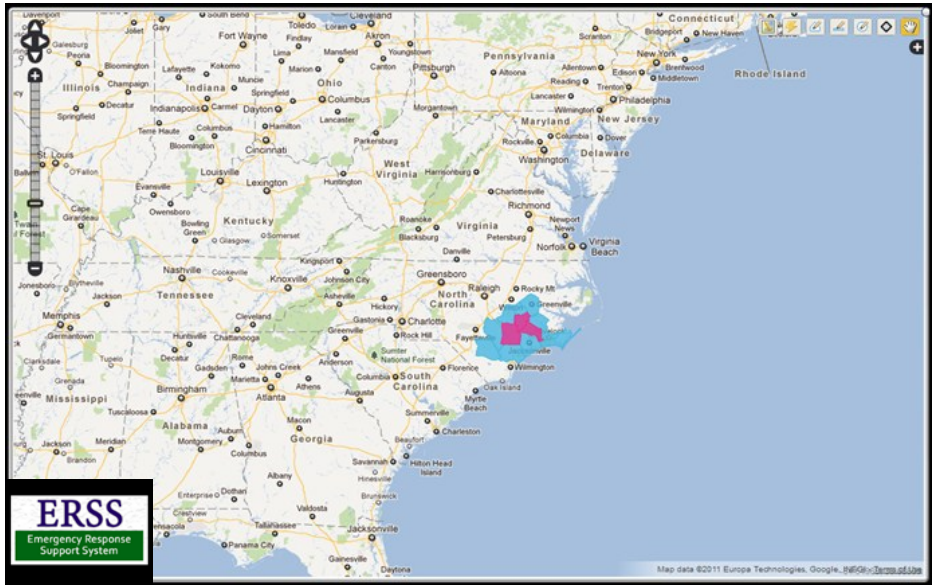
Complete county-level swine data for California is not available.



North Carolina Outbreak: One Infected County

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	3,538	201,120	495	115
Buffer Zone (blue)	35,194	3,006,961	3,501	1,492
Total	38,732	3,208,081	3,996	1,607

Total livestock affected: 3,250,809

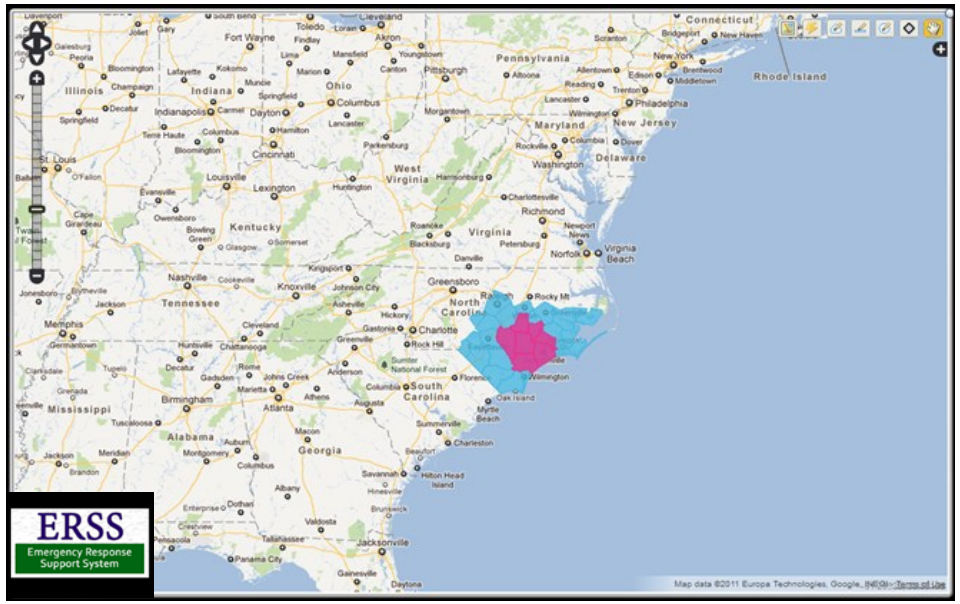


North Carolina Outbreak: Two Infected Counties

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	35,655	2,843,612	2,740	1,236
Buffer Zone (blue)	52,864	4,761,412	8,100	2,267
Total	88,519	7,605,024	10,840	3,503

Total livestock affected: 7,704,383

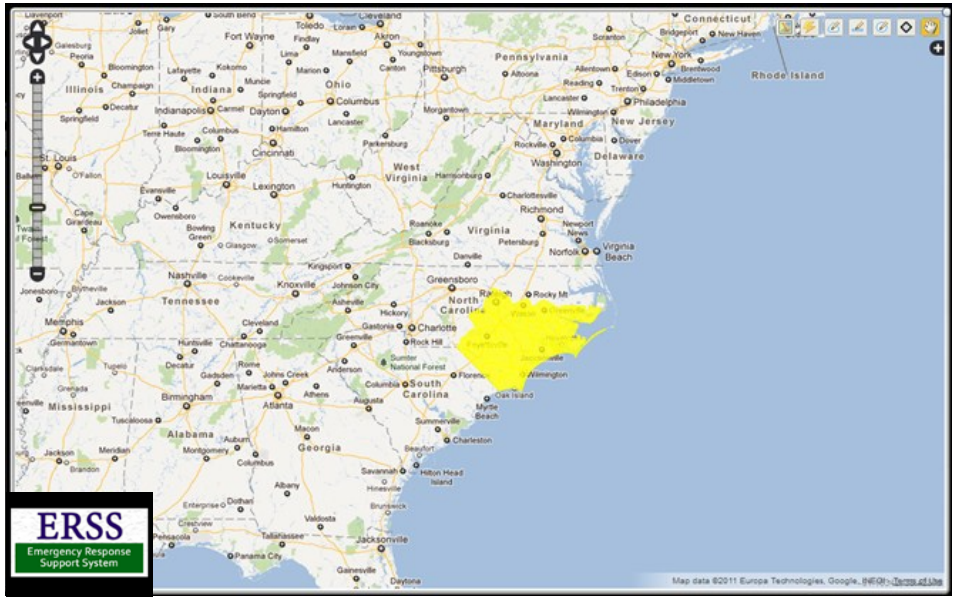
Source: NASS, 2007



North Carolina Outbreak: Seven Infected Counties

Where	Bovine	Swine	Sheep/ Goats	Operations
Infected Zone (pink)	77,524	6,065,937	8,513	2,816
Buffer Zone (blue)	68,568	2,810,420	17,832	3,640
Total	146,092	8,876,357	26,345	6,456

Total livestock affected: 9,048,794

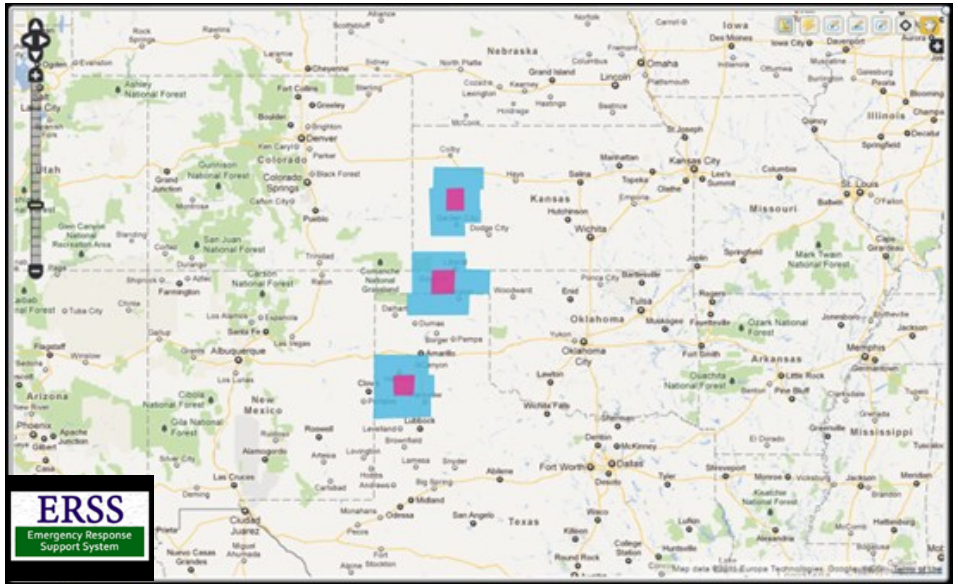


North Carolina Outbreak: Protection Vaccination Zone (26 Counties)

Where	Bovine	Swine	Sheep/ Goats	Operations
Vaccination Zone (yellow)	146,092	8,876,357	26,345	6,456

Total livestock affected: 9,048,794

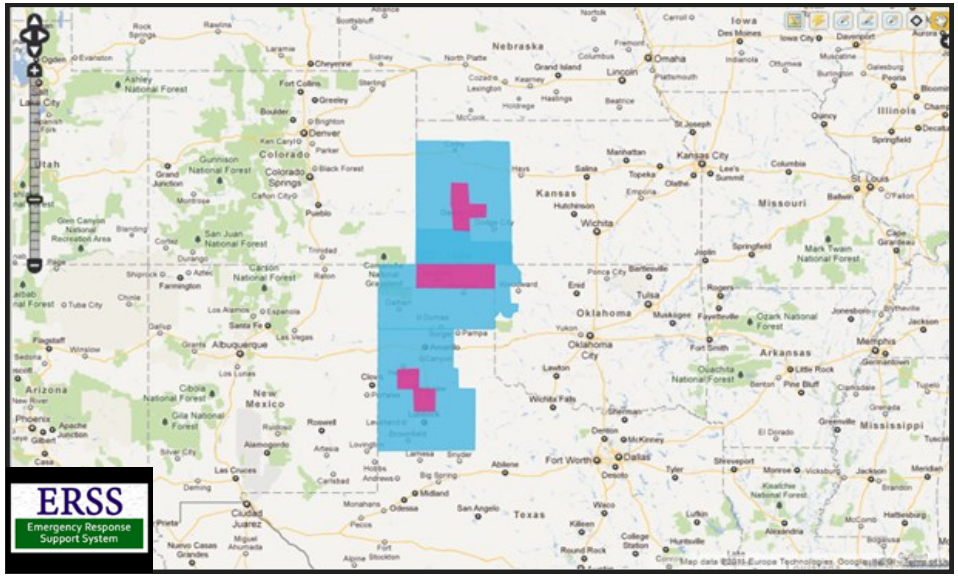
Source: NASS, 2007



TX-OK-KS Outbreak: Approximately Three Infected Counties

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	900,654	1,336,881	1,236	564
Buffer Zone (blue)	3,494,672	865	18,816	4,091
Total	4,395,326	1,337,746	20,052	4,655

Total livestock affected: 5,753,124



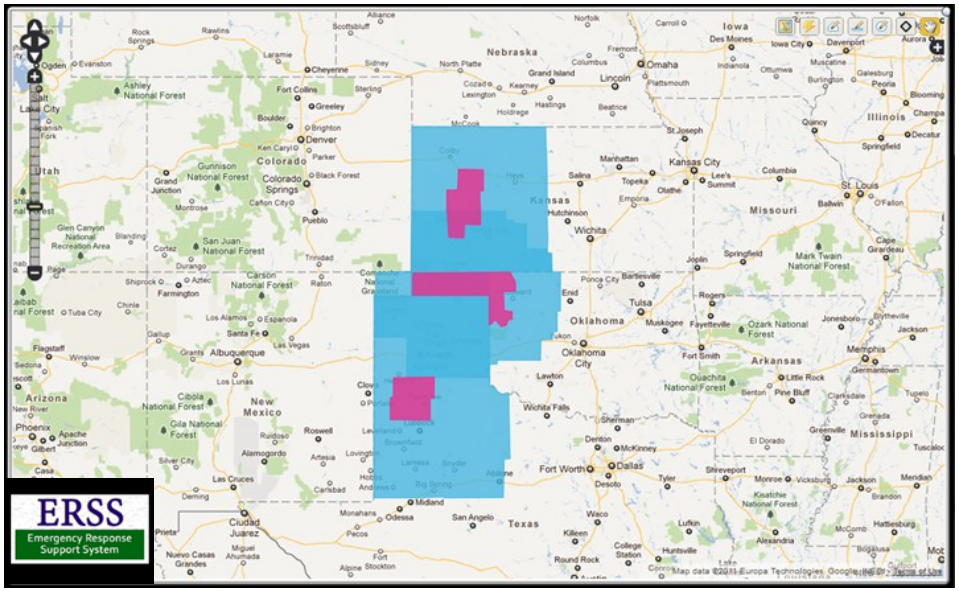
TX-OK-KS Outbreak: Six Infected Counties

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	1,516,259	1,337,157	4,569	1,633
Buffer Zone (blue)	7,549,474	146,615	39,783	12,268
Total	9,065,733	1,483,772	44,352	13,901

Total livestock affected: 10,593,857

Source: NASS, 2007

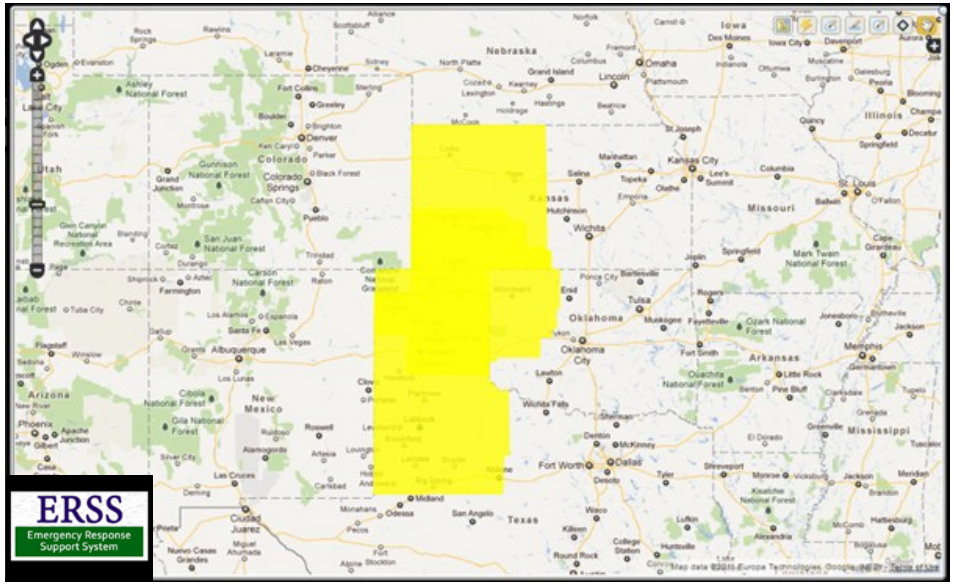
*Swine data provided may be incomplete; counties may choose not to report. Best available data incorporated.



TX-OK-KS Outbreak: Twelve Infected Counties

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	2,180,236	1,476,783	14,873	3,120
Buffer Zone (blue)	12,713,422	1,322,642	97,648	31,298
Total	14,893,658	2,799,425	112,521	34,418

Total livestock affected: 17,805,604



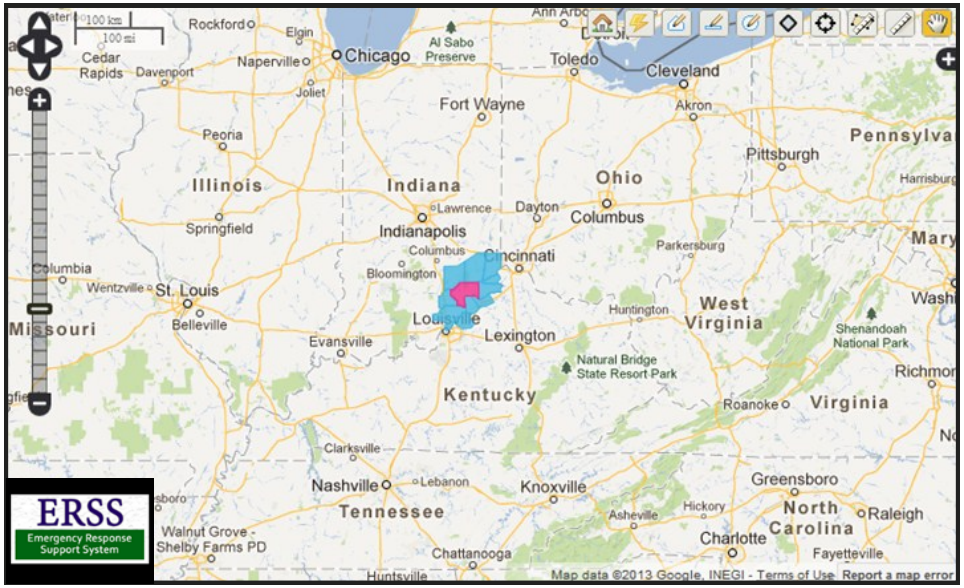
TX-OK-KS Outbreak: Protection Vaccination Zone (151 Counties)

Where	Bovine	Swine*	Sheep/ Goats	Operations
Vaccination Zone (yellow)	14,893,658	2,799,425	112,521	34,418

Total livestock affected: 17,805,604

Source: NASS, 2007

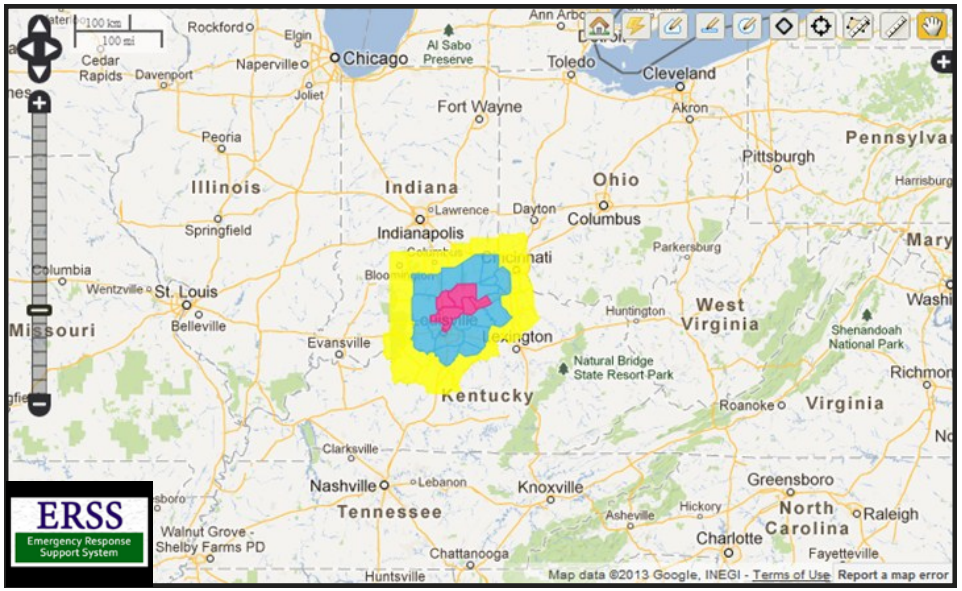
*Swine data provided may be incomplete; counties may choose not to report. Best available data incorporated.



IN-KY Outbreak: One Infected County

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	8,743	Withheld	974	402
Buffer Zone (blue)	66,177	41,353	6,919	2,595
Total	74,920	41,353	7,893	2,997

Total livestock affected: 124,166



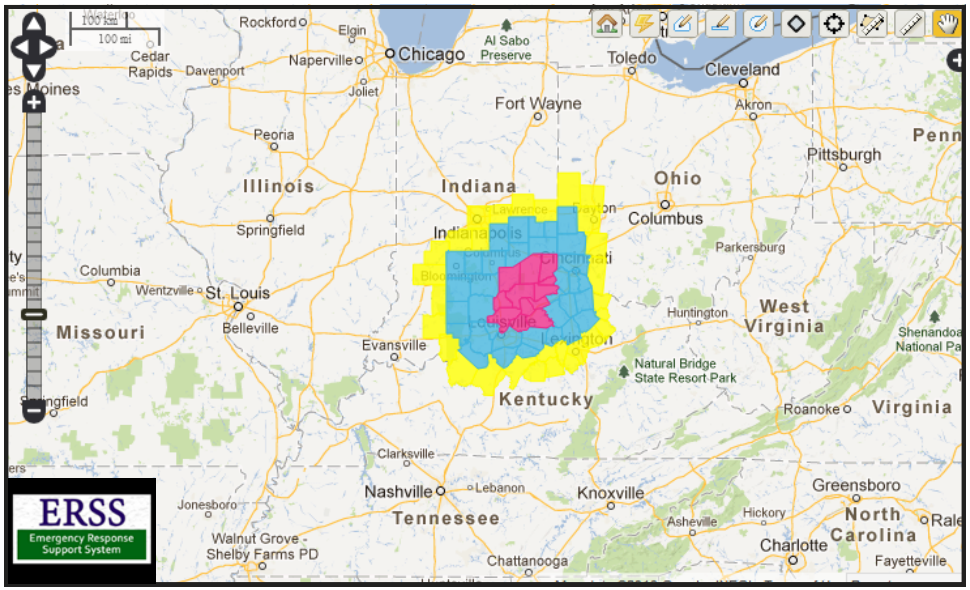
IN-KY Outbreak: Five Infected Counties

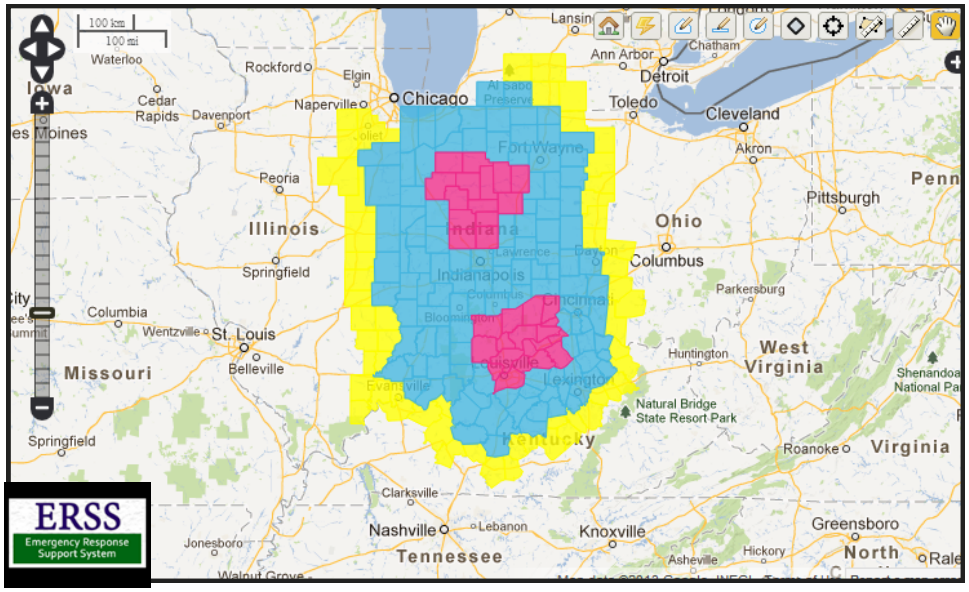
Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	36,890	1,815	3,970	1,438
Buffer Zone (blue)	225,018	106,129	19,190	6,495
Vaccination Zone (yellow)	399,111	284,002	34,063	11,333
Total	661,019	391,946	57,223	19,266

Total livestock affected: 1,110,188

Source: NASS, 2007

*Swine data provided may be incomplete; counties may choose not to report. Best available data incorporated.





IN-KY Outbreak: Twelve Infected Counties

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	102,514	41,411	9,458	3,571
Buffer Zone (blue)	422,494	531,337	39,033	12,875
Vaccination Zone (yellow)	549,340	596,692	52,053	12,998
Total	1,074,348	1,169,440	100,544	29,444

Total livestock affected: 2,487,112

IN-KY Outbreak: Thirty-two Infected Counties

Where	Bovine	Swine*	Sheep/ Goats	Operations
Infected Zone (pink)	271,563	1,294,663	32,316	8,911
Buffer Zone (blue)	1,594,711	3,220,495	134,409	40,726
Vaccination Zone (yellow)	959,005	1,230,255	80,631	20,679
Total	2,825,279	5,745,413	247,356	70,316

Total livestock affected: 8,818,048

Source: NASS, 2007

*Swine data provided may be incomplete; counties may choose not to report. Best available data incorporated.