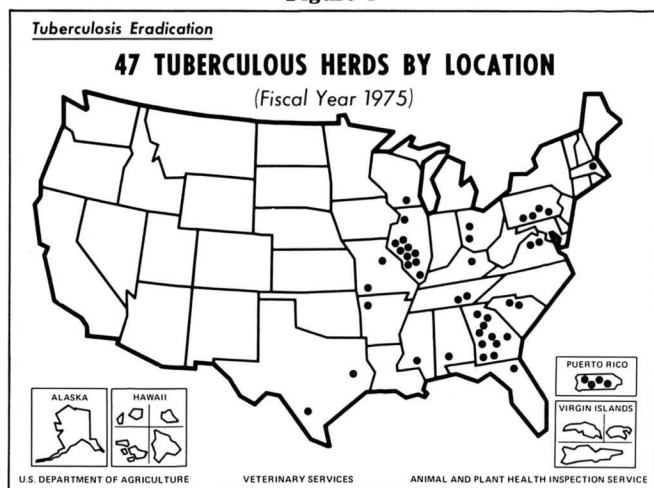


# Bovine Tuberculosis in the United States

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During fiscal year 1975 there were 47 tuberculous herds disclosed in the United States. Figure 1 shows the distribution of these 47 herds in 16 different states and Puerto Rico. You will note that 42 of these 47 herds happen to be located east of the Mississippi River, with Georgia and Illinois accounting for 20 of these herds. This statement is not intended to downgrade either of these states but rather to praise them for their excellence in conducting their tuber-

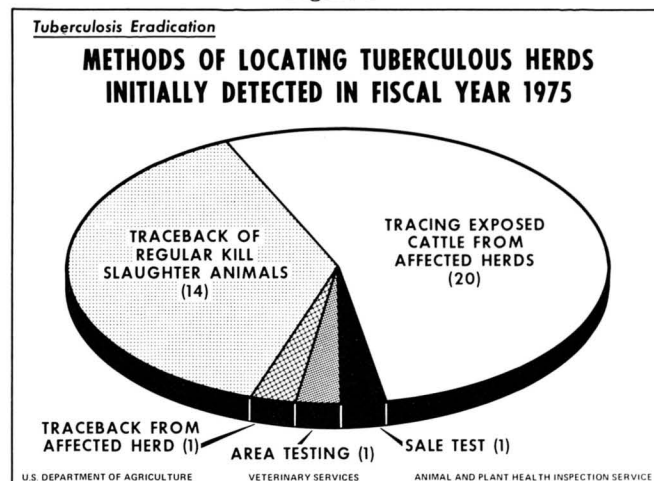
Figure 1



culosis epidemiologic investigations. The outbreak in Georgia is to be discussed in detail by Dr. Andrews who is next on the program. Seven of the tuberculous herds in Illinois were located by tracing sales out of one herd found to be infected when he sold some feeders out of his own herd for slaughter. This outbreak did not involve a registered herd; therefore, the assistance of a breed association was not possible, as was the case in Georgia. All sales had to be traced through dealers, livestock markets, and private transactions, with some groups of animals changing ownership three to four different times. The greatest problem was the diversion of heifers consigned as feeders into someone's breeding herd.

Thirty-seven of these 47 herds were never known to have been infected before and 10 were herds that were known to have been infected with *M. bovis* in previous years. Figure 2 depicts the method by which these 37 herds were located. We place great reliance on our procedure of traceback of regular kill slaughter animals found to have lesions of tuberculosis on post-mortem examination, yet only 14 of our 37 herds were located by this method. In an additional 32 cases of tuberculosis in regular kill animals, we were not

Figure 2



successful in locating a herd of origin. Whenever we find an affected herd we trace and test all possible sales made out of that herd. Twenty of these 37 tuberculous herds were located by this method, including seven out of the 10 in Illinois and eight of the 10 in Georgia. It is imperative, therefore, that whenever a tuberculous herd is found we must trace all sales from this herd and tuberculin test these animals or depopulate them as exposed. You will also note that one affected herd was found through tracing of animals purchased, one through sale testing, and one through area testing.

Our recommendations are that all tuberculous herds should be depopulated, with indemnification to the owner, in order to prevent further spread of the disease. Twenty-nine of the 47 tuberculous herds (62%) were depopulated this past year (Figure 3). This is the best we have ever done, but we must depopulate at least 95% in order to accelerate the program. Eight of the states depopulated every known infected herd, with Illinois leading the way by depopulating all 10 of their known affected herds. Of the 37 *M. bovis* herds initially discovered, we were able to depopulate 68% of them (Figure 4), but could only depopulate 40% of the previously known infected herds. History indicates that many of these 18 tuberculous herds which were not depopulated will eventually come back to haunt us.

We had the privilege last year of discussing with this group the use of the comparative-cervical tuberculin test for the retest of caudal fold suspects. During FY 1975, 4,309 suspects were retested by this procedure with 3,878 (90%) of them being classified

Figure 3

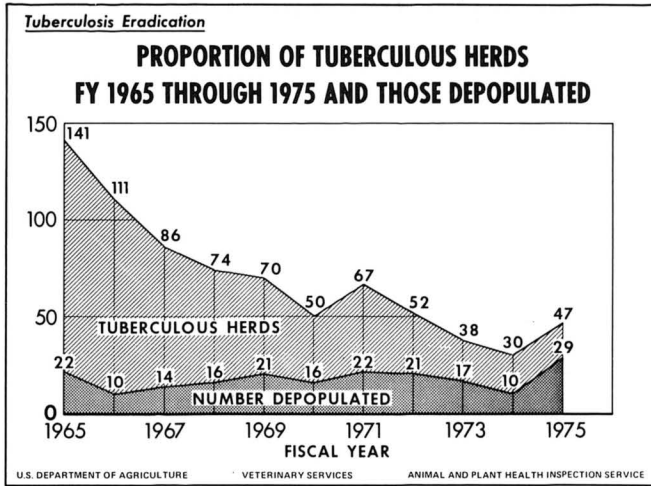


Figure 4

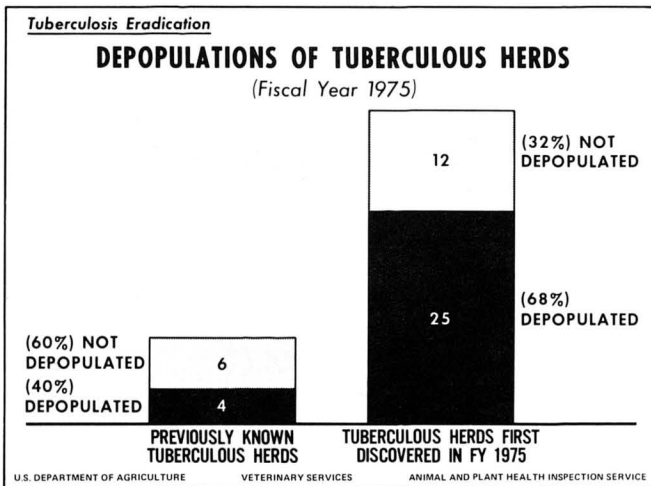
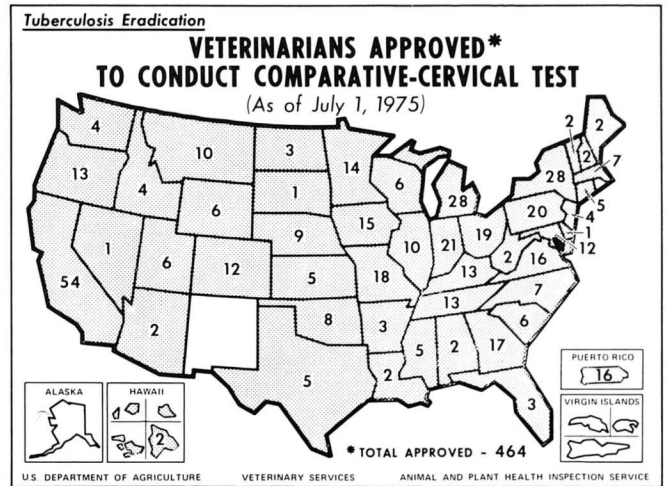


Figure 5



as negative, 312 (7%) as suspects, and 122 (3%) as reactors. Six of the 47 tuberculous herds were classified as being infected by this procedure. We strongly recommend that all caudal fold responding animals be reported to your state regulatory officials for a C-C retest. Figure 5 indicates the number of the 464 regulatory veterinarians (by state) approved to conduct the test as of July 1, 1975. Since then, we have trained an additional 37 veterinarians, including one from New Mexico. They used to say, when you see a sick pig "think hog cholera" first. We say, when you see a caudal fold response "think tuberculosis" first.