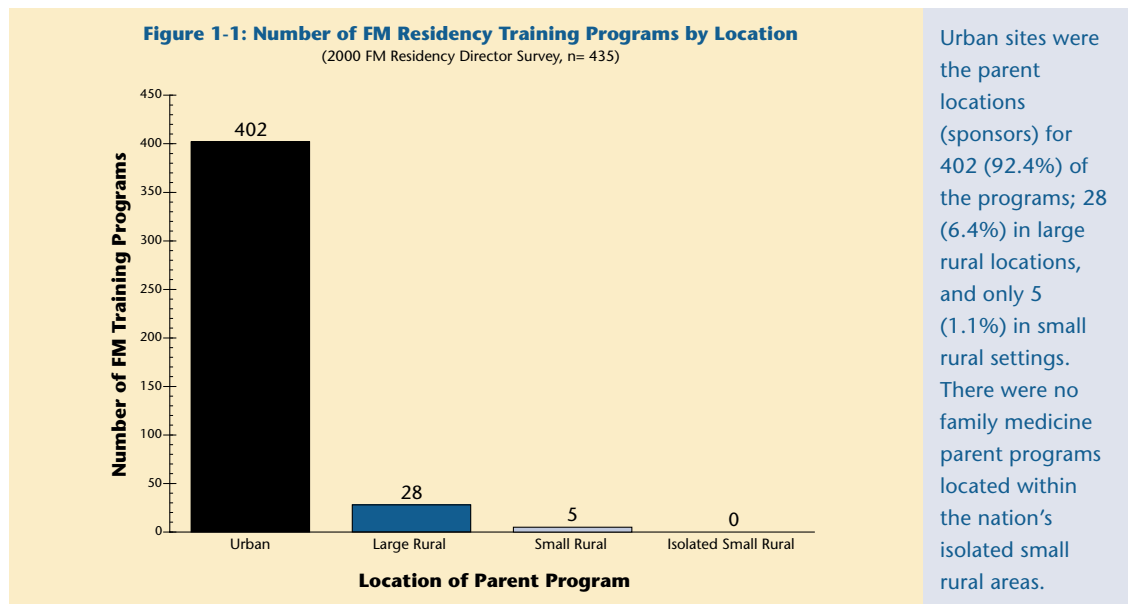


Characteristics and Geographic Location of Family Medicine Residency Programs in the United States

Despite the fact that family physicians are the predominant type of physicians serving rural America, very little family medicine residency training actually takes place in rural settings. In this chapter, a series of charts and tables describe the location and distribution of family medicine residencies across the United States and the amount of rural training they provide. All resident training is reported in full-time equivalents (FTEs). For example, a resident who spent 6 months training within a specific ZIP code area is counted as a .5 FTE within that area. The data reveal that very few programs are located in rural areas and that those programs provide the lion's share of the nation's rural training. Furthermore, programs based in rural areas are quite different than their urban counterparts.

Of the 453 family medicine residencies open in 2000, 435 responded to the survey. Most of the charts below report data from the 435 respondents. A few charts incorporate data from other sources and/or limited information collected from a telephone and e-mail follow-up about the non-respondents and report data on all 453 residency programs. It should be pointed out that the number of small rural programs is quite miniscule when listing the percent of programs located in, or training performed in, the various areas. For example, 60 percent of 5 small rural programs is very different than 45 percent of 402 urban programs. Nevertheless, the 33 rural parent program responses from rural-based programs are the entire population of such programs.



Residencies with rural parent locations were more likely to be the only family medicine residencies in a hospital and more likely to have a rural training track than residencies with urban parent locations.

Table 1: Characteristics of Programs by Rural-Urban Location of Parent Program

	Location of Parent Program		
	Urban (n = 402)	Large Rural (n = 28)	Small Rural (n = 5)
Programs with only family medicine residency in hospital (%)	45.0	92.9	60.0
Programs in community hospitals (%)	86.1	96.4	80.0
Programs in academic health centers (%)	13.9	3.6	20.0
Programs with rural training track (%)	7.0	14.3	20.0

Table 1-2 details much of the data presented in subsequent figures, but in tabular form. While urban parent programs produce 29 percent of rural training, rural programs are only responsible for .006 percent of urban training.

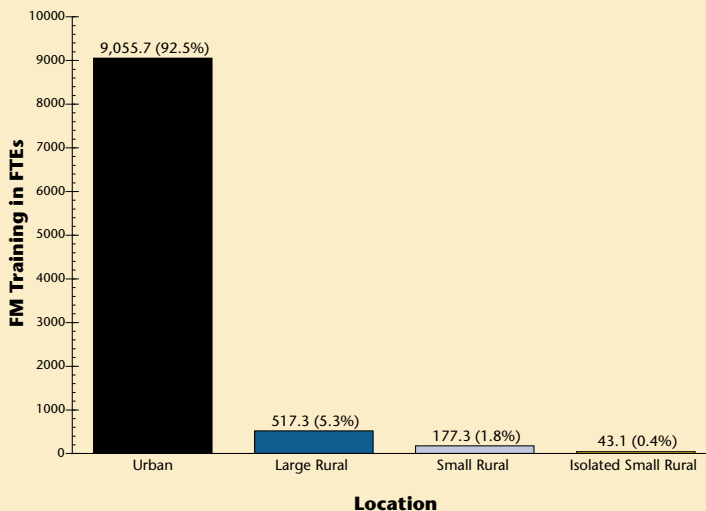
Table 1-2: Family Medicine Residency FTE Training by Location of Parent Program and Training Site (2000)

Location and Type of Training	Location of Parent Program			
	Urban (n = 402)	Large Rural (n = 28)	Small Rural (n = 5)	Totals (n = 435)
Rural Model Family Practice	0	405.9	42.3	448.2
Rural Training Track	89.2	31.7	13.8	134.7
Isolated small rural	5.0	2.0	0.0	7.0
Small rural RUCA	43.1	0.0	0.0	43.1
Large rural RUCA	41.1	29.7	13.8	84.6
Rural Block Rotation	104.9	9.4	12.5	126.8
Isolated small rural	28.5	2.3	0.0	30.8
Small rural RUCA	58.4	3.9	12.3	74.6
Large rural RUCA	18.0	3.3	0.3	21.6
Rural Continuity Clinic	18.8	7.5	1.5	27.8
Isolated small rural	1.5	3.8	0.0	5.3
Small rural RUCA	14.4	1.4	1.5	17.3
Large rural RUCA	2.9	2.3	0.0	5.2
Subtotal—All Rural Places	212.9	454.5	70.0	737.4
Isolated small rural	35.0	8.1	0.0	43.1
Small rural RUCA	115.9	5.3	13.8	135.0
Large rural RUCA	62.0	441.2	14.1	517.3
Total Rural Training Experience	212.9	454.5	70.0	737.4
Total Urban Training Experience	9,055.2	0.5	0.0	9,055.7
Grand Total	9,268.0	455.0	70.0	9,793.0

Note: Of the 453 family medicine residency programs, 435 responded, with 18 not responding. Additional information was obtained on the 18 nonresponding programs. Data on the 18 programs are not included in this table but are included in the figures where noted (where the number of programs is shown to be 453).

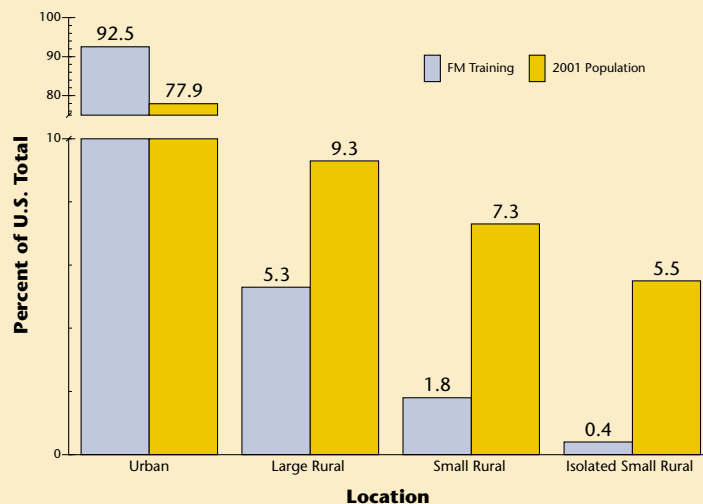
All 18 of the nonresponding parent programs were located in urban locales. These 18 programs produced approximately 404.6 FTEs of urban training and 11.4 FTEs of rural training. Thus, the grand total estimates for all 453 programs are that there were 748.7 FTEs of rural training (7.3%) and 9,460.4 FTEs of rural training (92.7%) during 2000.

Figure 1-2: Location of FTE FM Residency Training
(2000 FM Residency Director Survey, n= 435)



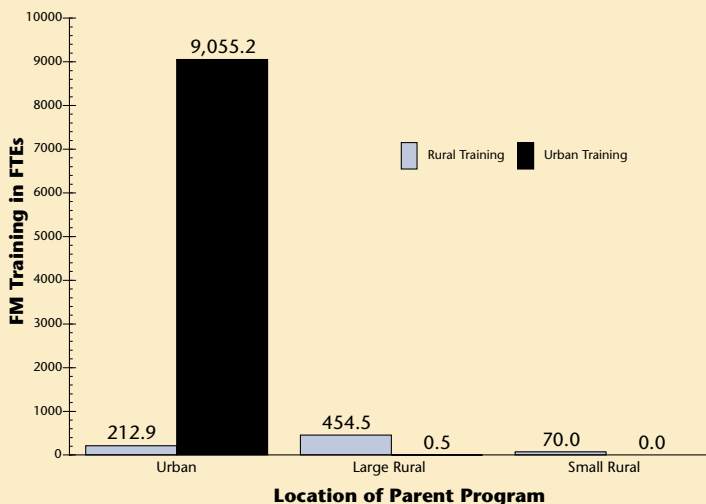
During 2000, only 7.5 percent of all family medicine residency training took place in rural settings (737 FTEs).

Figure 1-3: Location of FTE FM Residency Training Compared to Population
(2000 FM Residency Director Survey, n= 435)



In the United States, residency training programs are concentrated in urban settings, including family medicine residencies; 92.5 percent of residency training takes place in urban settings where 77.9 percent of the U.S. population resides. Small and isolated rural areas have 12.8 percent of the population but only 2.2 percent of family medicine residency training takes place in these areas.

Figure 1-4: Rural & Urban FM Residency Training by Program Location
(2000 FM Residency Director Survey, n= 435)

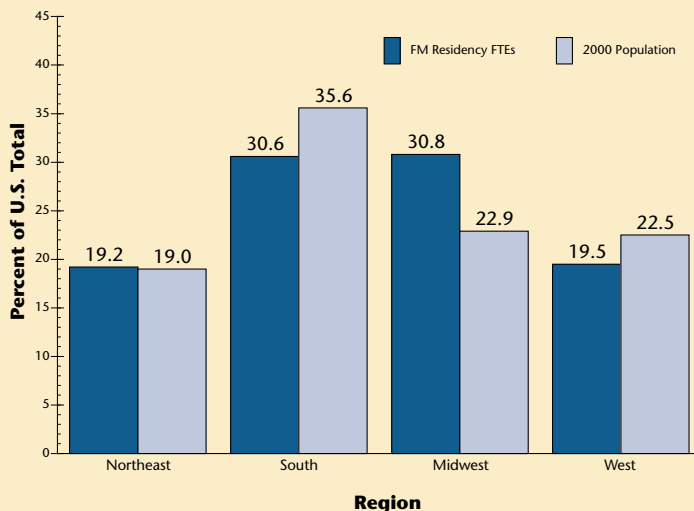


Of the 737 FTEs of rural training produced annually by the programs, 525 FTEs were produced by parent programs located within rural settings. Urban residencies produced 213 FTEs of rural training.

When compared to the regional population, relatively more rural family medicine residency training takes place in the Midwest than in the other regions.

Figure 1-5: FM Residency Training FTEs and Population by Region

(2000 FM Residency Director Survey, n= 435)



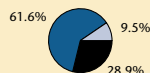
Seventy-one percent of the family medicine training that takes place in rural settings is provided by the 33 residencies with a rural parent location.

Figure 1-6: Rural & Urban FM Residency Training by Location of Parent Program

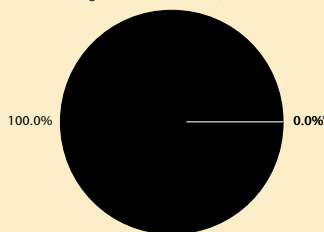
(2000 FM Residency Director Survey, n= 435)

Location of Parent FM Residency Program:
 ■ Urban ■ Large Rural ■ Small Rural

Resident FTE Rural Training
 Training in rural locations: 737.4 FTEs



Resident FTE Urban Training
 Training in urban locations: 9,055.7 FTEs



Pies are proportional to the number of FTE residents.

* Rounded to zero.

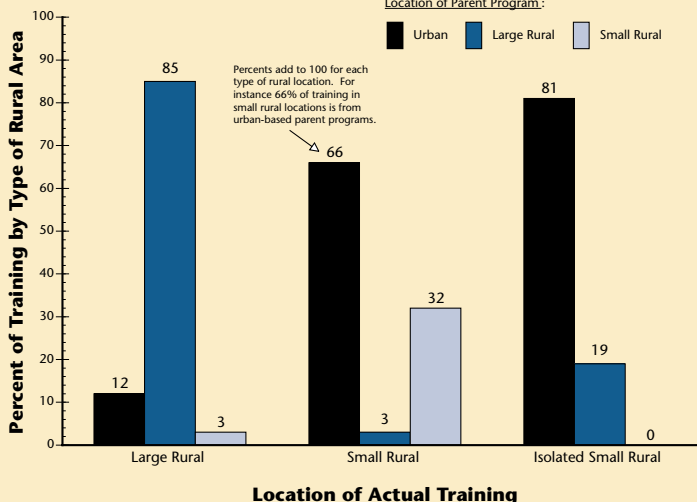
Sixty-six percent of the family medicine training that takes place in small rural areas and 81 percent of training that takes place in isolated small rural areas are under the auspices of urban-based parent programs. Urban-based programs only produce 12 percent of large rural area training FTEs.

Figure 1-7: Rural FM Residency Training by Location of Parent Program

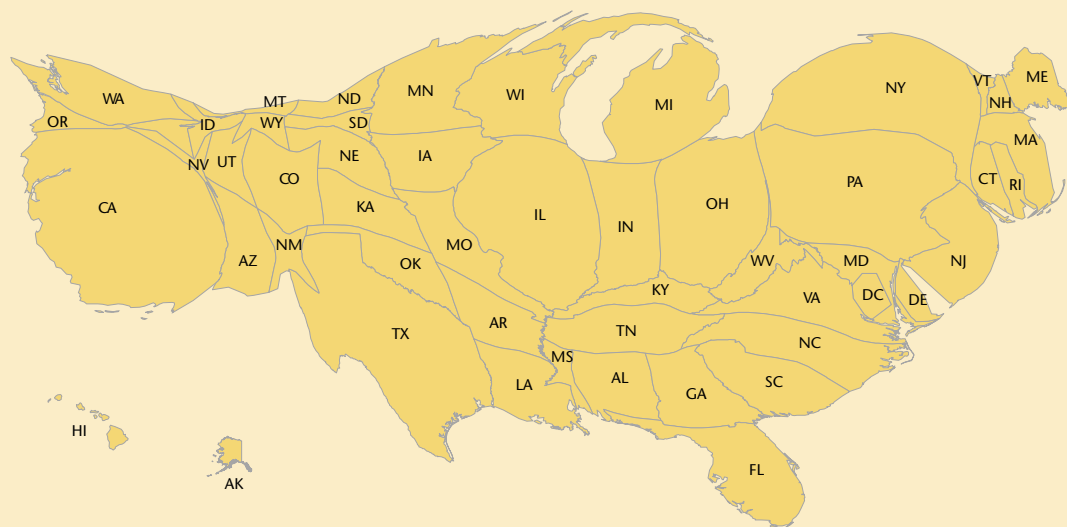
(2000 FM Residency Director Survey, n= 435)

Location of Parent Program:

■ Urban ■ Large Rural ■ Small Rural



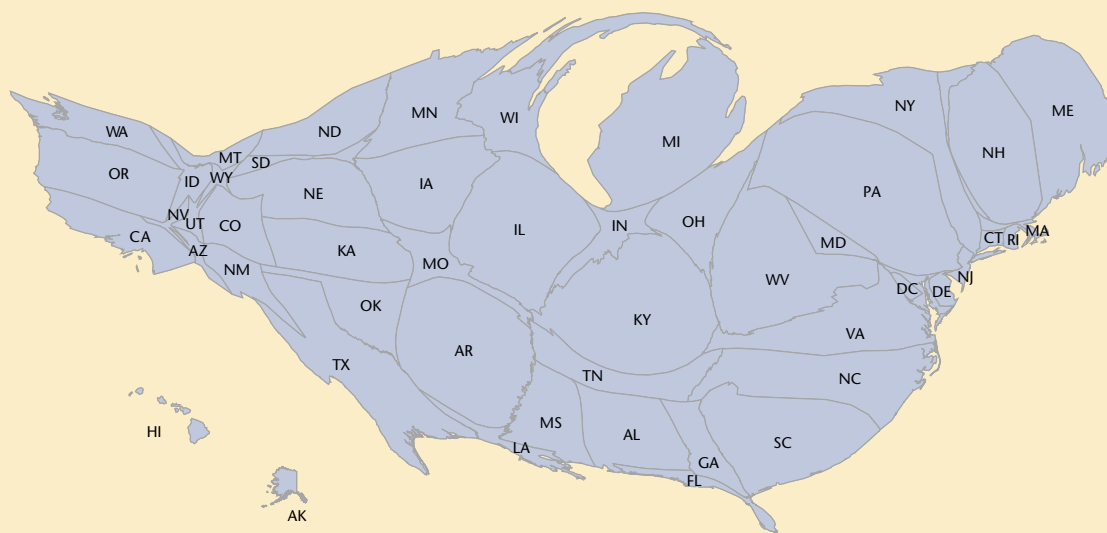
Map 1: Cartogram of Total Family Medicine Residency Training FTEs, by State (2000)



Area is proportional to the number of FTEs.

This cartogram shows the total (rural and urban) number of family medicine residency training FTEs by state. The size of the states is proportional to the number of FTEs. There is great variation across states in the number of FTEs trained, as shown for example when comparing Pennsylvania (where there is much training) with Wyoming (where there is little training).

Map 2: Cartogram of Total Rural Family Medicine Residency Training FTEs, by State (2000)

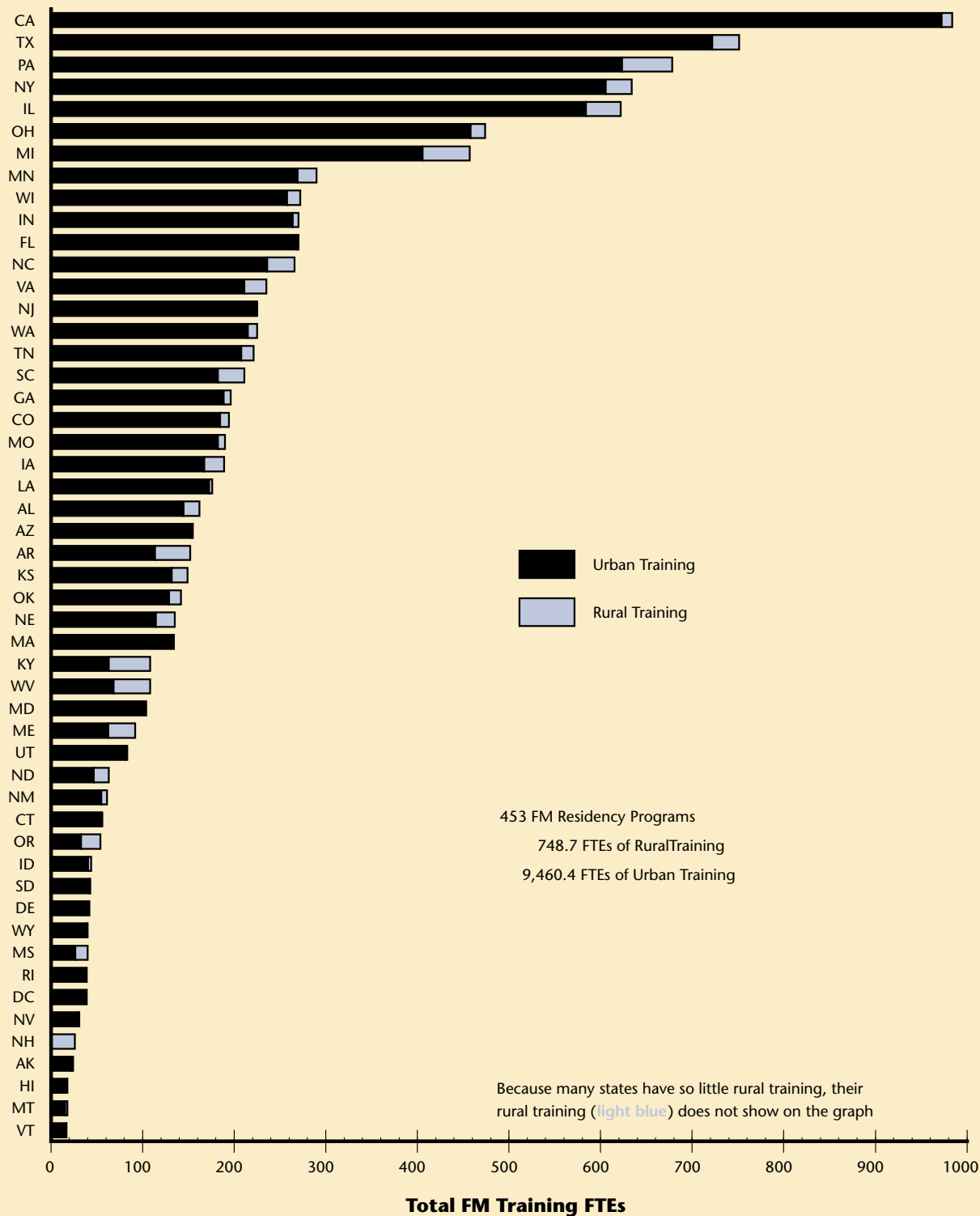


Area is proportional to the number of FTEs.

This cartogram is similar to the one depicted in Map 1 but looks at rural FTEs only. Note the relative differences between the maps; for example, California appears large in Map 1 and small in Map 2.

Figure 1-8: FM Residency FTE Training by State & Location

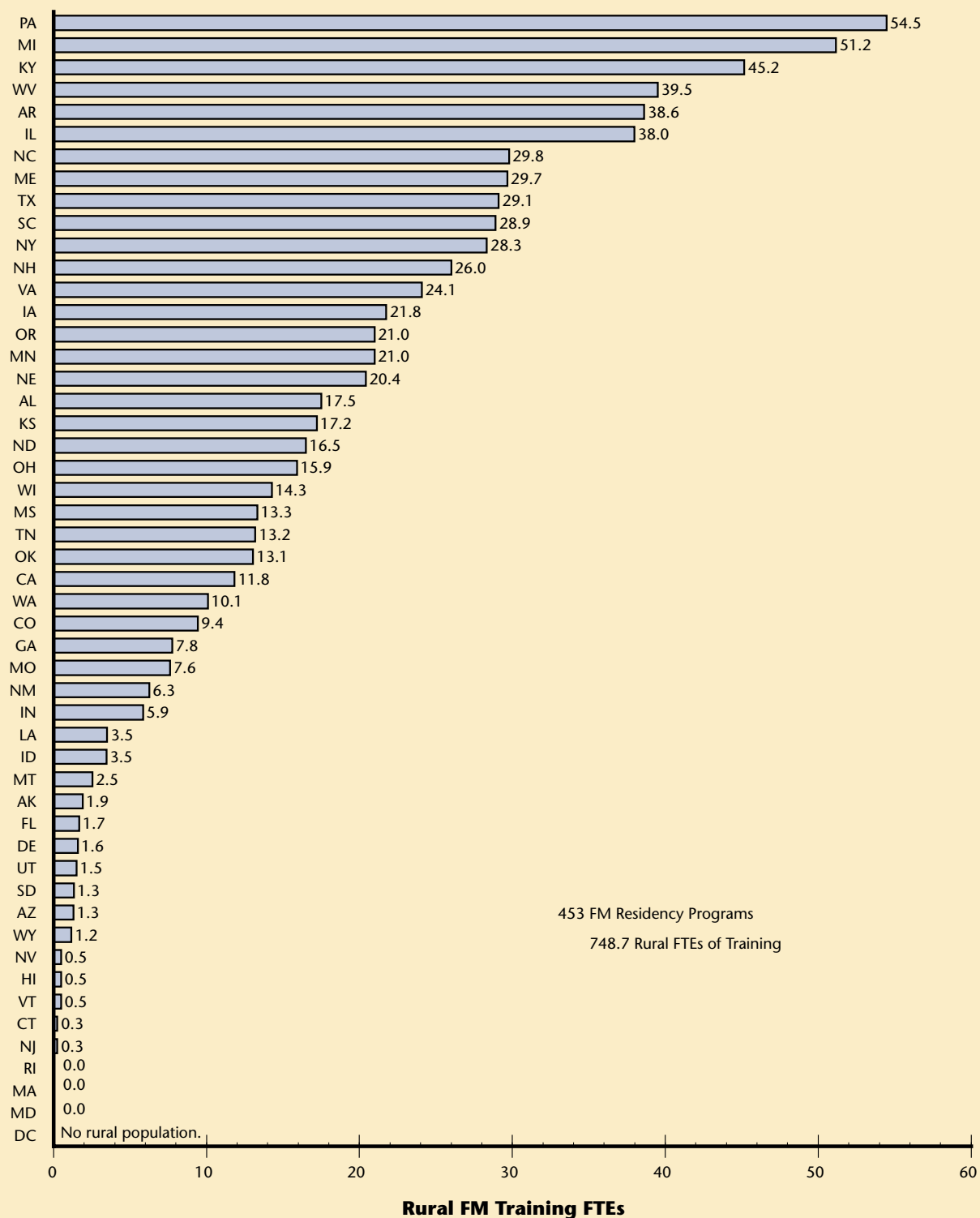
(2000 FM Residency Director Survey & Non Response Data, n=453)



The amount of rural training, as a proportion of total family medicine residency training, varies widely in individual states and is not strongly associated with the amount of urban training.

Figure 1-9: FM Residency FTE Rural Training by State

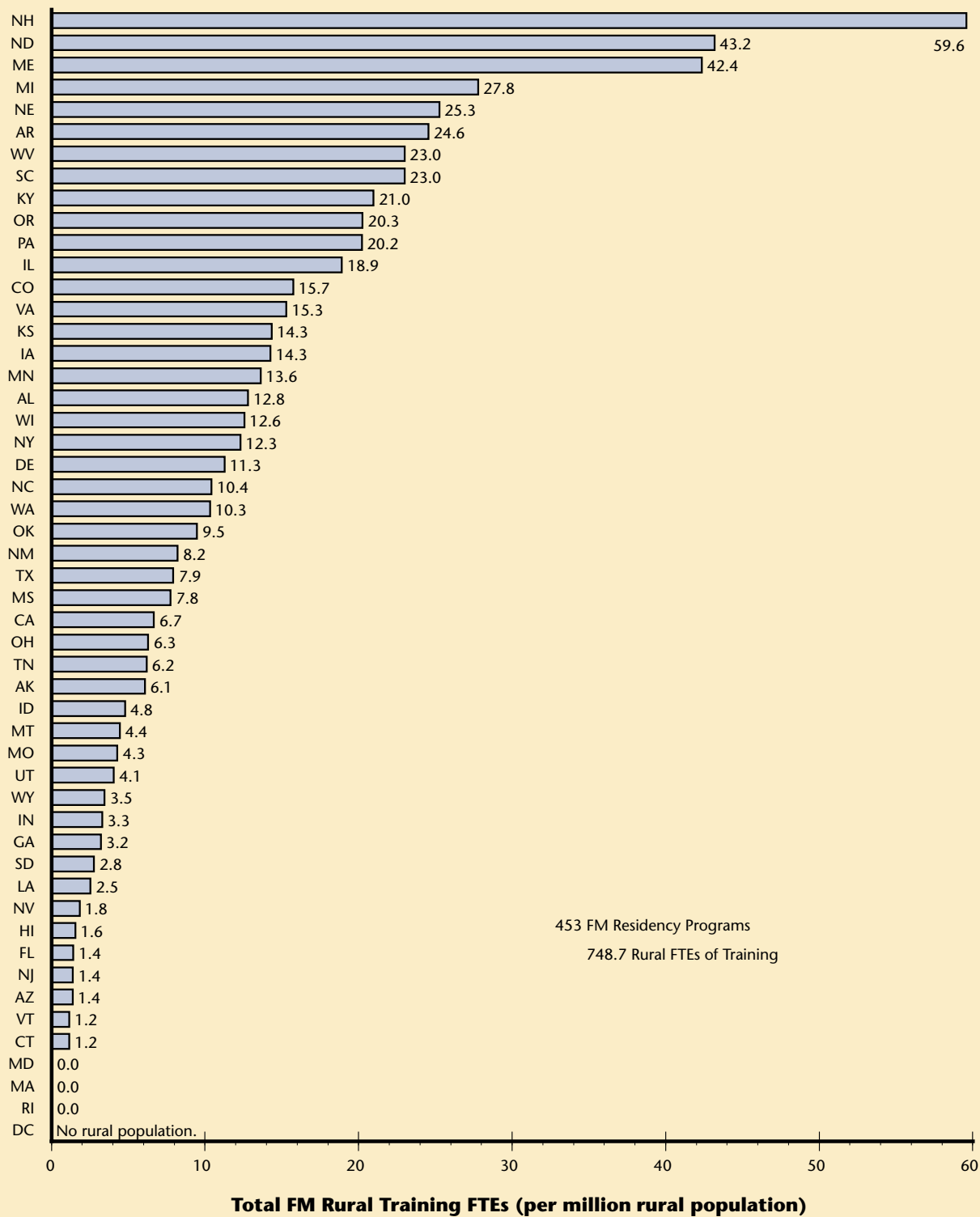
(2000 FM Residency Director Survey & Non Response Data, n=453)



The states that provide the highest number of FTEs of rural residency training are Pennsylvania, Michigan, Kentucky and West Virginia.

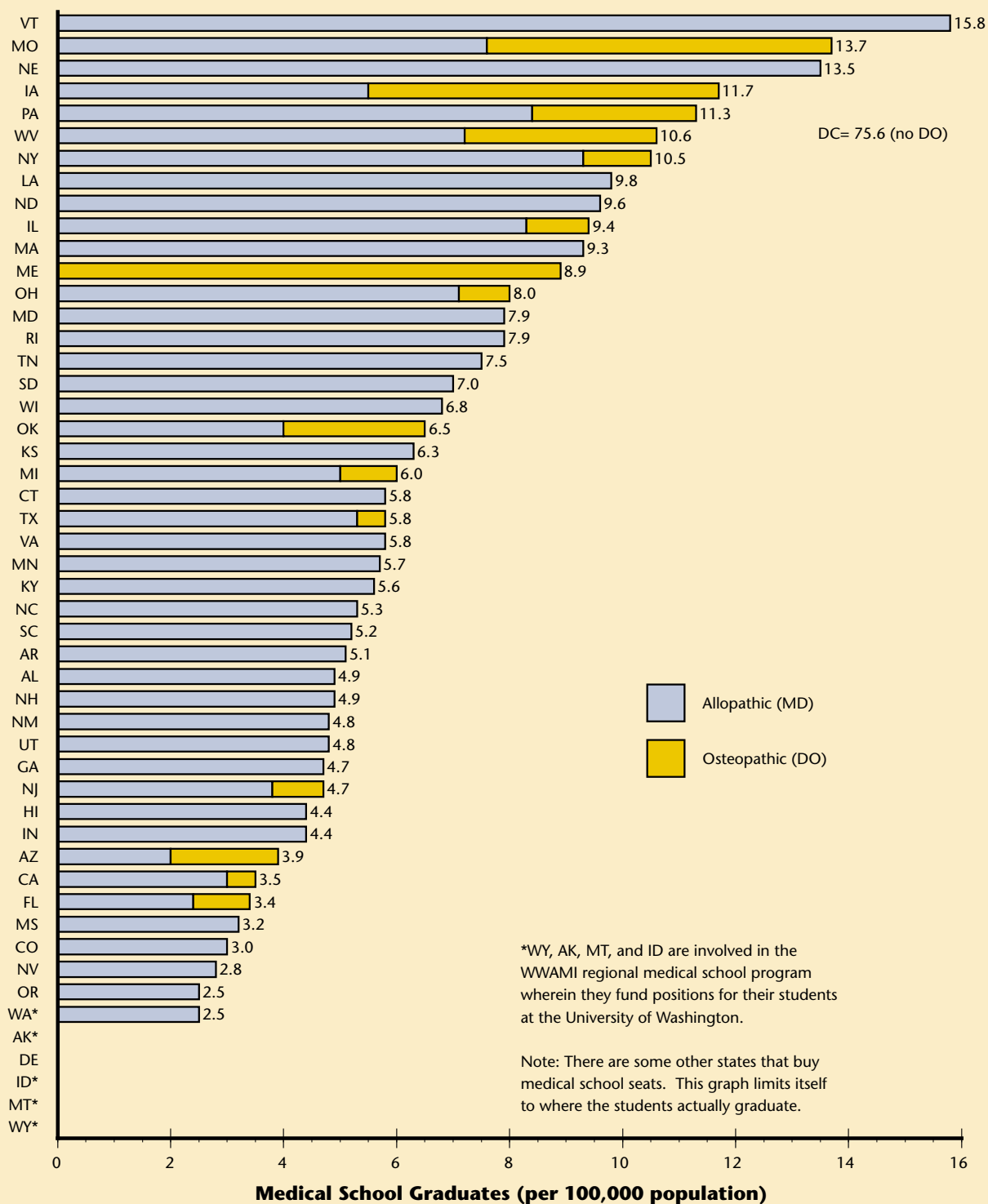
Figure 1-10: FM Residency FTE Rural Training Per Rural Population by State

(2000 FM Residency Survey & Non Response Data (n=453): 1998 Population)



The states that provide the most rural residency training per million rural residents are New Hampshire, North Dakota, Maine, Michigan and Nebraska. There is substantial variation between states; for example, North Dakota provides over twelve times as many FTEs of family medicine training as does Wyoming.

Figure 1-11: 2000 Medical School Graduates per 100K Population by State
(2000 Population)



Source: 51 HRSA State Health Workforce Profiles, CD, 2005.

There are large differences in the number of medical school graduates per 100,000 population across states; for example, Nebraska graduates over five times as many medical students as does Washington State. In addition, note how osteopathic graduates vary widely from state to state.

