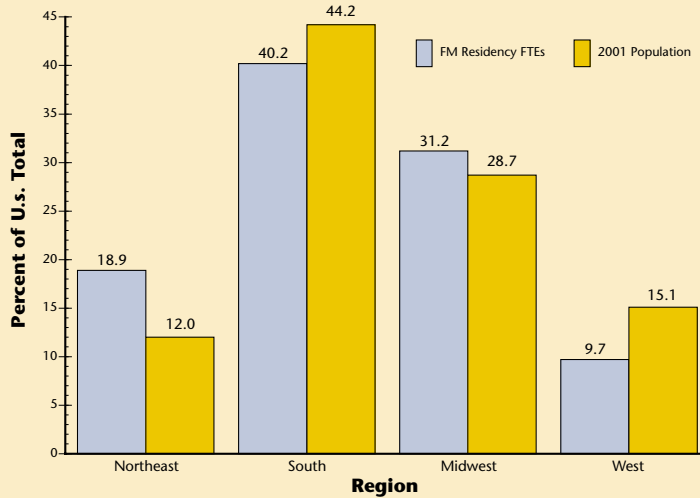# Family Medicine Residencies Based in Rural Locations

As shown in the previous chapter, family medicine residency training programs are not distributed across the states and regions of the nation in proportion to the distribution of the population. In this chapter, the regional distribution of programs and rural training is explored in greater detail. In the charts that follow, the four Census Bureau Regions and nine Census Bureau Divisions are used to examine the geographic distribution of rural residency programs and the amount of training they provide (see Map 3). All of the data reported in this chapter were collected from the 435 responses to the survey.

Family medicine and rural residency training vary dramatically across the nation in terms of their relative frequency and type. For example, the highest rate per rural population was in New England, while the lowest rate was in the Mountain Division. Nearly half the nation's rural training tracks were located in the South. Surprisingly, rural training only represented 4.3 and 5.3 percent of the family medicine training in the Pacific and Mountain Divisions, as compared to 23.2 percent of the family medicine training that takes place in the East South Central Division. In summary, there is substantial variation in the amount of family medicine residency training across region, Census Division and rural type.

## Map 3: Census Divisions and Regions
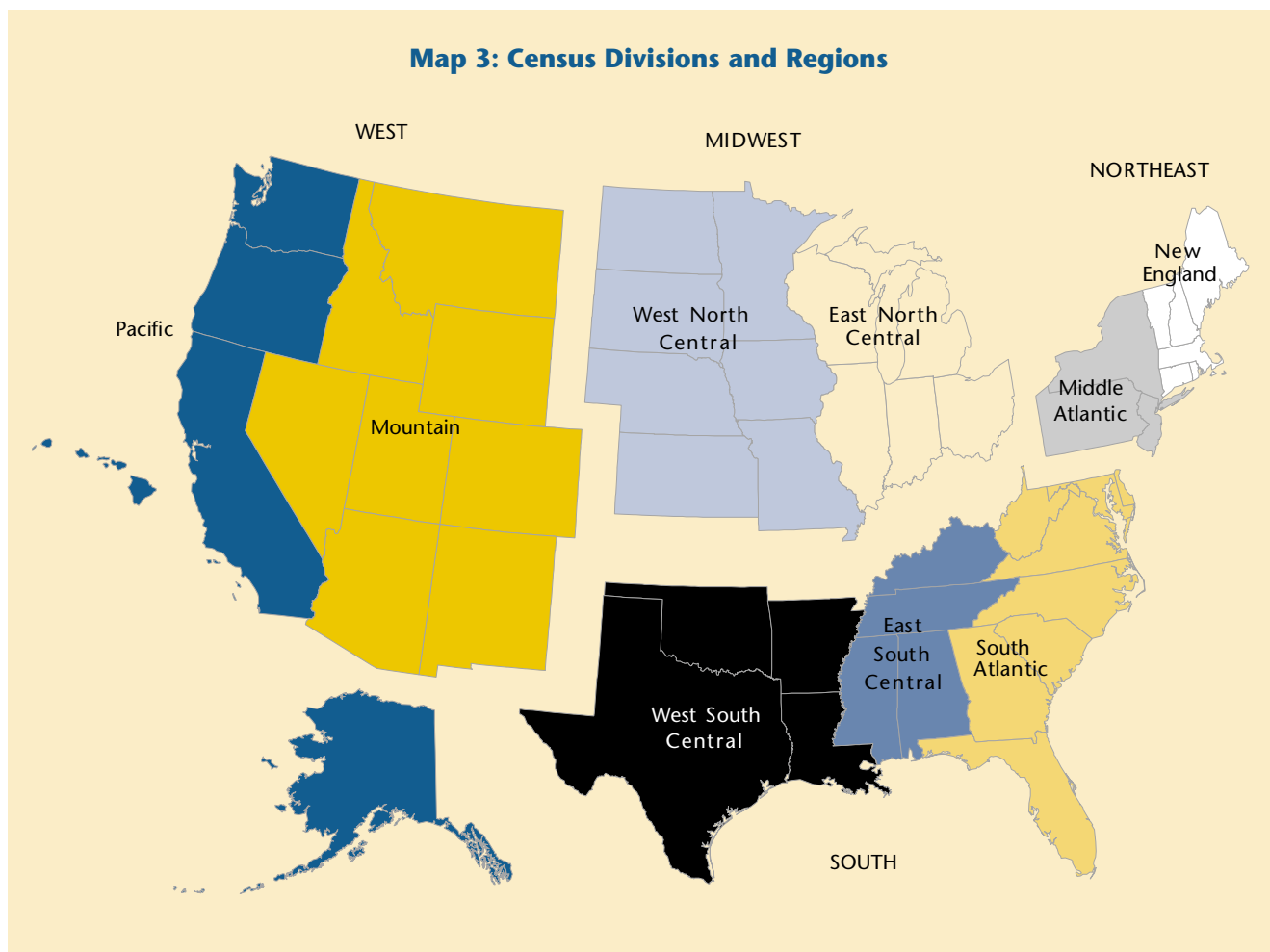
The proportion of all rural family medicine residency training FTEs was disproportionately high (compared to the rural population distribution) in the Northeast. Programs in the West provided only 9.7 percent of the total national training FTEs in this region where 15.1 percent of the nation's rural population resides.

Figure 2-1: Rural FM Residency Training and Population by Location of Program
(2000 FM Residency Director Survey, n= 435)

U.S. family medicine residencies provided about 11.8 FTEs of rural training per million U.S. rural residents. In New England, the East South Central Division and the West North Central Divisions, the rate was substantially higher, but it was substantially lower in the Mountain, Pacific and West South Central Divisions.

Figure 2-2: Rural FM Residency Training Per 2001 Rural Population by Census Division
(2000 FM Residency Director Survey, n= 435)
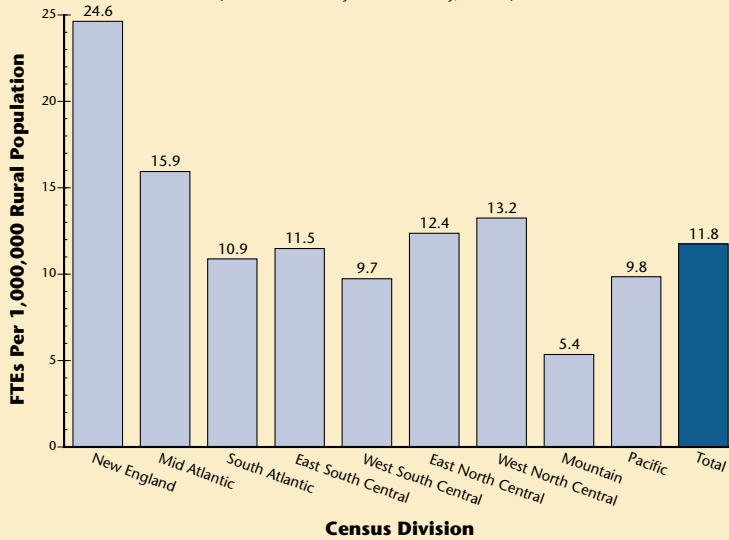
Nearly half of the nation's rural training track FTEs were located in the South Census Region.

Figure 2-3: FM Residency Rural Training Track FTEs by Census Region
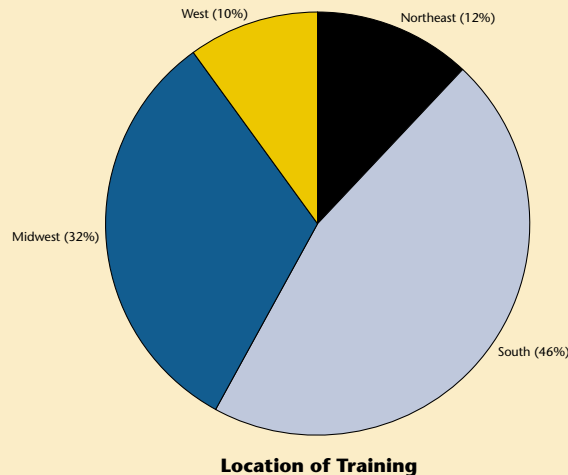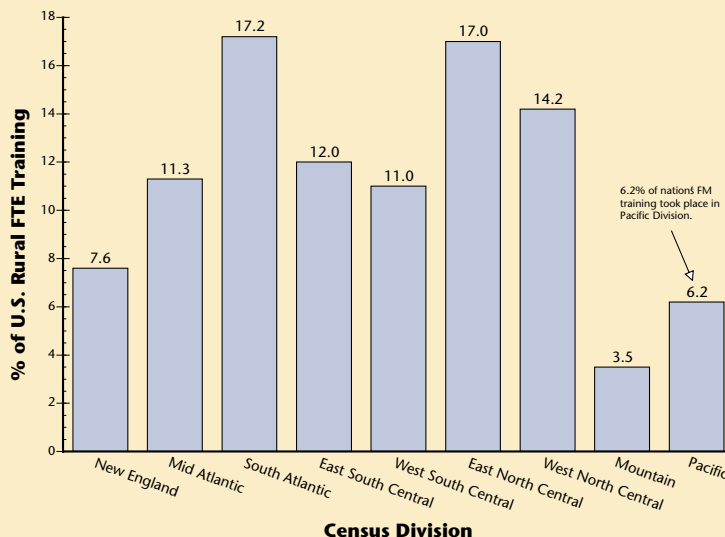(2000 FM Residency Director Survey, n= 435)

Location of Training

Figure 2-4: Rural FM Residency Training by Census Division
(2000 FM Residency Director Survey, n= 435)

% of U.S. Rural FTE Training

New England: 7.6
Mid Atlantic: 11.3
South Atlantic: 17.2
East South Central: 12.0
West South Central: 11.0
East North Central: 17.0
West North Central: 14.2
Mountain: 3.5
Pacific: 6.2

6.2% of nation's FM training took place in Pacific Division.

Census Division

Overall, the largest proportions of the nation's rural residency training FTEs were trained in the South Atlantic and East North Central Divisions, while the smallest proportions were in the Pacific and Mountain Divisions.

Figure 2-5: Rural FM Residency Training As a Percent Within Census Division
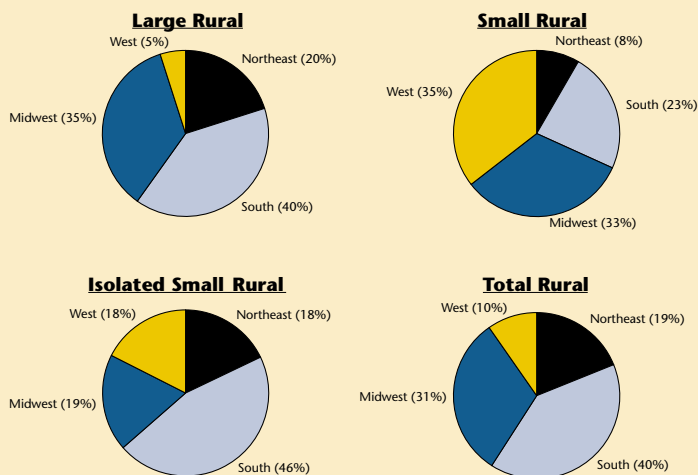(2000 FM Residency Director Survey, n= 435)

% FTEs Within Division

New England: 19.3
Mid Atlantic: 6.8
South Atlantic: 11.2
East South Central: 23.2
West South Central: 9.1
East North Central: 7.8
West North Central: 12.9
Mountain: 5.3
Pacific: 4.3

The West South Central division's percent means that 9.1% of the FM FTE training within that region is in rural areas.

Census Division
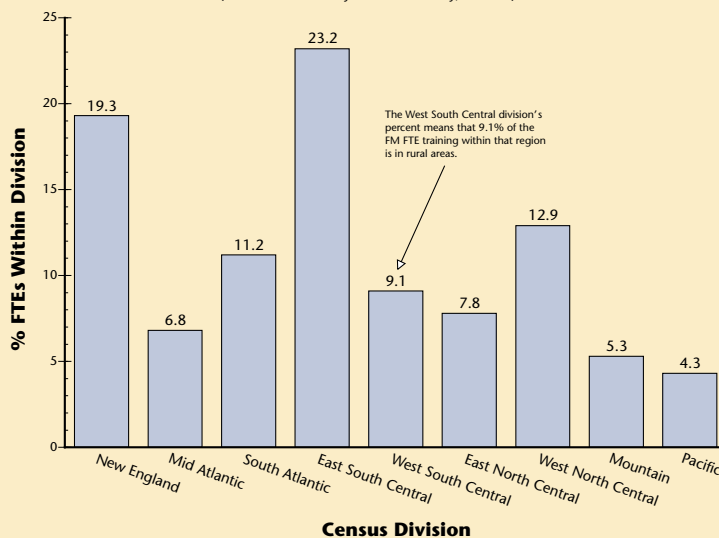
The proportion of residency training within each region that takes place in rural settings varies significantly, from 4.3 percent in the Pacific Division to 23.2 percent in the East South Central Division.

Figure 2-6: Rural FM Residency Training by Type of Rural Location and Region
(2000 FM Residency Director Survey, n= 435)

Large Rural
West (5%)
Northeast (20%)
Midwest (35%)
South (40%)

Small Rural
Northeast (8%)
West (35%)
South (23%)
Midwest (33%)

Isolated Small Rural
West (18%)
Northeast (18%)
Midwest (19%)
South (46%)

Total Rural
West (10%)
Northeast (19%)
Midwest (31%)
South (40%)

Programs in the South make the largest regional contribution to rural training (40% of all rural training). However, programs in the West and Midwest make large contributions to the training that occurs in small rural areas (35% and 33%).
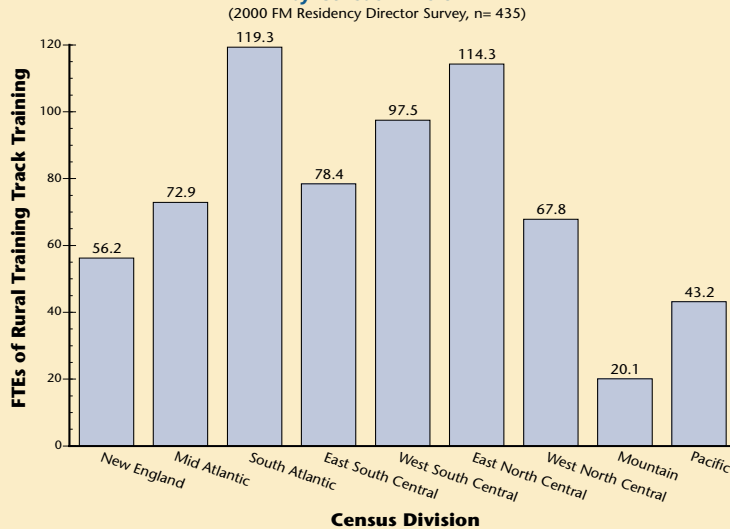
Eighty-five percent of the training that occurs in large rural towns is associated with residencies whose parent programs are located in a large rural area. In contrast, 83 percent of the training in small rural communities and 81 percent of the training in isolated small rural areas is associated with residencies whose parent program was in an urban location.

Figure 2-7: FM Residency Training by Location of Training and Parent Residency Location
(2000 FM Residency Director Survey, n= 435)

Large Rural Communities

Large Rural (85%)
Small Rural (3%)
Urban (12%)

Small Rural Communities

Urban (83%)
Large Rural (4%)
Small Rural (13%)

Isolated Small Rural Communities

Urban (81%)
Large Rural (19%)
Small Rural (0%)

The large rural percentage indicates that 19% of the training taking place in isolated small rural communities was performed through parent residencies located in large rural locations.

No core residencies were located in isolated small rural locations.

Family medicine residency programs in the South Atlantic and East North Central Census Divisions generated the largest number of rural training FTEs in small and isolated small rural areas. By comparison, the Mountain and Pacific Divisions produced far fewer rural training FTEs.

Figure 2-8: FM FTE Residency Training in Small & Isolated Small Rural Locations by Census Division
(2000 FM Residency Director Survey, n= 435)

FTEs of Rural Training Track Training (y-axis)
Census Division (x-axis)

- New England: 56.2
- Mid Atlantic: 72.9
- South Atlantic: 119.3
- East South Central: 78.4
- West South Central: 97.5
- East North Central: 114.3
- West North Central: 67.8
- Mountain: 20.1
- Pacific: 43.2

Most of the rural residency training that occurs in the United States takes place in large rural settings. The amount of training in small and isolated small places varies from 10.9 out of 80.8 FTEs in West South Central Division to 49.5 out of 127.2 FTEs in the South Atlantic Division. The greatest amount of training in isolated small rural areas takes place in the Mountain Division.

Figure 2-9: FM FTE Residency Training in Types of Rural Locations by Census Division
(2000 FM Residency Director Survey, n= 435)

FTEs of Training (y-axis)
Census Division (x-axis)

Types of Rural Locations:
- Large
- Small
- Isolated Small

- New England: 56.4 (Large 41.9, Small 13.6, Isolated Small 1.0)
- Mid Atlantic: 83.1 (Large 62.4, Small 18.1, Isolated Small 2.6)
- South Atlantic: 127.2 (Large 77.6, Small 43.0, Isolated Small 6.5)
- East South Central: 88.5 (Large 58.0, Small 28.1, Isolated Small 2.4)
- West South Central: 80.8 (Large 69.9, Small 9.8, Isolated Small 1.1)
- East North Central: 125.0 (Large 105.5, Small 16.4, Isolated Small 8.0)
- West North Central: 104.9 (Large 81.7, Small 17.1, Isolated Small 6.1)
- Mountain: 26.1 (Large 6.1, Small 10.5, Isolated Small 9.6)
- Pacific: 45.4 (Large 19.1, Small 20.6, Isolated Small 5.7)