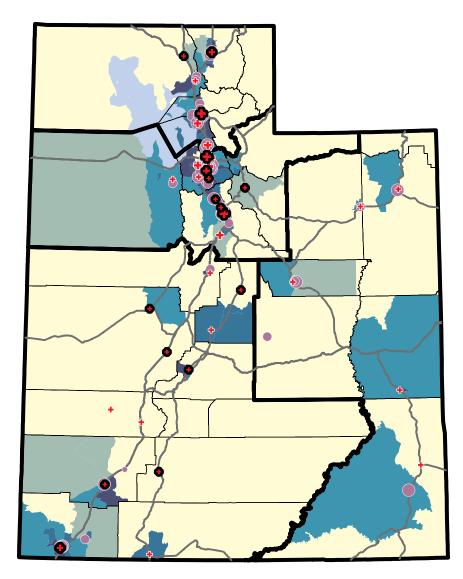
# Case Study Series



# UTAH

# MAP PAGE HAZMAT Response 92 Trauma Coordination 92 Central EMS Strike Team 96 Eastern EMS Strike Team 97 Northern EMS Strike Team 98 Southeastern EMS Strike Team 99 Southern EMS Strike Team 100 Western EMS Strike Team 101

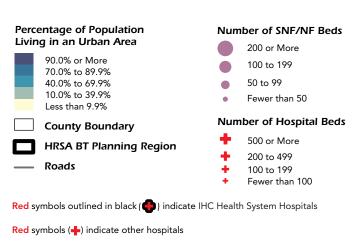
# Nursing Homes and Hospitals Serving the Resident Population



This map depicts the size and location of hospitals and nursing homes relative to the urban population. Approximately 39 general medical and surgical hospitals and 79 nursing homes distributed over 29 counties in Utah are used for analysis in this *Atlas*.

The urban population in Utah is concentrated along the Wasatch Front, a metropolitan region that runs north-south with the Wasatch Mountain Range rising on the eastern side. The rest of the State is mostly rural or wilderness, although there are some smaller settlements (such as St. George) along the major transportation routes in the southwest part of the State. Much of the land in Utah is State or national parkland or designated as wilderness by the Bureau of Land Management. Most of the hospitals and nursing homes in the State are located along major transportation networks with a few small community hospitals in remote rural areas.

Although there appear to be both hospitals and nursing homes in all the urban centers, including smaller urban areas in the southern and eastern parts of the State, people living in rural areas may have difficulty accessing care. With the exception of a few small hospitals in largely rural areas, most hospitals in Utah appear to be near a nursing home.

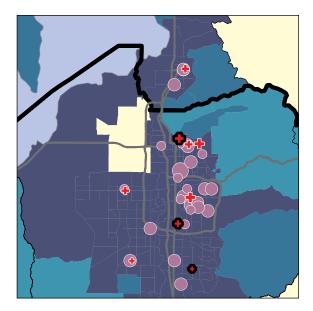


# **Major Cities**

# Ogden

Provo

Salt Lake City

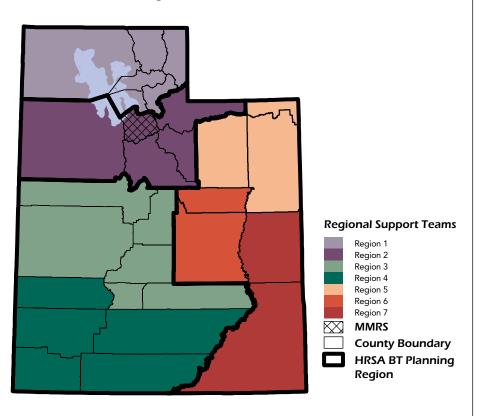


These maps allow for a closer look at two of Utah's urban centers: Salt Lake City and Ogden. Salt Lake City, Utah's largest city, is located in the northern portion of the State along Interstate 15. Ogden is also on the interstate, just north of Salt Lake City. Similar to the State-level map, the percentage of the population living in an urban area is displayed by census tract as are the size and location of nursing homes and hospitals. These smaller city maps are useful for looking at the distribution of resources in areas with a high density of nursing homes and hospitals.

Salt Lake City is the most heavily bedded city, although both Ogden and Salt Lake City have several hospitals and many large nursing homes close by. Both cities are unusual in that they serve large rural populations from surrounding communities.

Provo, located 50 miles south of Salt Lake City, is a much smaller community with only one large hospital. The city is home to Brigham Young University and is connected to Salt Lake City via Interstate 15.

# **HAZMAT** Response

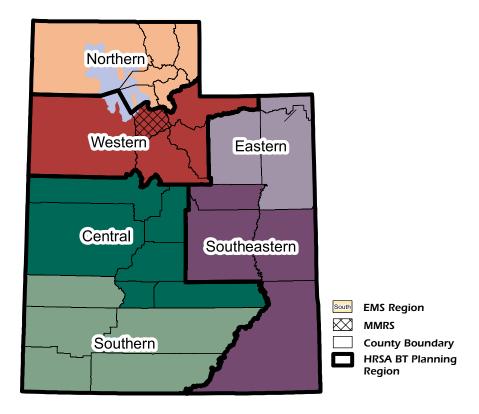


Hazardous materials (HAZMAT) response in Utah is organized into seven regional strike teams. These multicounty teams involve many agencies with specialties in many different areas of emergency response and mitigation. The regional strike teams were developed in the early 1990s to address the functional difficulties of providing HAZMAT services to such a large rural State and were based on an existing program, The Utah Associations of Governments. Planners also considered other access and transportation measures when they were designing the regions. The HAZMAT regions are nearly the same as the Emergency Medical Services (EMS) strike teams, with the exception of Regions 6 and 7, which are combined into one EMS region.

# **Trauma Coordination**

There is no regionalization of trauma services in Utah. The State has developed a mass casualty incident plan that details the roles and responsibilities of hospitals during an emergency. Additionally, the Utah Department of Health worked with hospitals in the State to develop the Utah Medical Surge Capacity Plan, which provides guidance and procedures to hospitals and other health facilities to be used in disasters resulting in mass casualties.

# **Emergency Medical Services**

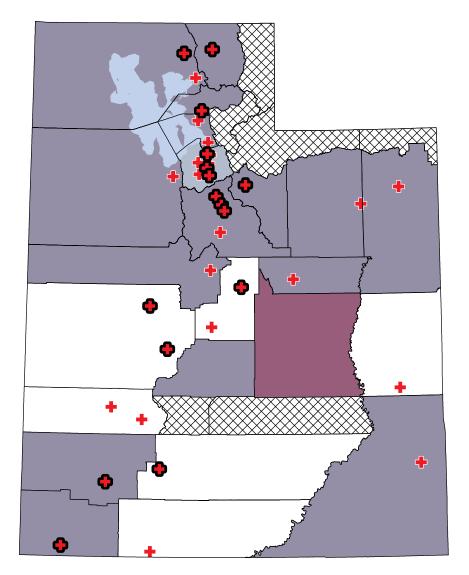


Emergency medical services (EMS) in Utah are organized around six EMS strike teams, which were originally developed for the 2002 Winter Olympics. They were designed to follow the Utah Health Department regions. The intent of the EMS strike teams is to create a system whereby, in an emergency, multiple counties can pool their EMS resources and move some of these resources to another county if necessary without depleting any one county's resources.

# **Emergency Management**

Emergency management activities in Utah are not regionalized but rather are a function of all levels of government. Cities, counties, and the State all have emergency managers, and requests for support or assistance usually originate from the city. In the past, counties used to provide emergency management staff on behalf of the cities. This trend has been shifting in the past few years, and cities are beginning to hire emergency managers. Many of these managers are housed in the city fire department or exist as stand-alone staff.

# **Relative Facility Location by County**



This map highlights counties containing nursing homes that are strategically located in rural areas with no hospital. In addition, the map identifies counties with high levels of hospital care (i.e., a tertiary care hospital) and counties with no hospital.

Only Emery County, in the middle of the State, has nursing homes but no hospitals. Emery is bordered by several more populated counties with hospitals and one county with no health facilities, suggesting the nursing facility could be used for surge capacity. Several counties in Utah have neither a nursing home nor a hospital: Morgan, Rich, Summit, and Daggett Counties in the northeast corner of the State and Piute and Wayne Counties in the southern area of the State. All of these counties are rural with very little population and border counties with hospitals, although access to health care for the people who do live in those counties may be difficult. Salt Lake County contains the only tertiary care hospital in Utah.

### Facility Type by County

- Nursing Home, No Hospital

   Nursing Home, Non-Tertiary Care Hospital

   Nursing Home, Tertiary Care Hospital

   No Nursing Home, Non-Tertiary Care Hospital

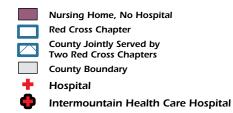
   No Nursing Home, Non-Tertiary Care Hospital

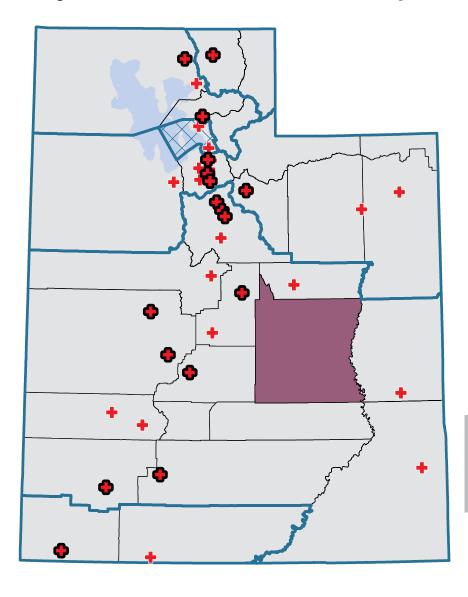
   No Nursing Home, No Hospital
  - Hospital
- IHC Health System Hospital

# **Relative Facility Location and Red Cross Chapters**

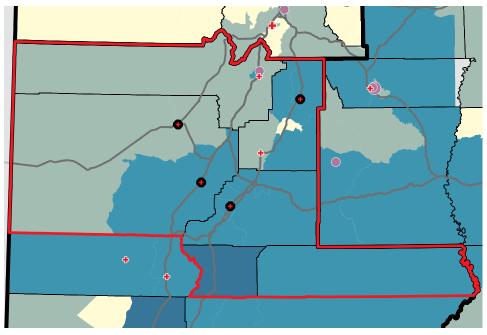
This map looks at areas with nursing homes and no hospitals relative to the Red Cross chapters operating in Utah. The Red Cross could support strategically located nursing homes in the event of an emergency.

There are six Red Cross chapters in Utah, most of which serve very large multicounty regions. With such large geographic regions, the Red Cross could encounter some difficulties in providing emergency services in some areas. Salt Lake County, which has a nursing home and a tertiary care hospital, is jointly served by two Red Cross regions.





# **Central EMS Strike Team**

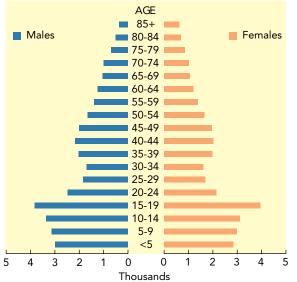


		Hospitals						SNFs/NFs			
County	# of Facilities	Total Beds	Annual Admissions	Annual ER Visits	FTE RNs	# of Facilities	Total Beds	FTE RNs			
Juab	1	19	931	4,340	29	1	80	31			
Millard	2	40	691	4,286	21	0	0	0			
Piute	0	0	0	0	0	0	0	0			
Sanpete	2	51	1,567	10,717	47	0	0	0			
Sevier	1	27	1,138	7,293	27	1	98	44			
Wayne	0	0	0	0	0	0	0	0			

This map examines the size and location of nursing homes and hospitals relative to the distribution of the population aged 65 or older in the Central EMS Region. This region has six hospitals, four of which are operated by Intermountain Health Care, and two nursing homes. One facility is in Juab County, and the other is in Sevier County; both are fairly small facilities with fewer than 100 beds. Piute and Wayne Counties in the southeast area of this region have no hospitals, although two small facilities are located in the county neighboring Piute. The populations living in these counties may have problems accessing health care; however, all of the counties in this region are rural with very small populations. Sanpete, Sevier, and Piute Counties are predominantly national park, while most of Juab, Millard, and Wayne Counties are designated wilderness areas.

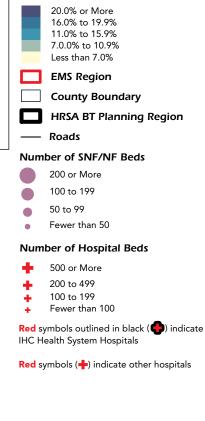
The population pyramid shows a large population between the ages of 15 and 19, suggesting the presence of families with several children. Additionally, as the base of the population pyramid is larger than the middle, there has been some moderate population growth over the past 10 years.

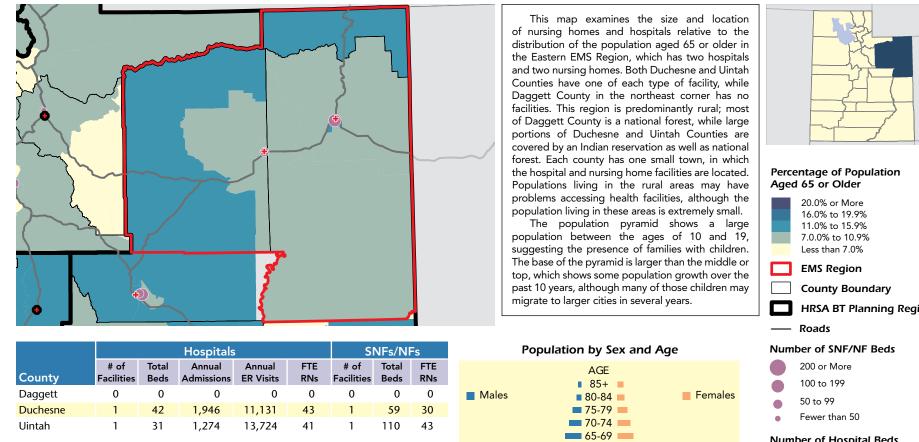
### Population by Sex and Age





### Percentage of Population Aged 65 or Older





5 4 3 2 1 0

60-64

55-59 50-54

45-49

40-44

35-39

30-34

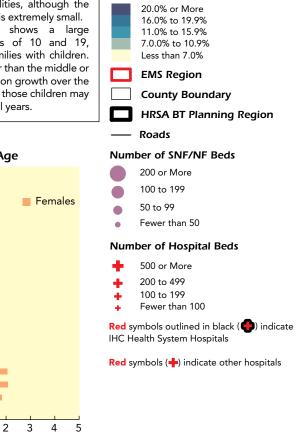
25-29 20-24

15-19 10-14 5-9 <5

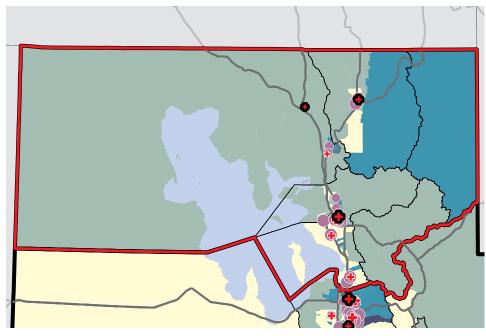
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# Eastern EMS Strike Team

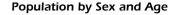


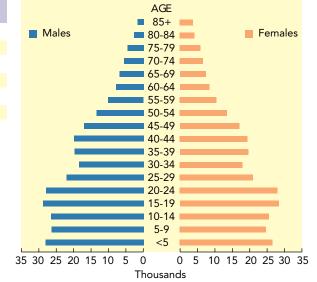
# Northern EMS Strike Team



		Hospitals						SNFs/NFs		
County	# of Facilities	Total Beds	Annual Admissions	Annual ER Visits	FTE RNs	# of Facilities	Total Beds	FTE RNs		
Box Elder	2	107	1,717	12,415	41	2	156	60		
Cache	1	123	7,571	26,313	205	3	304	201		
Davis	2	252	9,978	46,819	242	5	451	265		
Morgan	0	0	0	0	0	0	0	0		
Rich	0	0	0	0	0	0	0	0		
Weber	2	466	27,064	67,753	664	12	1,069	492		

This map examines the size and location of nursing homes and hospitals relative to the distribution of the population aged 65 or older in the Northern EMS Region, which has 7 hospitals, 3 of which are operated by Intermountain Health Care, and 22 nursing homes. This region also contains Ogden and Logan, two of the larger cities in Utah. There are no facilities west of Interstate 15, the major highway that runs through this region, although this land is mostly covered by designated wilderness and the Great Salt Lake. Cache County has a large proportion of elderly persons and is served by three nursing homes and one hospital, although much of this county is a national forest. Rich County has no health facilities and also has a large proportion of elderly persons but is predominantly wilderness area. Several large cities are located in Weber and Davis Counties, and the population in these areas should have few problems accessing health care. The population pyramid shows a large young population and a bubble of persons aged 35 to 49, indicating the presence of families with children. The young population is larger than the older groups, suggesting moderate growth. There is also a sizable elderly population.

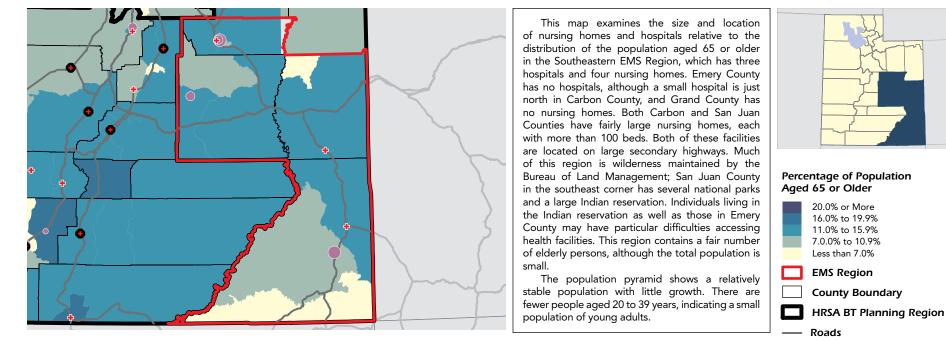




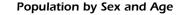


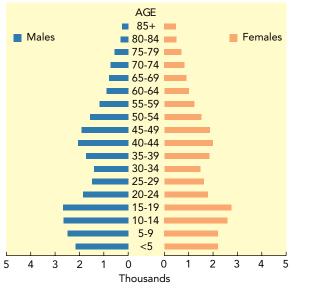
### Percentage of Population Aged 65 or Older





		Hospitals						SNFs/NFs			
County	# of Facilities	Total Beds	Annual Admissions	Annual ER Visits	FTE RNs	# of Facilities	Total Beds	FTE RNs			
Carbon	1	84	2,294	13,994	66	2	158	48			
Emery	0	0	0	0	0	1	55	37			
Grand	1	25	555	5,146	23	0	0	0			
San Juan	1	22	700	1,374	15	1	104	44			





# Southeastern EMS Strike Team

Number of SNF/NF Beds 200 or More

- 100 to 199
- **50 to 99**
- Fewer than 50

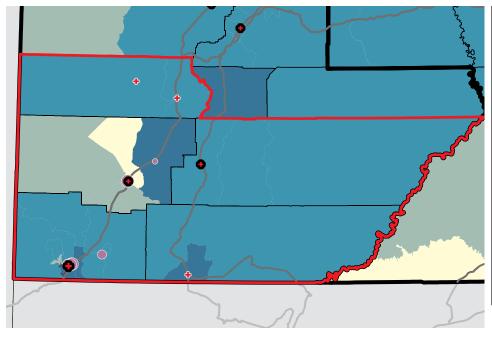
### Number of Hospital Beds

- 500 or More
- **4** 200 to 499
- 100 to 199
- Fewer than 100

**Red** symbols outlined in black (**•**) indicate IHC Health System Hospitals

**Red** symbols (+) indicate other hospitals

# Southern EMS Strike Team

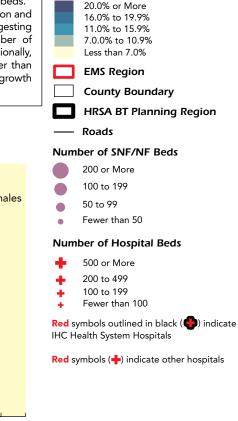


This map examines the size and location of nursing homes and hospitals relative to the distribution of the population aged 65 or older in the Southern EMS Region, which has six hospitals and seven nursing homes. This region also contains St. George in the southwest corner of the State, one of the larger cities in Utah. Although each county in this region contains at least one hospital, there are large tracts of rural land dominated by national parkland in the eastern portions of Garfield and Kane Counties that have no access to health facilities. Neither of these counties has a nursing home, nor does Beaver County to the north. Washington County has a total of five nursing homes, several of which are large facilities with more than 100 beds.

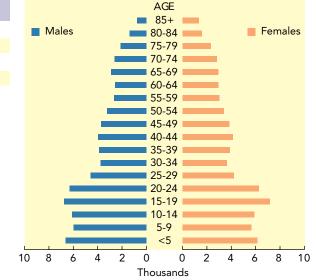
This region has a sizable elderly population and a fairly large population aged 50 to 65, suggesting the possibility of an increase in the number of elderly persons in the next 10 years. Additionally, the base of the population pyramid is larger than the middle, indicating moderate population growth in this region.



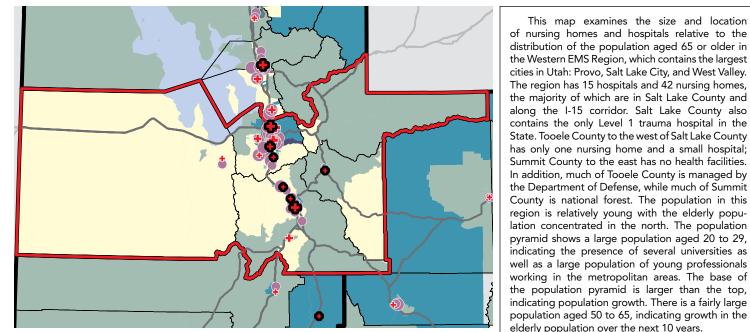
### Percentage of Population Aged 65 or Older



		Hospitals						SNFs/NFs		
County	# of Facilities	Total Beds	Annual Admissions	Annual ER Visits	FTE RNs	# of Facilities	Total Beds	FTE RNs		
Beaver	2	82	1,119	3,454	42	0	0	0		
Garfield	1	44	429	2,092	13	0	0	0		
Iron	1	46	2,357	14,341	53	2	151	63		
Kane	1	38	344	2,527	24	0	0	0		
Washington	1	196	11,924	31,561	346	5	516	220		

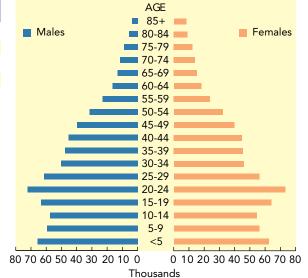


Population by Sex and Age

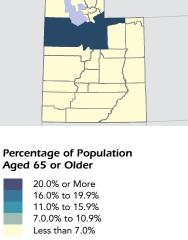


		SNFs/NFs						
County	# of Facilities	Total Beds	Annual Admissions	Annual ER Visits	FTE RNs	# of Facilities	Total Beds	FTE RNs
Salt Lake	8	1,674	91,316	287,744	3,066	26	2,684	1,294
Summit	0	0	0	0	0	0	0	0
Tooele	1	35	1,816	14,578	63	1	84	35
Utah	5	656	33,851	113,303	1,113	14	962	423
Wasatch	1	19	663	4,750	17	1	46	20

## Population by Sex and Age



# Western EMS Strike Team



# Aged 65 or Older

