

Utah Health Status Update: Infectious Diseases (Part 1)

April 1998

Utah Department of Health

In 1907, the Utah State Board of Health adopted Quarantine Rules that mandated reporting of 16 infectious diseases, including diphtheria, pneumonia, scarlet fever, smallpox, measles, tuberculosis, rubella, whooping cough and infantile paralysis. During 1908, over 1,000 Utah residents died of reportable diseases. The list of reportable diseases has been expanded over the years to meet new threats to the public's health. During 1997, physicians, laboratories, hospitals, and other health care providers reported almost 10,000 cases of 52 different notifiable diseases to the Utah Department of Health.

Disease-causing germs have threatened human health throughout history and it seems possible they will become even more important in coming years. Although death rates due to infectious diseases in Utah have declined, thousands still become ill each year due to influenza, hepatitis, salmonellosis, and other infections. Prevention and control of communicable diseases require prompt reporting, ongoing surveillance, and public education. This is the first of three reports that will highlight selected recent trends in infectious disease occurrence in Utah.

Enteric diseases:

- Hepatitis A rates peaked in 1996, but declined in 1997. Most cases are due to person-to-person transmission, especially from asymptomatic children. Outbreaks are uncommon, but can affect many people.
- *E. coli* O157:H7 is a bacterial cause of diarrhea that can also cause hemolytic uremic syndrome, a severe illness. Its transmission can be prevented by careful preparation of food and good personal hygiene. The increase in 1997 is at least partly due to increased surveillance activities.
- Salmonella and shigella infections cause diarrhea that can be severe; both occur in Utah at rates above U.S. rates. Rates of both increased substantially in 1995-1996, but have declined since then.

Tuberculosis (TB):

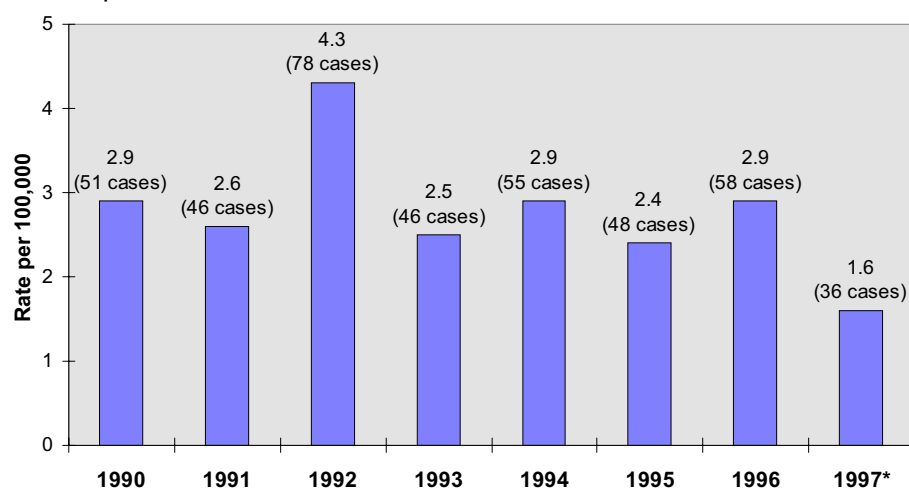
- Substantial proportions of TB cases occur among homeless (38% in 1996) and foreign born persons (46% in 1996). As is true nationally, increasing percentages of cases have been occurring in those two populations.
- Most Utah TB cases are reported from Salt Lake County, but that proportion declined from 70% in 1996 to 50% in 1997.
- TB infections that are resistant to multiple drugs pose a substantial health threat. Five cases of TB resistant to both INH and rifampin have been reported in the past 8 years, none were in 1997.

Emerging Infections:

- Hepatitis C is increasingly being recognized as an infection that is prevalent in some populations and can cause serious liver disease.

Tuberculosis

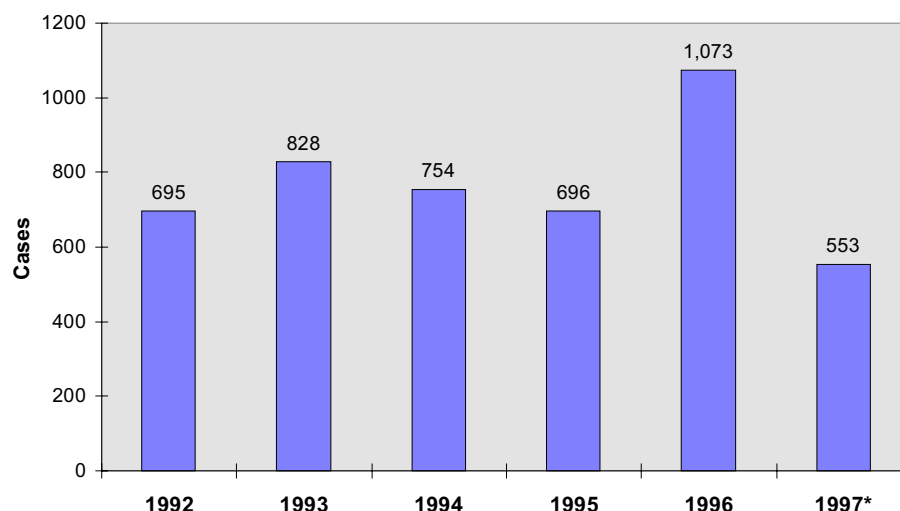
Numbers of Cases and Rates per 100,000 Persons of Tuberculosis Reported in Utah, 1990-1997.



* provisional data

Hepatitis A

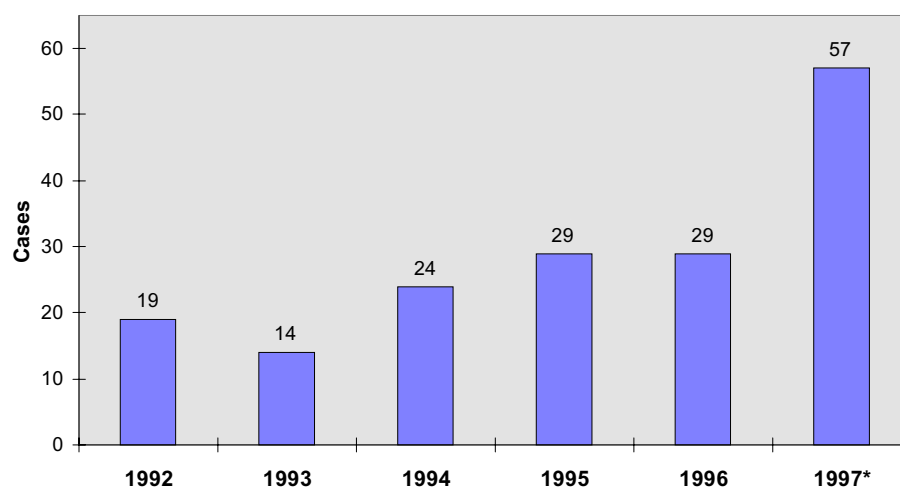
Numbers of Cases of Hepatitis A Reported in Utah, 1992 to 1997.



* provisional data

E. coli O157:H7

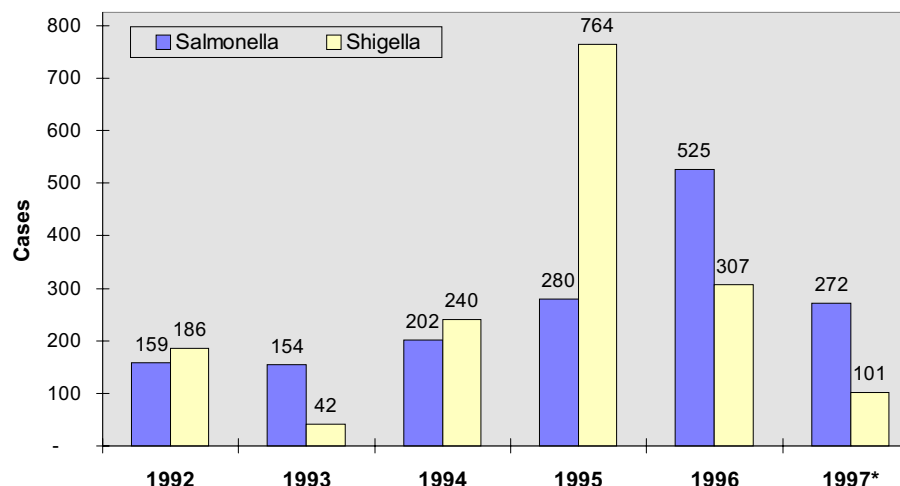
Numbers of Cases of *E. coli* O157:H7 Reported in Utah, 1992 to 1997.



* provisional data

Salmonella and Shigella

Numbers of Cases of Salmonella and Shigella Reported in Utah, 1992 to 1997.



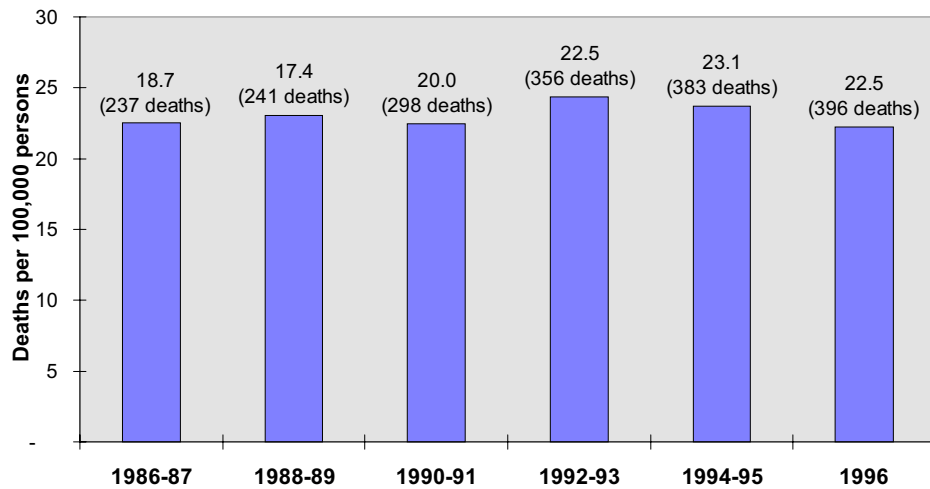
* provisional data

	1996 Utah Rate [†]	1996 U.S. Rate [†]
Salmonella	26.2	17.1
Shigella	15.3	9.8
<i>E. coli</i> O157:H7	1.4	1.2
Hepatitis A	53.6	11.7
Tuberculosis	2.9	8.0

[†] Rate per 100,000 persons

Pneumonia and Influenza

Deaths due to pneumonia and influenza and death rates per 100,000 persons, Utah 1986-1996.



Emerging Infections (continued)

- Heightened surveillance will be required to monitor the prevalence of infections due to antibiotic-resistant organisms and guide adaptations in treatment regimens.

During the next decade public health will be required to respond to the emergence of newly recognized infectious diseases and to maintain vigilance and prepare for the re-emergence of diseases thought to have been conquered. Maintaining active surveillance and the capability for rapid and effective response to outbreaks and other emerging infectious disease problems is a critical public health function.

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Additional information about this topic is available from the Bureau of Epidemiology, Utah Department of Health, P O Box 142104, Salt Lake City, Utah 84114-2104, (801) 538-6191, FAX (801) 538-9923, or email: cnichols@doh.state.ut.us, the Bureau of HIV/AIDS and Tuberculosis/Refugee Health, Utah Department of Health, P O Box 142105, Salt Lake City, Utah 84114-2105, (801) 538-6096, FAX (801) 538-9913, email: kparker@doh.state.ut.us, or their homepage at <http://161.119.100.19/els>, or from the Office of Public Health Data, (801) 538-6108, FAX (801) 538-7053, or email: phdata@doh.state.ut.us.



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