Rubella Outbreak in Douglas County, Nebraska
By Carol Allensworth, MT(ASCP), SM
Douglas County Health Department
A total of 82 confirmed cases of rubella have been reported in the Omaha area since April 1, 1999. The outbreak peaked during May and the first week of June, although cases continued to be reported throughout the month of July and into early August. A rubella outbreak is considered to be concluded only when six weeks have passed since rash onset in the last reported case.
Fifty-four of the 82 confirmed cases were either employees or close contacts of employees in the meat packing industry. An additional 15 of the confirmed cases were associated with outbreaks of rubella in two child care centers. Of the remaining cases, 8 had a known exposure to a confirmed case of rubella, and 5 cases were closely tied to the Hispanic community where rubella was known to be circulating.
Four of the confirmed cases were pregnant at the time of infection, two in the first trimester, one in the second trimester, and one in the third trimester.
The outbreak has primarily affected two groups, unvaccinated individuals of Hispanic origin and infants. The highest concentration of rubella cases occurred among individuals of Hispanic ethnicity, many of whom were born in countries either without national rubella vaccination programs or where such programs were introduced only recently. The demographic characteristics of this group are similar to those seen in other outbreaks of rubella in the US. The age of the affected individuals is shown in the chart on page 1. The high percentage of individuals in child bearing years, is of concern and the issue of pregnancy and infection of the fetus was investigated. At this time, the Health Department is heightening surveillance activities to identify any cases of congenital rubella syndrome (CRS) which may have occurred as a result of the outbreak. In addition, Douglas County experienced outbreaks of rubella among unvaccinated infants and their parents in two northwest Omaha child care centers. The infants ranged in age from five months of age to seventeen months of age, and four of the infants had been eligible for vaccination at the time of infection. This outbreak demonstrated the importance of the national vaccination program and the need for continued surveillance.