



Bulletin No. 18

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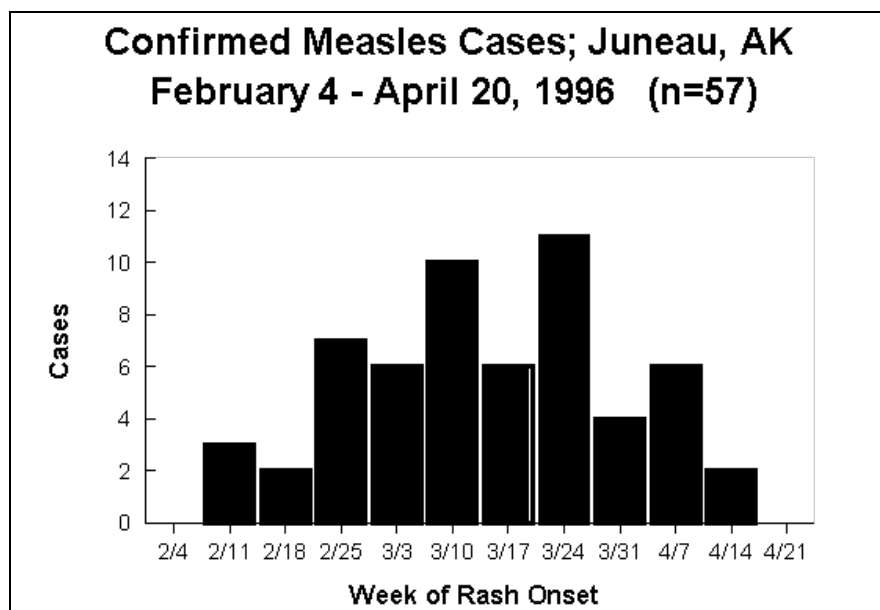
Second Measles Vaccine Dose to be Required  
for Kindergarten and First Grade Students

**Upon school entry in the fall of 1996, all kindergarten and first grade (K-1) students in Alaska will be required to show evidence of having received *two* doses of measles vaccine.**

### Background

Since 1976, when the school immunization law was first enforced in Alaska, over 99% of school attendees have been appropriately vaccinated against diphtheria, tetanus, pertussis, polio, measles, and rubella. For the last 20 years, these high immunization levels in students have prevented transmission of vaccine preventable diseases in Alaska schools.

School immunization audits conducted in Juneau in late 1995 indicated that, like the rest of the state, 99% of Juneau school students were appropriately immunized (one dose) against measles. **In spite of these high vaccination levels, 57 cases of measles were confirmed in Juneau between mid-February and mid-April, 1996.** The majority of cases were in school-age children, 73% of whom had a history of one dose of measles/mumps/rubella (MMR) vaccine appropriately administered after 12 months of age. The remaining 27% of school-age cases had a medical or religious exemption and had not received the vaccine. Standard control measures, used successfully in Alaska for the last 20 years, were not effective in stopping measles transmission.



### Discussion

Around the country, there is growing evidence that a single dose of measles vaccine may not provide adequate protection to prevent outbreaks of disease. Although measles vaccine is highly effective for most persons, a single dose is ineffective in a small proportion of vaccine recipients, leaving them susceptible to infection if exposed to the measles virus. Although no measles cases have occurred outside Juneau so far, the potential exists that the virus could be introduced into schools anywhere in the state, causing illness and other disruptive results (i.e., lost school or work days, increased health care visits, hospitalizations, and increased medical costs).

Since 1994 (*Epidemiology Bulletin* No. 28) the Section of Epidemiology has recommended that all Alaska children receive a second dose of MMR between 4 and 6 years of age. State-supplied vaccine has been, and is, available for this use. Most children 4-6 years of age already will have received a second dose prior to school entry in the fall of 1996, though some children will need to get their second MMR vaccination to meet the new requirement. Parents will need to provide documentation (date and dose specific verification signed by the physician or nurse providing the immunization) of the second MMR in the fall of 1996.

**Second Dose Measles Vaccine  
Requirement at a Glance**

***What:*** Documentation of receipt of 2 doses of measles vaccine.

***For Whom:*** All students in kindergarten or first grade in Alaska schools.

***When:*** 1996/97 school year (fall of 1996)

***How:***

**Dose #1**

***Medical recommendation:*** Give at 12-15 months of age.

***For school compliance:*** Must be given after 12 months of age.

**Dose #2**

***Medical recommendation:*** Give at 4-6 years of age, prior to school entry.

***For school compliance:*** Must be given at least 1 month (28 days) after dose #1.

**Questions? (907) 269-8000**