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A Monitoring System for Adverse Reactions to Vaccination

Vaccinations are recommended and administered to thousands of Alaskan children and other individuals each year on the presumption that the benefits far outweigh the risks. The benefit side of the equation is straightforward: vaccinations can prevent serious disease. The risk side is not so straightforward, since it includes factors that are known and others that may exist, but have not yet been discovered. It is necessary, therefore, to maintain surveillance of potential risks of vaccination to continually reevaluate whether individual vaccinations are, on balance, good for people. Such surveillance is important, not only to provide potential vaccines with accurate information about the consequences of vaccination, but also to stimulate improvements in the vaccination process or recommendations that will minimize or eliminate the risks. In conjunction with the Centers for Disease Control's National Vaccine Reaction Monitoring System all health-care providers are encouraged to report any reaction to a vaccination that was serious enough to require hospitalization or a visit to a physician or public health facility. Any reaction involving only soreness, redness or swelling at the point of injection should not be reported even if a physician was visited.

To report reactions meeting the above criterion call Mr. James B. Farrell, Public Health Advisor, Immunization Program for the State Division of Public Health at the following numbers:

- Anchorage area - 279-5535
- Remainder of the state - Zenith 1700 (This is a toll free number that can be reached by contacting the long distance operator and asking for Zenith 1700.)

Below are current estimated complication rates for some common vaccines and their natural diseases compiled by the CDC, Atlanta, GA, and presented at The Immunization Conference, Washington, D.C., November 4, 1977.

Rates of Complications (Per 1000)* Following Vaccines and Natural Diseases			
Disease or Vaccine Complication	Natural Disease	Vaccine	Ratio: Disease/Vaccine
Measles			
Fever > 103° F	900-1000	60-350	2.6-16.7
Rash	900-1000	30-100	9-33.3
Encephalitis (and other neurologic disorders)	1-4	.001	1000-4000
SSPE* (1)	.006-.022	.0004-.001	6-55
Death	0.1-1.0	.0002	500-5000
Rubella			
Lymphadenopathy	500-1000	110-440	1-9
Rash	360-1000	10-120	3-100
Athralgia	250-500	30-300	1-17
Arthritis	10-300	1-100	0.1-300
Fever ≥100° F	600 (est)	10-40	15-60
Polio (live vaccine)			
Paralytic polio	1-10	0.0002	5000-50000
Death	0.6-0.8	.00001	60000-80000
*In the 30 day period following vaccination or onset of natural disease			
(1) occurs 1 month - 20 years after measles or vaccine			