Iowa Rubella Immunization Program 1969-1970

By: Dr. Ron Eckoff

The following is excerpted from the August 1970 issue of the Journal of the Iowa Medical Society. The paragraph below was the opening paragraph of article in journal.

“When many forces converge on a problem, exert significant energy to resolve it and do so with reasonable success, there is justification for savoring, at least momentarily, the beneficial outcome. We can apply that line of thinking to Iowa’s 1969-70 rubella (German measles) eradication program.”

In 1969 a rubella task force of physicians, public health officials, nurses, school administrators, and business, service, civic and religious representatives began planning. When the rubella vaccine was licensed in June 1969, somewhat ahead of schedule, the “planning tempo moved abruptly from waltz to fox trot.” The forecast of a likely rubella epidemic in 1971 moved the idea of a concerted state-wide immunization to the front burner.

Rubella had a cyclic nature and it typically came around in a big way in about seven year intervals. The last epidemic had been in 1964. At that time, it reportedly left some 20,000 newborns with cataracts, hearing defects, heart malformations and brain damage nationally. (Approximately 500 of these were in Iowa) In addition, nationally some 30,000 pregnancies terminated in miscarriage or still birth during this epidemic.

Add seven to 1964 and the year 1971 turns up as the next high incidence for rubella. The possibility of thwarting a re-play of 1964 seemed ample justification for mounting an immediate and full-blown attack on rubella. A woman who contracts rubella in the first month of her pregnancy is said to have a 50 to 90 per cent chance of giving birth to an abnormal child; the chance is 25 to 50 per cent that some deformity will occur if the disease is contracted during the second month of pregnancy.

The first county-wide clinic was in Bremer County, November 10, 1969. By the end of the school year similar programs were conducted in 97 other Iowa counties. Over 521,000 Iowa youngsters received the rubella vaccine and the project’s price tag (stamped PAID) was approximately $750,000

How was all of this accomplished? The Maternal and Child Health Committee of the Iowa Medical Society conferred with the Department of Public Health and then urged the medical society to support a statewide effort. The IMS Executive Council agreed. In order to see the administrative aspects of the program operate as expeditiously as possible, an agreement was consummated between the Scanlon Medical Foundation/Iowa Medical Society and the State Department of Health to facilitate the handling of funds contributed for the purchase of vaccine. Checks ranging from 50 cents to several thousand dollars passed through a special Foundation account to buy more vaccine.
The State Executive Council, on the recommendation of Governor Robert D. Ray allocated $100,000 from contingency funds to get the program started. Voluntary donations from parents, private organizations and local governments carried the program from there on and at the end of the program the $100,000 was repaid to the contingency fund.

The statistical highlights of the program are impressive. Clinics were conducted in 1,305 schools. Iowa physicians contributed 1,200 hours to serve in clinics. Over 10,000 additional volunteers are said to have worked at the clinics and twice that many may have donated time to fund raising, publicity and parent motivation. The total number immunized in the clinics was 521,036. (129,572 preschool and 391,464 school age) There were 590,000 children age 1-13 years in Iowa, which meant the program reached 88.4 per cent of the target population. This put Iowa FIRST in the nation in level of rubella immunization.

This was all accomplished when there was no school immunization law and was just a year after local boards of health were first appointed in Iowa under Chapter 137.

The campaign did avert the expected 1971 epidemic in Iowa. There had been over 18,000 reported cases of rubella in Iowa in 1964. From 1965 through 1970, there was an average of about 2,000 cases reported. It was 751 in 1971, 464 in 1972, 221 in 1973 and through the rest of the 70s and 80s it was only over 100 one year. During the 90s, there were over 10 cases reported only once and that involved foreign born meat packing workers. There has been only one case reported in Iowa since 2000. Although rubella is generally a relatively mild disease in young children, the elimination of endemic rubella in Iowa has prevented pregnant women from becoming infected. This has prevented many cases of blindness, deafness, congenital heart defects, and other birth defects. A great public health success story.