

existing outbreak, an international importation, or another reported case and were classified as sporadic index cases. Two cases were epidemiologically linked to these cases. Twelve of the 14 sporadic index cases were laboratory confirmed.

Reported by: State and local health depts. National Immunization Program, CDC.

**Editorial Note:** The 3-week period without reported measles cases reflects at least four factors: 1) major increases in measles vaccination coverage levels among preschool-aged children; 2) increased use of a second dose of measles vaccine among school-aged children and young adults attending college; 3) an overall increase in efforts to control measles throughout the Western Hemisphere; and 4) the usual seasonally low incidence of measles during the fall (1,2). Furthermore, the absence of any reported persons with sporadic index cases of measles who had onset after September 22 may reflect a cessation of endemic measles transmission in the United States during this period.

The absence of reported endemic foci of measles transmission does not indicate that measles has been eliminated in the United States. In the past, substantial numbers of measles cases were not reported to public health authorities (3). Therefore, surveillance must be intensified to permit the identification and elimination of any remaining foci of transmission. Any case of rash illness suspected to be measles should be reported promptly to public health authorities to enable immediate investigation and vigorous control measures to minimize spread of infection. For each case, laboratory confirmation should be obtained, vaccination status determined, and source of exposure ascertained.

Although current measles activity is at its lowest level ever in the United States, previous periods of low activity have been followed by resurgences (4,5). High vaccination coverage levels among preschool- and school-aged children need to be achieved and sustained in all communities to ensure the elimination of endemic measles transmission.

#### References

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#### Addendum:

Since this report was prepared, an additional 3 weeks have passed since the last case of measles reported to the Centers for Disease Control from the United States. No measles cases have been reported from the 50 states from November 7 (week 45) through December 18 (week 50).

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## Measles Campaign Improves Anti-Rubella Coverage

The Tenth EPI Sub-Regional Managers' Meeting was held in Tobago on 22-26 November, 1993. Over ninety participants attended. Plans of Action for 1994 were revised and the following topics covered: immunization coverage, poliomyelitis eradication, measles elimination, rubella surveillance, tuberculosis control and social mobilization. One of the papers presented was "Rubella Seroprevalence in a Sample of Antenatal Clinic Attendees in Trinidad and Tobago" from which we include the main points below.

The rubella antibody status of pregnant females is at best a surrogate measure for the potential risk of occurrence of Congenital Rubella Syndrome (CRS) in a population, as measures of seroprevalence are not time-related to incidence. Furthermore, the risk of CRS is determined not only by rubella incidence rates among women of child-bearing age, but also by age-specific patterns of susceptibility and fertility.

The ultimate goal of rubella immunization is the protection of a future fetus against damage from intrauterine infection. Even though a large proportion of the female population (80-90%) is immune to rubella by adolescence and young adulthood, notable exceptions were detected in a study of certain islands and isolated populations where fewer women possess rubella antibodies when compared to women from urban areas.

Serum samples were randomly obtained at the 81 government health centers and hospitals across Trinidad and Tobago from 2003 pregnant women routinely tested for the IgG antibody to rubella using an Enzyme Linked Immunosorbent Assay (ELISA test). Of the 1838 effective samples taken, 986 (53.6%) antenatal clinic attendees were found to possess IgG antibody to rubella.

The mean age of the sample women was 32.7 years, with very small variance between the seropositive and the seronegative. Of the women between 15 and 24 years of age, 46.6% (370/794) were seronegative and of those between 25 and 34, 48% (336/700) were nonimmune. Despite the fact that selected rubella immunization for prepubertal girls was started in 1982, 40.5% of attendees aged 20 and under were seronegative and therefore remain potentially susceptible to infection with rubella virus.

Even though these results can be used as indicators of the effectiveness of rubella vaccination strategies, it must be pointed out that some of the seropositive clients might have naturally acquired the antibody due to previous infection. The decision by the Ministry of Health in 1991 to use divalent measles/rubella vaccine for its Measles Elimination Campaign resulted in 92% coverage in children age 12 months to 14 years. This strategy showed immediate and significant increase in rubella immune levels in the entire cohort. Selective immunization is successful only at reducing the risk of CRS for each woman who is immunized, and hence, it can only be entirely successful when 100% of all at-risk women are immune.

In choosing a strategy to eliminate CRS, careful consideration must be given to the very important variables of cost, the ease of accessibility to the different target

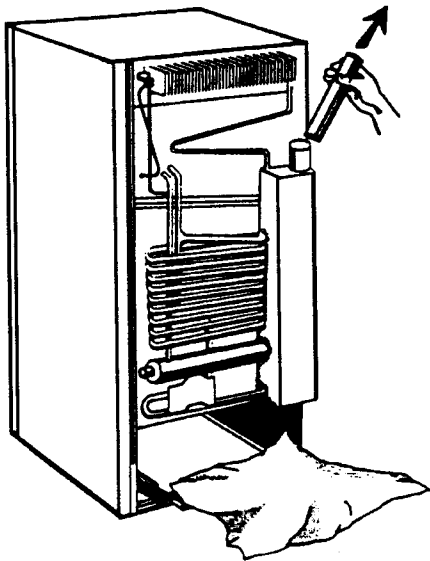
populations, the levels of coverage that can be reasonably attained and most of all, its long-term effectiveness of any chosen strategy. Rubella vaccination in childhood is entirely compatible with the traditional approaches to immunization advocated by the national and regional EPI programs. Such programs have gained widespread acceptance among both its consumers and its providers, as an adequate infrastructure already exists for the delivery of vaccine.

Within the current context of a very limited financial and human resources, it is essential to carefully reexamine the selective immunization strategies for rubella.

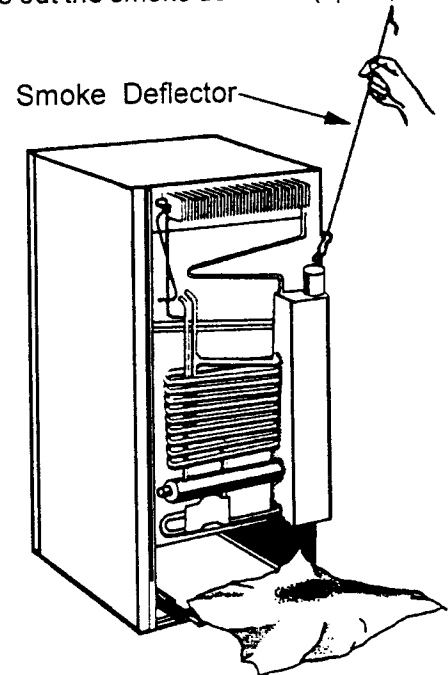
Source: Rubella Seroprevalence in a Sample of Antenatal Clinic Attendees in Trinidad and Tobago. Merle J. Lewis, Glenda Maynard, Terrence Ovid and Karen Williams. of the Ministry of Health, Government of Trinidad and Tobago, and Yvette Holder, Caribbean Epidemiology Centre.

## How to Clean the Chimney of a Kerosene Refrigerator

1. Remove the fuel tank and the wick holder.
2. Place a rag or paper under the chimney.
3. Take apart the upper section of the chimney, if there is one.



4. Take out the smoke deflector (spiral).



5. Clean the chimney with a brush.
6. Replace the new smoke deflector and assemble the top part of the chimney.
7. Pick up the paper or rag with the soot.
8. Install the fuel tank and light the wick.

