

Many promising strategies for preventing and treating congenital CMV (cytomegalovirus) are available. They include raising awareness, developing behavioral interventions to prevent infection in pregnant women, and improving outcomes in congenitally infected children through early detection and intervention. To be successful, these approaches require adequate surveillance and laboratory capacity. However, prevention and treatment strategies have never been implemented on a wide scale.

## CURRENT EFFORTS

Congenital CMV does not receive dedicated federal funding. Fortunately, people have realized a need to address this issue. By using Centers for Disease Control and Prevention (CDC) general funds and external grants, small research activities have been funded, including:

- Study of the natural history of CMV infection among women
- Surveys of women's knowledge, attitudes, and behaviors related to congenital CMV
- Laboratory assessments of CMV persistence in the environment and the efficacy of hand washing for removing CMV from hands
- Study of long-term outcomes in a group of children born with congenital CMV

## ISSUES NEEDING IMMEDIATE ATTENTION

**Awareness** - Awareness campaigns are needed to explain the dangers posed by CMV and how it can be prevented

- Only 9% of women have ever heard of CMV.
- Most obstetricians do not discuss CMV or CMV prevention with their patients

**Preventing CMV infection among pregnant women** - Behavioral intervention programs need to be developed, implemented, and evaluated

- A licensed CMV vaccine is unlikely to be available for many years.
- A large intervention study in France showed that women who were educated about preventing CMV transmission were able to significantly reduce their rates of infection during pregnancy; a similar intervention needs to be tested in the U.S.

**Evaluating newborn CMV screening** - Research and pilot screening programs are needed to determine whether benefits of screening outweigh costs and potential harms

- Congenital CMV infections are more common than the combined metabolic or endocrine disorders currently in the U.S. core newborn screening panel.
- Newborn CMV screening has significant potential for improving children's functional outcomes (e.g., language and educational development) through early detection and intervention.

**Surveillance** - Ongoing surveillance is needed to assess the burden of congenital CMV and to make it possible to monitor the effectiveness of future prevention programs

- There is no ongoing assessment of the occurrence of CMV infection among pregnant women, rates of congenital infection among newborns, or rates of disability among infected newborns.

**Laboratory Capacity** - Diagnostic methods are not yet sufficient for universal CMV screening programs

- Standards and controls need to be developed for quality control of newborn CMV screenings
- Improved diagnostic tools are needed for prenatal maternal screening and diagnosis