

Third dose of MMR vaccine could help curb mumps outbreaks

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(HealthDay)—A third dose of the measles-mumps-rubella (MMR)

vaccine lowers the risk of mumps during an outbreak, according to a study published online Sept. 6 in the *New England Journal of Medicine*.

Cristina V. Cardemil, M.D., M.P.H., from the Centers for Disease Control and Prevention in Atlanta, and colleagues evaluated the effectiveness of a third dose of the MMR vaccine for [outbreak](#) control and assessed for waning immunity.

The researchers noted that during the 2015-2016 academic year, mumps was diagnosed in 259 of the 20,496 students enrolled at the University of Iowa. They found that before the outbreak, 98.1 percent of the students had received at least two doses of MMR vaccine. During the outbreak, 4,783 received a third dose. Among the students who had received three doses, the attack rate was lower than among those who had received two doses (6.7 versus 14.5 cases per 1,000 population). The risk of mumps increased more than ninefold among students who had received their second MMR dose 13 years or more before the outbreak. Receipt of the third vaccine dose was associated with a 78.1 percent lower risk of mumps at 28 days post-vaccine compared with receipt of a second dose.

"These findings suggest that the campaign to administer a third dose of MMR vaccine improved [mumps](#) outbreak control and that waning immunity probably contributed to propagation of the outbreak," conclude the authors.

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