ACIP Typhoid Fever Vaccine Update

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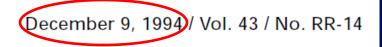
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Objective

Update information on typhoid immunization







MORBIDITY AND MORTALITY WEEKLY REPORT

Recommendations and Reports

Typhoid Immunization

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

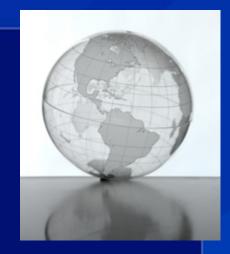
Typhoid Fever

- Caused by Salmonella enterica serotype Typhi
 - Humans are only reservoir
- Usually acquired from contaminated food or water
- Incubation period 6–30 days
- Insidious onset with increasing fever, malaise, headache, anorexia
- Life-threatening complications include septic shock, intestinal hemorrhage and perforation
- Treated with fluoroquinolone, beta-lactam, azithromycin, chloramphenicol, or trimethoprim-sulfamethoxazole
 - Antibiotic resistance common and increasing



Epidemiology

- Typhoid fever uncommon in United States
 - ~400 U.S. cases/year
 - >20 million cases/year worldwide
- ~90% of U.S. cases associated with foreign travel
 - 75% with travel to South Asia



Typhoid Vaccines Included in 1994 ACIP Statement

Vaccine	Vaccine type	Mode of administration	No. of doses
Ty21a vaccine	Live, attenuated	Oral	4
Vi capsular polysaccharide vaccine	Subunit	Parenteral	1
Heat-phenol-inactivated vaccine	Inactivated whole-cell	Parenteral	2

Typhoid Vaccines Available in U.S. in 2014

Vaccine	Vaccine type	Mode of administration	No. of doses	Current status
Ty21a vaccine, Vivotif®	Live, attenuated	Oral	4	Currently marketed in U.S.
Vi capsular polysaccharide vaccine,	Subunit	Parenteral	1	Currently marketed in
Typhim Vi®				U.S.

Available vaccines have estimated efficacy of 45–80%

Current ACIP Typhoid Vaccine Recommendations Published 1994

 "Either oral Ty21a or parenteral ViCPS is preferable" to parenteral inactivated vaccine

- Indicated for
 - Travelers to endemic areas (<u>www.cdc.gov/travel</u>)
 - Household contacts of carriers
 - Laboratory workers who work frequently with Salmonella serotype
 Typhi cultures or specimens

Planned Updates

- No substantial change to vaccine recommendations
- Document will include updated information on
 - Epidemiology
 - Vaccine safety studies
 - Vaccine availability

Thank you

For more information please contact Centers for Disease Control and Prevention

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Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

