

Get
SMART
About Meningitis

School **M**eningitis **A**wareness **R**esource **T**ools

An NASN Adolescent Meningococcal Disease Education Initiative

Dawn Schaefer RN BSN

West De Pere District Nurse

Parents Generally Unaware

- Adolescents and college students at increased risk
- Disease progresses rapidly and within hours can lead to permanent disability or death
- May be prevented through immunization

What Is Meningococcal Disease?

- Bacterial infection caused by the bacterium *Neisseria meningitidis*
 - Leading cause of bacterial meningitis among U.S. toddlers, children and adolescents
- Attacks membranes surrounding the brain and spinal cord (meningitis) or poisons the blood (meningococemia)

Overview: Meningococcal Disease

- Strikes approximately 3,000 Americans each year; 10% of them will die
 - Among teenagers and college students, fatality rate is unusually high
 - According to one study, as many as one in four teens who contract the disease may die
- Disease can progress rapidly and symptoms may resemble those of common viral illnesses:
 - High fever
 - Headache
 - Nausea
 - Exhaustion
 - Rash

Overview: Meningococcal Disease

- Nearly 20% of meningococcal disease survivors have permanent disabilities, including:
 - Brain damage
 - Loss of hearing
 - Organ failure
 - Limb amputations

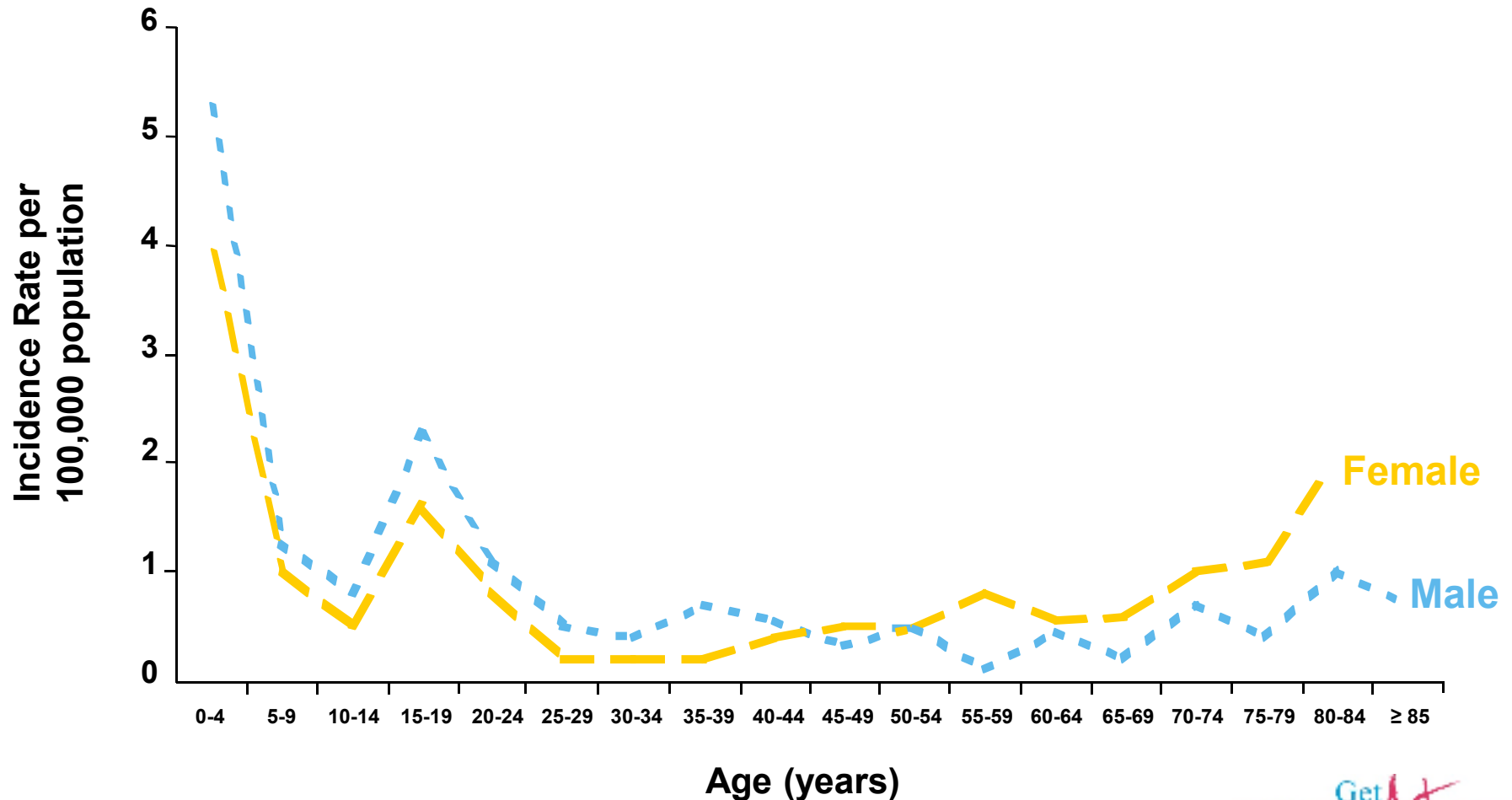
Overview: Meningococcal Disease

- Meningococcal bacteria are transmitted through air droplets and/or by direct contact with secretions from infected persons (e.g., through coughing or kissing)
- The majority of meningococcal disease cases occur in winter and early spring

Overview: Meningococcal Disease

- Five serogroups, or strains of the bacteria, cause 95% of meningococcal cases worldwide
 - A, B, C, Y and W-135
 - Serogroups B,C and Y are most prevalent in the U.S.
- Among teenagers and young adults, up to 83% of cases may be prevented through immunization

A Peak of Meningococcal Disease Incidence Occurs in 15- to 19-Year-Olds*



*In California, Georgia, Maryland, Tennessee, Connecticut, Minnesota, and Oregon, 1992–1996
Rosenstein NE, et al. *J Infect Dis.* 1999;180:1894.



Disease Prevention

- Vaccination
 - Most effective method of protection
 - Immunization may prevent up to 83% of cases occurring among teenagers and college students
- Encouraging healthy habits
 - Promote frequent hand-washing and good hygiene
 - Avoid sharing items that touch a person's mouth, since it may help spread the disease
 - Encourage teens and young adults to get enough sleep and maintain a healthy lifestyle

Immunization: Best Protection

- FDA-approved conjugate meningococcal vaccine expected to provide longer term protection against disease
 - Protects against 4 of the 5 serogroups (A,C,Y, W-135)
 - Available for use in persons 11 to 55 years

Vaccination Recommendations

- The Centers for Disease Control and Prevention (CDC) recommends vaccination for:
 - Adolescents at preadolescent doctor's visit (11-12 years)
 - Adolescents at high school entry, or about age 15
 - College freshmen living in dormitories
 - Other groups at high risk (e.g., travellers, military recruits, complement deficient and asplenic patients)
- Other adolescents who wish to decrease their risk of meningococcal disease may choose to be immunized

What Can We Do to Protect Children in West De Pere?

- Support efforts to educate parents and students about the disease and immunization
- To reach the community with this important information, we plan to:
 - Distribute letters to parents
 - Post posters/information throughout the school
 - Conduct presentations at back-to-school/parents nights
 - Reach out to the health department to host a vaccination clinic



Supporting Immunization at West De Pere

- Talk to your family's health care provider to see if your child should be vaccinated
- To learn more about meningococcal disease and prevention, contact Dawn Schaefer RN West De Pere District Nurse at 337-1087 ext. 8031.