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# C H A P T E R 1

## DO WE STILL NEED VACCINES?

*Vaccines are medicine's bright and shining stars. Before vaccines, parents in the United States could expect that every year:*

- *Polio would paralyze about 15,000 children.*
- *Rubella ("German measles") would cause birth defects and mental retardation in as many as 20,000 newborns.*
- *Measles would infect about 4 million children, killing 3,000.*
- *Diphtheria would be one of the most common causes of death in school-aged children.*
- *A bacterium called Hib would cause meningitis in 15,000 children, leaving many with permanent brain damage.*
- *Pertussis ("whooping cough") would kill 8,000 children, most of whom were less than one year of age.*

Vaccines have changed those horrifying numbers. Now in the United States only about two cases of diphtheria, five cases of birth defects

#### 4 • *Vaccines*

from rubella, and no cases of polio occur annually. Vaccines have prevented more disease and death than any other preventive program in history (with the possible exception of the purification of drinking water).

However, because vaccines have almost eliminated certain infections, some people are reexamining their usefulness. Do we still need vaccines? Do their benefits still outweigh their risks? As you will see in the pages that follow, vaccines should be given for three reasons: (1) Some diseases are so common (pertussis) that a choice not to get vaccine is a choice to risk disease; (2) some diseases continue to infect small numbers of children and adolescents (measles, mumps, German measles, Hib), and a drop in immunization rates would cause new outbreaks of disease; and (3) some diseases have been virtually eliminated from this country (polio, diphtheria), but are still prevalent in many regions of the world and could be imported by travelers or immigrants.