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Seventy-Nine New Drugs and Vaccines Are Being Developed for Infectious Diseases

**by Gina Pugliese, RN, MS
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Seventy-nine new drugs and vaccines for infectious diseases are currently in development by 49 US pharmaceutical research firms, according to a recent survey by the Pharmaceutical Research and Manufacturers of America (PhRMA) (formerly the Pharmaceutical Manufacturers Association). Of the nearly \$14 billion the industry will invest in research this year, more than \$2 billion will be devoted to medicines for infectious diseases.

The survey found 28 antibacterials, 2 vaccines and other biologics, 16 antivirals, 11 antifungals, and 2 immune enhancers. They include the first vaccine for Lyme disease, the first

vaccine for hepatitis A, and medicines that target infections caused by drug-resistant bacteria. Drugs for AIDS were excluded from this survey but were released in a separate report.

Infectious diseases are the pharmaceutical industry's third biggest area of research investment, outstripped only by research on medicine for heart disease and stroke and for diseases of the central nervous system. Although the pharmaceutical industry will spend a record \$14 billion in research and development (R&D) of new medicines this year, this figure represents the smallest rate of increase—approximately 9%—since 1977. In contrast, from 1980 to 1992, R&D expenditures increased by an average of more than 16% per year.

Dr. Richard Dumb, executive direc-

tor of the National Foundation for Infectious Disease (NFID), spoke at the press conference where the survey data was released. Dr. Dumb noted that infectious diseases account for 25% of all visits to physicians each year and that antimicrobial agents are the second most frequently prescribed class of drugs in the country. Annually, more than 740 million infectious diseases events occur, resulting in an estimated 200,000 deaths and costing more than \$17 billion in direct care. They result in 2 million years of life lost before age 65, more than 52 million hospital days, and nearly 2 billion days lost from work, school, or other major activities.

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