**In an attempt to bring new strains of drug-resistant** bacteria in hospitals under control, the University of Iowa Medical School (Iowa City, Ia) has initiated the Surveillance and Control of Pathogens of Epidemiologic (Scope) Importance, reports the October 4 issue of the *Wall Street Journal*.

This investigation includes 48 hospitals nationwide that will send bacterial samples to the researchers for testing. First, the microbiologists will try to detect the origin of the particular strain and then use deoxyribonucleic acid (DNA) analysis to compare the samples with other samples to determine if the strain is spreading.

Ronald N. Jones, MD, professor and director of the medical microbiology division of the University of Iowa, who is part of the Scope team, conducted an earlier study in which he found that 13 out of 43 hospitals had a drug-resistant strain of bacteria infecting their patients. However only two of the hospitals were aware of the infection.

"Now [these] hospitals know what to look for in their own hospital tests of those organisms, and they can isolate those patients before they can spread [the infection] to other patients," he explains.

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**Two new drugs hold promise for the treatment** of symptoms associated with multiple sclerosis (MS), according to results presented at a meeting of the American Neurological Association. Both drugs work to prevent the immune system from attacking the central nervous system.

One drug, a genetically engineered form of beta interferon, was tested on 300 patients with mild MS in a trial conducted by researchers at the State University of New York. The drug, which is manufactured by Biogen, Inc, (Cambridge, Mass), delayed by 75% the average time it took for patients to become totally disabled during a 2-year period. A second drug, copolymer-1, was also found to "significantly" slow the disease progression in a separate clinical trial. Conducted by researchers at the University of Maryland, this trial involved 370 patients. The beta interferon copolymer-1 is manufactured by Teva Pharmaceutical Industries, Ltd, of Israel.

Already approved by the US Food and Drug Administration last year, Betaseron (interferon beta one B) is currently available for the treatment of MS. Physicians interested in having their patients take this drug can enroll them by calling the registration line at (800) 788-1467.

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**Screening healthy persons for common cancers** has taken one step closer to reality. Using urine, sputum, and tissue samples from 105 patients with lung, bladder, and head and neck cancer, researchers at Johns Hopkins University have developed an experimental test to detect cancer before it can be found using standard means.

Although the ongoing larger scale investigations are focused on patients who are at high risk of having cancer develop within the next few years, scientists hope to ultimately use this technology in healthy persons. The screening test is based on the underlying scientific principle that cancer develops when enzymes that monitor cell growth and division are defective. This uncontrolled cell growth and division create identical descendant cells, or clones. The experimental screening test searches the deoxyribonucleic acid (DNA) for patterns of these irregular clones. Specifically, it uses the polymerase chain reaction (PCR) to scan the DNA fragments. Scientists hope to incorporate 10 clonal cancer markers in one PCR test.

The research team is lead by David Sidransky, MD, who had done earlier work with Bert Vogelstein, MD, in identifying defective genes that lead to the development of colon and bladder cancers.

The promise that this latest research holds is being tempered with caution in the scientific community.

"We have to be cautious about talking about a universal screening test being just around the corner," emphasizes Samuel Broder, MD, head of the National Cancer Institute.

Nonetheless, the methods used by Dr Sidransky and colleagues are the wave of the future. "The approach of detecting mutations in body fluids will be the way in which most cancer will be detected in a few years," predicts John Laszlo, MD, national vice president for research of the American Cancer Society in Atlanta.

Results from this preliminary study are published in the October 11 issue of *The Proceedings of the National Academy of Sciences*.

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**More than one in three children have been victims** of abuse in the past year, according to a survey conducted by researchers at the University of New Hampshire. Abuse-related injuries had caused 1 in 100 children to seek medical care during this period.

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