

# October 13, 1995 / Vol. 44 / No. 40

- 741 National Adult Immunization Awareness Week
  741 Increasing Pneumococcal Vaccination Rates — United States, 1993
  744 Increasing Influenza Vaccination Rates — Montana and Wyoming, 1994
- 747 Urinary Incontinence in Persons Aged ≥65 Years — Mass. and Okla., 1993
- 754 National Breast Cancer Awareness Month — October 1995
- 754 Mammography Use Wisconsin
- 757 Notices to Readers

# National Adult Immunization Awareness Week — October 22–28, 1995

MORBIDITY AND MORTALITY WEEKLY REPORT

National Adult Immunization Awareness Week will be October 22–28, 1995. This observance will emphasize the importance of appropriately vaccinating adults against diphtheria, hepatitis B, influenza, measles, mumps, pneumococcal disease, rubella, tetanus, and varicella. National Adult Immunization Awareness Week coincides with the influenza vaccination season and offers opportunities to implement vaccination programs. The following two reports describe efforts to increase pneumococcal and influenza vaccination levels in high-risk populations.

Additional information about this week's activities is available from the National Coalition for Adult Immunization, 4733 Bethesda Ave., Suite 750, Bethesda, MD 20814; telephone (301) 656-0003; fax (301) 907-0878.

# Increasing Pneumococcal Vaccination Rates Among Patients of a National Health-Care Alliance — United States, 1993

Streptococcus pneumoniae is the most common cause of bacterial pneumonia worldwide and a leading cause of sepsis and meningitis (1). In the United States, an estimated 40,000 persons die each year from pneumococcal infections (2). Since 1983, 23-valent pneumococcal polysaccharide vaccines have been licensed in the United States (2) and are 56%–57% effective in preventing invasive pneumococcal disease (3). However, the 1993 National Health Interview Survey documented that  $\leq$ 28% of persons in high-risk categories, including all persons aged  $\geq$ 65 years, reported ever having received the vaccine (4). During 1993–1994, VHA Inc. (Irving, Texas)—a national health-care alliance serving approximately 1200 health-care organizations nationwide (including 21% of all community hospitals in the United States)—initiated efforts to improve pneumococcal vaccine delivery to and coverage

# U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES / Public Health Service

### Pneumococcal Vaccination Rates — Continued

among patients at increased risk for complications of pneumococcal infection. This report summarizes the program and an evaluation of its effectiveness in increasing vaccine coverage.

In August 1993, VHA conducted a telephone survey of a national probability sample about pneumonia and its prevention.\* The survey indicated that, among participants aged  $\geq$ 65 years, 32% had read or heard about pneumococcal pneumonia, 27% were aware of pneumococcal vaccine, and 15% (or a member of their family) had ever been vaccinated. In comparison, the year 2000 national health objective for pneumococcal vaccine coverage for persons aged  $\geq$ 65 years is 60% (objective 20.11) (*5*). Based on these findings and recommendations from advisory councils of member health-care organizations, VHA developed the nationwide Pneumonia Pnockout<sup>®</sup> campaign. The goals of this program were to educate elderly and other high-risk persons about pneumococcal pneumonia and the need for pneumococcal vaccination and to encourage partnerships between VHA health-care organizations. Overall, 355 (37%) of the 953 member organizations of VHA volunteered to participate.

The campaign was conducted October 25–November 19, 1993, and targeted persons aged  $\geq$ 65 years and those with high-risk conditions for pneumococcal disease as defined by the Advisory Committee on Immunization Practices (2). VHA provided each participating organization with a media kit containing public service announcements, sample press releases, and a national toll-free telephone number for patients listing VHA hospitals offering pneumococcal vaccination.

The campaign was evaluated by VHA in January 1994. Based on information provided by 221 (65%) of the 355 organizations, 82,562 persons received pneumococcal vaccine during the 4-week campaign. Of these, 21% were vaccinated in unspecified locations, 19% in hospital outpatient services, 18% in family practice centers or physicians' offices, 15% in public health departments, 15% in community sites, and 12% in other settings (e.g., hospital inpatient services [3%], long-term–care facilities [2%], and other sites [7%]). Examples of problems encountered during the program included the need for physicians' orders to vaccinate Medicare patients; hospital regulations requiring patient registration before administration of vaccine; assurance of adequate vaccine supplies; reluctance of physicians to participate; and the need to educate health-care providers and patients about vaccine benefits, safety, and effectiveness. Educational materials were provided to an estimated 288,000 persons, including the general public (58%), health-care staff (17%), physicians (4%), long-term–care staff (1%), and others (19%).

Evaluation of the impact of the campaign also included a follow-up survey in December 1993 that replicated the methods of the baseline survey.\* Compared with August 1993, there were statistically significant increases in the prevalences of awareness of pneumococcal pneumonia (overall: from 26% to 31%; among persons aged  $\geq$ 65 years: from 32% to 40%) and pneumococcal vaccine (overall: from 16% to 24%; among persons aged  $\geq$ 65 years: from 27% to 44%), and of persons aged  $\geq$ 65 years reporting that they or a family member had been vaccinated (from 15% to 22%).

In September 1994, a year-round campaign was initiated to increase efforts of participating organizations to integrate pneumococcal vaccination into daily patient-care delivery systems; 216 organizations participated, of which 71 (33%) were new. Of the

<sup>\*</sup>Prevalence estimates have a standard error of  $\pm 2.2\%$ .

### Pneumococcal Vaccination Rates — Continued

216 organizations, 93 (43%) submitted preliminary evaluations of the 1994 program in January 1995. Based on this evaluation, 56 (60%) provided 36,450 doses of pneumococcal vaccine. An estimated 60% of doses were given in collaboration with public health departments and other community organizations, compared with 30% in 1993. Other patient-care settings (e.g., physician offices, outpatient and inpatient services, and home health care) accounted for 30% of vaccine doses delivered.

Reported by: DA Stewart, M Scovill, MS, C Aitches, JM Haning, DP Bourque, JS Roberts, MD, L Gentry, C Eddy, VHA Inc, Irving, Texas. DS Fedson, MD, Pasteur-Merieux MSD, Lyon, France. Adult Vaccine-Preventable Diseases Br, Epidemiology and Surveillance Div, National Immunization Program, CDC.

Editorial Note: Based on national surveys, during 1989-1993, vaccination levels among adults increased substantially; for example, pneumococcal vaccination among persons aged  $\geq$ 65 years increased from 15% to 28% (4). However, these levels remain below the year 2000 national health objective of 60% vaccination levels for high-risk persons (objective 20.11) (5). Previously documented barriers to achieving high vaccination levels among adults include 1) missed opportunities to vaccinate adults during contacts with health-care providers in offices, outpatient clinics, and hospitals (6); 2) lack of vaccine-delivery systems in the public and private sectors that can reach adults in different settings (e.g., health-care, workplace, and college or university settings) (6); 3) patient and provider fears concerning adverse events following vaccination (7,8); and 4) lack of awareness among both patients and providers of the importance of vaccine-preventable diseases in adults (6). Two of the barriers identified during the VHA campaign are now being addressed: first, the Health Care Financing Administration has approved a regulation that enables the use of standing orders (rather than requiring a physician's presence) to administer pneumococcal vaccine to Medicare patients, and second, vaccine companies have initiated efforts to assure adequate supplies of pneumococcal vaccine. The number of VHA organizations participating in the campaign may increase by overcoming these barriers and others that may have limited participation (e.g., member agency interest and awareness of the problem in their communities and resources to address the problem).

Previous efforts to increase vaccination coverage levels among adults have involved collaborations between public and private health-care providers. For example, the Medicare Influenza Vaccine Demonstration and the Hawaii Pneumococcal Disease Initiative (9,10) both employed public-private partnerships to substantially increase vaccine delivery and improve vaccination levels among elderly persons. In comparison, the VHA campaign entailed minimal collaboration with public agencies during the development stage, although public health departments assisted with implementation. Important elements of the VHA campaign included collection of information about the target population and education of both the target population and healthcare providers. More than 80% of the 1994 participants are continuing their efforts in 1995. Replication of the VHA campaign and similar efforts, in conjunction with publicsector support, will assist in achieving national health objectives for 1) reducing epidemic-related pneumonia and influenza-related deaths among persons aged  $\geq$ 65 years; and 2) increasing pneumococcal and influenza vaccination levels among noninstitutionalized, high-risk populations to at least 60% (5).

### Pneumococcal Vaccination Rates — Continued

### References

- 1. Lederberg J, Shope RE, Oaks SC Jr, eds. Emerging infections: microbial threats to health in the United States. Washington, DC: National Academy Press, 1992.
- CDC. Pneumococcal polysaccharide vaccine: recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1989;38:64–8,73–6.
- Butler JC, Breiman RF, Campbell JF, Lipman HB, Broome CV, Facklam RR. Pneumococcal polysaccharide vaccine efficacy: an evaluation of current recommendations. JAMA 1993; 270:1826–31.
- 4. CDC. Influenza and pneumococcal vaccination coverage levels among persons aged ≥65 years—United States, 1973–1993. MMWR 1995;44:506–7,513–5.
- Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991:122–3; DHHS publication no. (PHS)91-50213.
- Williams WW, Hickson MA, Kane MA, Kendal AP, Spika JS, Hinman AR. Immunization policies and vaccine coverage among adults: the risk for missed opportunities. Ann Intern Med 1988;108:616–25.
- 7. Pachucki CT, Lentino JR, Jackson GG. Attitudes and behavior of health care personnel regarding the use and efficacy of influenza vaccine [Letter]. J Infect Dis 1985;151:1170–1.
- Nichol KL, Lofgren RP, Gapinski J. Influenza vaccination: knowledge, attitudes, and behavior among high-risk outpatients. Arch Intern Med 1992;152:106–10.
- 9. CDC. Final results: Medicare influenza vaccine demonstration—selected states, 1988–1992. MMWR 1993;42:601–4.
- 10. Campbell JF, Donohue MF, Nevin-Woods C, et al. The Hawaii Pneumococcal Disease Initiative. Am J Public Health 1993;83:1175–6.

# Increasing Influenza Vaccination Rates for Medicare Beneficiaries — Montana and Wyoming, 1994

Approximately 20,000 influenza-associated deaths occurred during each of 10 different epidemics in the United States during 1972–1991; most (>90%) of the deaths attributed to pneumonia and influenza occurred among persons aged  $\geq$ 65 years (1). Although Medicare has provided reimbursement for influenza vaccination since 1993, the Health Care Financing Administration (HCFA) received billing claims for influenza vaccination for the 1993–94 and 1994–95 influenza seasons for only 35% and 38% of Medicare beneficiaries, respectively (2) (HCFA, unpublished data, 1995). This report describes the impact of an intervention project in September 1994 in which individual Medicare beneficiaries aged  $\geq$ 65 years in Montana and Wyoming were contacted and encouraged to receive influenza vaccination.

The project was conducted by the Montana-Wyoming Foundation for Medical Care (MWFMC) in collaboration with HCFA. During 1994, the numbers of persons who were Medicare beneficiaries in Montana and in Wyoming were 130,000 and 60,000, respectively. The two states were divided into 40 geographic regions defined by zip code aggregates (24 in Montana, 16 in Wyoming); in each state, four regions were randomly selected as intervention sites. During September 23–30, MWFMC sent individual letters and an informational brochure to Medicare beneficiaries with mailing addresses in the eight intervention regions: in two regions (total population: 19,850) in each state, beneficiaries received a personalized letter from the MWFMC medical director encouraging them to obtain vaccination, and beneficiaries in the other two regions (total population: 21,250) in each state received a form letter from the MWFMC encouraging them to obtain vaccination. In addition, during October

## Influenza Vaccination Rates — Continued

1994, public and private organizations, including HCFA, implemented measures to increase influenza vaccination coverage in all regions, including public service announcements and notices to health-care providers.

Vaccination rates in the intervention regions were compared with those in the remaining regions for October 1–December 31 in both 1993 and 1994 using influenza vaccination claims submitted to HCFA. Approximately 90% of influenza vaccination claims submitted to HCFA are for vaccinations provided from October 1 through December 31. Medicare pays for influenza vaccination for beneficiaries enrolled in Part B. This analysis was restricted to those who were alive and continuously enrolled in Part B during the study period; approximately 96% of persons aged ≥65 years in the United States are enrolled in Medicare Part B. A beneficiary was considered to have received an influenza vaccination if at least one bill for either the influenza vaccine or administration of the vaccine was submitted for the study period. A logistic regression model was used to examine the relation between receipt of both a letter and an influenza vaccination; EGRET software was used to adjust for confounding variables and conduct statistical testing.

From 1993 through 1994, influenza vaccination rates increased in all regions of Montana and Wyoming regardless of intervention status. However, overall increases in influenza vaccination rates were greater in intervention regions across both states than in nonintervention regions by 6.1 percentage points (95% confidence interval [CI]=5.5–6.7). In Montana, the influenza vaccination rate for beneficiaries who received letters increased 8.7 percentage points (from 41.2% to 49.9% among those who received a personal letter) and 6.5 percentage points (from 46.0% to 52.5% among those who received a form letter) compared with 4.4 percentage points (from 42.3% to 46.7%) for beneficiaries who did not receive letters. The crude rate comparisons were statistically significant (personal letter versus no letter=1.1 [95% CI=1.1-1.2] and form letter versus no letter=1.3 [95% Cl=1.2-1.3]). In Wyoming, the rate increased 18.9 percentage points (from 23.8% to 42.7% among those who received a personal letter) and 19.9 percentage points (from 20.5% to 40.4% among those who received a form letter) for those receiving letters compared with 11.5 percentage points (from 21.6% to 33.1%) for beneficiaries not receiving letters. The crude rate comparisons were statistically significant (personal letter versus no letter=1.5 [95% Cl=1.4-1.6] and form letter versus no letter=1.4 [95% Cl=1.3-1.4]).

The strongest predictor for a billing claim for vaccination in 1994 was a claim for vaccination in 1993 (odds ratio [OR]=8.1 [95% Cl=7.9–8.4] for beneficiaries vaccinated in 1993 versus those not vaccinated in 1993). In addition, after adjusting for age, sex, and 1993 vaccination status, beneficiaries who received a letter were significantly more likely to receive an influenza vaccination than beneficiaries who did not (OR=1.3; 95% Cl=1.3–1.4). Beneficiaries who received a letter from MWFMC were more likely to have a claim for vaccination than those who did not receive a letter both among persons who were vaccinated in 1993 (OR=1.2; 95% Cl=1.2–1.3) and those who were not vaccinated in 1993 (OR=1.4; 95% Cl=1.3 to 1.4). The likelihood of vaccination was similar for persons who received a personal letter and for those who received a form letter. Age was also an important predictor for a billing claim for vaccination in 1994 (beneficiaries aged  $\geq$ 70 years were more likely than those aged 65–69 years to have a billing claim).

#### Influenza Vaccination Rates — Continued

Reported by: JW McMahon, MD, JR Hillman, MD, M McInerney, PhD, Montana-Wyoming Foundation for Medical Care, Helena. MJ Kileen, MD, C Christensen, PhD, Health Care Financing Administration, Regional Office, Seattle, Washington. Adult Vaccine Preventable Diseases Br, Epidemiology and Surveillance Div, National Immunization Program, CDC.

**Editorial Note:** Influenza vaccination levels among elderly persons in the United States increased from 1989 (33%) through 1993 (52%) (*3*), probably reflecting greater acceptance of preventive medical services by practitioners and patients and increased delivery of vaccine by health-care providers and sources other than physicians (e.g., visiting-nurse and home-health agencies) (*3*). In addition, the findings in this report suggest that the initiation of Medicare reimbursement for influenza vaccination in 1993 may have contributed to increased rates in Montana and Wyoming, although this intervention also may have increased submission of Medicare claims for persons who had already been receiving influenza vaccine. The intervention project also indicated that prior influenza vaccination, documented by Medicare claims data, was the strongest predictor of current vaccination—a finding consistent with previous reports (*4*). In addition, the increase in vaccination ates among those who received a letter is similar to the effect of the Medicare Influenza Vaccine Demonstration program in 1990 and 1991, during which a letter to all beneficiaries in parts of 10 states was the most important motivator for vaccination (*5*).

The Montana and Wyoming intervention resulted in a statistically significant, although modest, improvement in vaccination levels. Other client-oriented interventions (e.g., letter or postcard reminders) have improved influenza vaccination levels by an average of 12% (6). Provider- (e.g., chart reminders and reminders directly to physicians) and system-oriented interventions (e.g., standing orders to nurses) also have been effective in increasing influenza vaccination levels (18% and 39%, respectively) for patients who could be directly identified in providers' health record systems (6). In addition, combinations of client and provider strategies have been documented to be more effective than client-based strategies alone (6). Future interventions to improve influenza vaccination levels in the Medicare population could employ a combination of strategies directed toward patients, providers, and systems to assure more effective means of providing influenza vaccination are used.

### References

- 1. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1995;44(no. RR-3).
- 2. Health Care Financing Administration. 1993 Influenza immunizations paid for by Medicare: state and county rates. Baltimore, Maryland: Health Care Financing Administration, 1994.
- 3. CDC. Influenza and pneumococcal vaccination coverage levels among persons aged ≥65 years— United States, 1973–1993. MMWR 1995;44:506–7,513–5.
- 4. Nichol KL, Lofgren RP, Gapinski J. Influenza vaccination: knowledge, attitudes, and behavior among high-risk outpatients. Arch Intern Med 1992;152:106–10.
- Anderson K, Teske R, Dini E, Strikas R. Improving influenza vaccination coverage in the Medicare population. In: Hannoun C, Kendal AP, Klenk HD, Ruben FL, eds. Options for the control of influenza II. Amsterdam, Netherlands: Elsevier, 1993:109–13.
- 6. Gyorkos TW, Tannenbaum TN, Abrahamowicz, M, et al. Evaluation of the effectiveness of immunization delivery methods. Can J Public Health 1994;(suppl 1):S14–S30.

# Knowledge, Attitudes, and Practices of Physicians Regarding Urinary Incontinence in Persons Aged ≥65 Years — Massachusetts and Oklahoma, 1993

Urinary incontinence (UI)—the involuntary loss of urine sufficient to be a problem for the patient or caregivers (1)—affects an estimated 15%–30% of persons aged  $\geq$ 60 years in the United States and is a major cause of admittance to nursing homes (2). UI may be associated with a variety of medical (e.g., rashes, skin infections, pressure sores, urinary tract infections, and falls) and psychosocial problems (e.g., depression, embarrassment, restricted social interaction, reduced activities outside the home, reduced sexual activity, and sleep disturbances) (2–5). Despite the dissemination of clinical practice guidelines for UI by the Agency for Health Care Policy and Research (AHCPR) (1), many physicians do not know how to diagnose or treat UI. Beginning in 1992, CDC and AHCPR funded demonstration projects in Massachusetts and Oklahoma to educate the public, patients, and health-care professionals about UI. In both projects, physicians were assessed regarding baseline attitudes toward UI, knowledge of the causes and treatment of UI, preparedness to evaluate and treat UI, and current practices regarding UI. This report summarizes findings from the two projects during 1993.

**Massachusetts.** During March–May 1993, the Massachusetts Department of Public Health conducted a telephone survey of 350 eligible physicians who were sampled randomly in Essex and Norfolk counties; 163 (47%) participated. Of the 163 participants, 124 (76%) were primary-care physicians; 23 (14%), gynecologists; and 16 (10%), urologists. Overall, 34% reported that they had asked at least three fourths of their elderly patients about UI during the previous month; urologists (75%) and gynecologists (74%) were more likely to report asking than primary-care physicians (21%) (p<0.01). Seventy-two percent of physicians indicated that <10% of their patients aged  $\geq$ 65 years mentioned experiencing UI, and 68% that <10% of patients aged  $\geq$ 65 years who were asked about UI reported having this condition. The most common reasons that prevented physicians from asking patients about UI included lack of time (36%), lack of available and effective treatments (28%), and patient embarrassment (26%). A total of 73% underestimated the correct proportion (two thirds) of elderly patients with UI who could benefit from therapy. Most urologists (97%) and gynecologists (91%) and 46% of primary-care physicians rated themselves as prepared to treat UI.

**Oklahoma.** During May–September 1993, the Oklahoma State Department of Health mailed a survey to 194 eligible physicians who were randomly selected in four counties (Canadian, Cleveland, Logan, and Oklahoma) in the vicinity of Oklahoma City; 155 (80%) participated. Of the 155 participants, 120 (78%) were primary-care physicians; 26 (15%), gynecologists; and nine (6%), urologists. Overall, one third (33%) reported always asking all new patients about UI; urologists (89%) and gynecologists (58%) were more likely than primary-care physicians (23%) to always ask (p<0.01). Of all respondents, 16% reported they were "fully prepared" and 13% reported they were "poorly prepared" to evaluate UI; 62% of the primary-care physicians rated themselves as "somewhat prepared" or "poorly prepared" to evaluate UI. Nearly one third (32%) of respondents reported incorrectly that elderly persons with chronic UI were unlikely to improve. Most (90%) believed that physicians should be more active in asking the patient about problems with bladder control, and 78% believed that physicians control.

(Continued on page 753)



# FIGURE I. Notifiable disease reports, comparison of 4-week totals ending October 7, 1995, with historical data — United States

<sup>†</sup>Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

# TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending October 7, 1995 (40th Week)

	Cum. 1995		Cum. 1995
Anthrax Brucellosis Cholera Congenital rubella syndrome Diphtheria <i>Haemophilus influenzae</i> * Hansen Disease Plague Poliomyelitis, Paralytic	71 13 5 893 106 6	Psittacosis Rabies, human Rocky Mountain Spotted Fever Syphilis, congenital, age < 1 year <sup>†</sup> Tetanus Toxic shock syndrome Trichinosis Typhoid fever	51 1 465 280 23 143 25 247

\*Of 874 cases of known age, 208 (24%) were reported among children less than 5 years of age. <sup>†</sup>Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through second quarter 1995.

-: no reported cases

<sup>\*</sup>The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

Reporting Area	AIDS*	Gono	rrhea	l	4	B	3	C/N/	A,NB	Legion	ellosis
	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	54,704	262,617	310,023	20,900	18,663	7,475	8,802	3,260	3,183	953	1,208
NEW ENGLAND	2,653 81	4,396	6,485 71	226 23	231 21	165 7	265 11	93	116	28	64 4
N.H.	77	91 47	85	8	16	18	22	12	9	1	-
Mass.	1,137	2,211	2,455	99	87	65	151	73	75	18	44
R.I. Conn.	192 1,136	406 1,575	364 3,486	26 65	20 78	8 66	/ 68	-	20	4 N	16 N
MID. ATLANTIC	14,696	25,506	34,749	1,237	1,301	927 302	1,134	320 175	366	153	189 46
N.Y. City	7,624	8,598	13,353	587	494	290	251	1/3	1	4	6
Pa.	3,575	3,326 9,736	3,944 9,408	172	131	145	296	36	31	88	100
E.N. CENTRAL	4,122 852	57,890 16,800	62,464 16,784	2,226 1,451	1,857 679	721 87	914 132	220 9	265 19	249 125	347 159
Ind.	429	6,182	6,737	132	304	179	164	6	8	59	36
Mich.	825	14,033	13,893	290 126	229 191	318	302 76	172	166	25	67 54
W.N. CENTRAL	1,266	15,079	17,177	1,447	950	43	517	- 99	69	94	82
Minn. Iowa	285 71	2,238 1,191	2,463 1,103	146 54	184 49	45 42	48 24	2 13	14 9	6 20	2 28
Mo. N. Dak	564 6	8,704 20	9,474 33	1,035 23	483 5	319 4	390	57 8	18 1	44 4	29 4
S. Dak.	15 84	131	169	49 34	31 107	2	2	1	11	3	1
Kans.	241	2,098	2,876	106	91	36	29	12	16	7	5
S. ATLANTIC Del.	14,155 241	76,711 1,723	83,039 1,496	992 7	958 21	1,083 2	1,614 12	258 1	339 1	171 2	291 31
Md. D.C.	2,250 827	7,471 3,594	14,501 5,582	169 20	137 17	206 15	277 40	4	17 1	27 4	66 6
Va. W. Va	1,082	8,085	10,282	163 17	134 15	91 41	102	14 43	20 24	17	8
N.C.	816 766	18,785	21,590	89 40	109	224	225	46	51	31 21	20 12
Ga.	1,784	11,257	U	55	26	63	516	15	173	23	101
FIA. F.S. CENTRAI	6,303 1,763	15,929 32,038	18,629 35,986	432	467 480	402 632	384 899	118 774	44 731	32 43	44 71
Ky. Tenn	221	3,819	3,777	36	127	54 493	66 772	22	24	10	8
Ala.	484	12,852	12,079	69 145	78	85	61	2	15	6	12
W.S. CENTRAL	4,691	4,804 23,834	36,759	3,272	2,423	- 1,304	- 990	- 520	256	13	35
Ark. La	209 785	2,671	5,232 9,396	343 100	151 122	36 152	22 137	4 140	7 142	1 3	6 12
Okla. Tex.	206 3.491	1,496 11.005	3,742 18,389	660 2,169	246 1.904	376 740	113 718	323 53	48 59	3	11
MOUNTAIN	1,716	6,660	7,690	3,065	3,690	603	516	347	353	89	73
ldaho	38	55 96	72 69	102 244	275	19 65	67	41	10 64	4 2	14
Wyo. Colo.	12 523	42 2,241	66 2,696	90 424	23 402	17 95	22 78	141 54	128 58	8 33	4 15
N. Mex. Ariz	137 545	780 2.532	760 2.475	637 889	880 1.475	233 92	165 57	39 37	44 20	4 9	3
Utah Nev.	112 332	131 783	199 1.353	555 124	427 190	54 28	62 47	9 14	15 14	14 15	6 21
PACIFIC	9,642	20,503	25,674	7,210	6,773	1,570	1,953	629	688	113	56
Oreg.	347	2,122	2,275	1,543	784	62	184	29	35	20	-
Calif. Alaska	8,328 60	17,162 551	21,335 716	4,874 41	4,900 177	1,345 9	1,612 12	402 1	447	88	44
Hawaii	190	444	573	124	42	13	24	41	5	5	2
P.R.	1,925	459	390	5 81	52	455	282	182	139	-	-
v.ı. Amer. Samoa	- 27	6 24	25 25	6	3	2	-	-	1-	-	-
C.N.M.I.	-	23	41	15	6	7	1	-	-	-	-

 TABLE II. Cases of selected notifiable diseases, United States, weeks ending

 October 7, 1995, and October 8, 1994 (40th Week)

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands \*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update September 28, 1995.

						Measle	es (Rube	· · · · ·		<u> </u>				
Reporting Area	Lyı Dise	me ease	Mal	aria	Indig	enous	Impo	orted*	То	tal	Meningococcal Infections		Mu	mps
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	6,486	9,549	928	826	2	243	-	24	267	863	2,310	2,134	614	1,123
NEW ENGLAND	1,582	2,230	37	60	-	6	-	2	8	27	106	100	10	19
N.H.	25 19	24	5 1	4 3	-	-	-	-	-	5 1	20	19	4	3
Vt. Mass	8 149	14 146	1 12	3 27	-	- 1	-	- 1	- 2	3 7	8 38	2 44	- 2	- 3
R.I.	285	323	4	8	-	5	-	-	5	7	-	-	1	2
	1,096	1,705	14 252	162	-	-7	-	ו 5	12	4 212	32 273	27	2 93	/ 93
Upstate N.Y.	2,057	3,634	52	44	-	, 1	-	-	1	17	84	75	24	27
N.Y. City N.J.	158 837	18 1,139	133 50	59 35	-	2 4	-	3	5 6	14 173	38 73	28 51	13 12	7 13
Pa.	941	946	17	24	-	-	-	-	-	8	78	75	44	46
E.N. CENTRAL Ohio	65 43	469 36	86 12	91 14	-	7 1	-	3	10 1	102 17	317 93	316 92	109 36	193 51
Ind.	14	15	14	12	-	-	-	-	-	1	59	41	4	7
Mich.	3 5	23 5	32 15	40 22	-	4	-	2	2 5	25	57	46	38	35
Wis.	-	390	13	3	-	2	-	-	2	3	37	34	-	11
W.N. CENTRAL Minn.	193 129	246 129	22 4	38 11	-	2	-	-	2	170	154 25	136 12	30 2	60 4
lowa Mo	11 34	13 91	3	5 12	-	- 1	-	-	- 1	7 160	27 62	18 66	- 22	13 38
N. Dak.	- 54	-	1	12	-	-	-	-	-	-	1	1	1	4
S. Dak. Nebr.	- 1	- 3	2	-	-	-	-	-	-	- 2	5 14	8 11	- 4	- 1
Kans.	18	10	3	5	-	1	-	-	1	1	20	20	1	-
S. ATLANTIC	432	657 101	201 1	166 3	1	11	-	1	12	64	418	310 5	89	162
Md.	267	212	55	60	-	-	-	1	1	4	31	27	20	47
D.C. Va.	1 47	6 117	15 45	12 23	-	-	-	-	-	- 3		4 56	20	- 38
W. Va.	22 48	18 71	2 15	- 9	-	-	-	-	-	37	8 67	12 44	- 16	3 35
S.C.	16	7	1	4	-	-	-	-	-	-	51	21	9	7
Ga. Fla.	12	110	26 41	29 26	- 1	2 9	-	-	2 9	3 14	82 117	66 75	8 16	23
E.S. CENTRAL	41	37	20	29	-	-	-	-	-	28	148	151	13	18
Ky. Tenn.	9 20	21 10	2	9	-	-	-	-	-	28	47 37	34 28	-	6
Ala. Miss	7	6	8	9 1	-	-	-	-	-	-	34 30	59 30	4	5
W.S. CENTRAL	90	99	40	38	1	22	-	3	25	16	287	250	40	, 201
Ark.	5	8	3	3	-	2	-	-	2	1	22	38	3	5
Okla.	39	56	1	6	-	-	-	-	-	-	28	24	-	23
Tex.	42	34	31	23	1	3	-	2	5	14	196	157	27	150
Mont.	-	- 13	48 3	25	-	6/	-	-	- 68	164	158	141	25 1	134
ldaho Wyo.	-3	3	1	2 1	-	-	-	-	-	1	7	15 6	3	7
Colo.	-	1	22	11	-	26	-	-	26	19	42	28	2	4
N. Mex. Ariz.	-	4	5 7	3	-	30 10	-	-	31 10	- 1	31 48	48	2	N 94
Utah Nev.	1 2	1 1	6 4	4 2	-	- 1	-	-	- 1	134 9	14 7	18 7	11 6	14 13
PACIFIC	83	61	222	217	-	121	-	9	130	80	449	501	205	243
Wash. Oreg	10 4	1	18 10	24 14	-	16	-	4	20 1	3	75 70	75 109	10 N	14 N
Calif.	69	54	182	163	-	105	-	3	108	61	292	310	176	210
Alaska Hawaii	-	-	2 10	2 14	-	-	-	- 1	- 1	10 4	8 4	25	13	3 16
Guam	-	-	-	-	U	-	U	-	-	228	3	-	3	6
P.R. V.I.	-	-	1	4	- U	11	- U	-	11	11	23	7	2 2	2 4
Amer. Samoa	-	-	- 1	- 1	-	-	-	-	-	- 20	-	-	-	2
<b>ON</b>	2	-			0	-	0	-	-	25		2	-	2

# TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 7, 1995, and October 8, 1994 (40th Week)

\*For imported measles, cases include only those resulting from importation from other countries.

N: Not notifiable U: Unavailable -: no reported cases

Reporting Area	Pertussis			Rubella			Sypl (Prima Secon	hilis ary & idary)	Tubero	ulosis	Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	78	2,938	3,001	-	117	208	11,384	16,364	14,974	16,764	5,443	5,915
NEW ENGLAND	10	391	347	-	34	128	131	172	389	386	1,225	1,456
Maine N H	1	28 39	15 66	-	1	-	2	4	12 15	23 13	45 123	- 123
Vt.	-	60	40	-	-	-	-	-	3	6	143	111
Mass.	2	240	190	-	7	124	48	75	215	198	365	553
Conn.	-	22	31	-	25	2	3 77	77	106	35 111	289	629
MID. ATLANTIC	2	252	473	-	12	6	628	1,093	3,124	3,462	1,008	1,556
Upstate N.Y.	2	128	196	-	4	5	43	143	387	434	374	1,153
N.Y. CITY N.J.	-	13	93 13	-	1	- 1	287 129	491	1,664 595	2,013	278	217
Pa.	-	90	171	-	-	-	169	287	478	419	356	186
E.N. CENTRAL	6	275	444	-	4	9	2,000	2,417	1,483	1,591	70	53
Uhio	4	115 19	121 50	-	-	-	6/2 214	918 197	207	271	10 12	4 12
III.	-	67	89	-	1	1	752	818	737	791	3	17
Mich. Wie	2	62 12	48 136	-	3	8	228 134	231 253	308	338	37	12
WN CENTRAL	31	212	144			2	608	255 955	151	/130 40	263	171
Minn.	30	118	51	-	-	-	34	37	103	101	19	14
lowa Mo	-	1	17	-	-	-	37	49	48	46	88	70
N. Dak.	-	43	39 4	-	-	-	- 502	004 1	3	8	24	19
S. Dak.	-	11	15	-	-	-	-	1	20	21	72	30
Nebr. Kans.	1	9 22	8 10	-	-	-	9 26	11 52	20 81	16 53	5 36	28
S. ATLANTIC	6	284	269	-	26	15	2,934	4,278	2,590	3,005	1,712	1,576
Del.	-	10	2	-	-	-	14	22	42	34	74	47
D.C.	-	28 5	58 7	-	-	-	87	237 179	24 I 85	252 96	265	436
Va.	-	15	30	-	-	-	476	635	202	255	340	316
W. Va. N.C.	-	- 110	4 58	-	- 1	-	9 886	8 1 318	57 335	61 374	94 377	61 131
S.C.	2	22	13	-	1	-	456	630	247	287	103	146
Ga. Fla	-	26 68	24 73	-	1	2 13	572 297	657 592	323	533	210	302 135
ES CENTRAL	3	256	119	_	- 20	-	2 970	2 996	1,000	1,1156	200	158
Ky.	3	14	58	-	-	-	161	156	235	247	23	20
Tenn.	-	204	18	-	-	-	674	827	294	378	72	34
Miss.	-	3	12	N	N	N	1,620	1,491	299	217	9	4
W.S. CENTRAL	-	231	151	-	7	13	1,440	3,502	1,839	2,116	527	541
Ark.	-	28	22	-	-	-	82	388	117	204	21	25
La. Okla.	-	15	22	-	-	- 4	788 54	1,383	ь 146	193	25 31	55 31
Tex.	-	172	97	-	7	9	516	1,608	1,570	1,708	450	430
MOUNTAIN	10	431	384	-	5	5	200	207	474	423	148	124
Mont. Idaho	-	3 81	6 45	-	-	-	4	3	10 12	9 11	41	15 3
Wyo.	-	1	-	-	1	-	-	-	3	7	22	17
Colo. N Mex	7	84 89	186	-	-	-	98 33	107 18	37 64	51 43	9	11
Ariz.	-	149	97	-	3	-	33	39	234	170	45	52
Utah	-	19	28	-	1	4	4	11	31	38	15	12
	- 10	606	670	-	- 20	20	172	744	2 /70	J4 196	262	280
Wash.	4	213	96	-	23	- 30	12	29	189	208	202	15
Oreg.	2	29	86	-	1	4	7	31	33	90	-	10
Alaska	-	319	4/3	-	- 23	- 22	453 1	6/8 3	3,057	3,645 52	251	33
Hawaii	4	45	15	-	3	4	-	3	132	191	-	-
Guam	U	1	2	U	-	1	8	3	35	69	-	-
P.R. VI	-	12	2	-	-	-	237	246 25	195	150	44	67
Amer. Samoa	-	-	1	-	-	-	-	1	4	4	-	-
C.N.M.I.	U	-	-	U	-	-	4	1	13	25	-	-

# TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 7, 1995, and October 8, 1994 (40th Week)

U: Unavailable -: no reported cases

	All Causes, By Age (Years)				P&I <sup>†</sup>		All Causes, By Age (Years)						P&I <sup>†</sup>		
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND Boston, Mass. Bridgeport, Conn. Cambridge, Mass. Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Mass. New Haven, Conn. Providence, R.I. Somerville, Mass. Springfield, Mass. Waterburv, Conn.	625 173 64 25 15 47 26 10 58 40 58 40 58 40 58 40 58 29	449 125 46 19 14 25 18 8 20 26 45 3 23 22	99 29 6 9 5 1 5 9 1 8 5	59 15 10 12 3 1 5 2 - 3 2	10 - - 1 - 1 3 1 - 1 - 1	8 3 - - - 1 1 1	39 36 36 - 61 - 226 132	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla. Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, Fla. Tampa, Fla. Washington, D.C. Wilmington, Del.	1,242 153 169 92 109 104 59 87 52 52 164 191 10	781 96 91 61 81 60 38 54 39 31 113 109 8	254 31 26 16 23 9 18 6 10 32 41 1	136 20 29 1 8 16 3 10 6 5 14 24	43 4 6 3 3 3 5 2 2 2 12	27 2 2 1 2 6 - 1 4 3 5 -	83 7 15 11 9 1 3 4 8 2 15 8 2
Worcester, Mass. MID. ATLANTIC Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J. Erie, Pa.§	76 2,426 50 25 109 26 15 41	55 1,569 34 22 79 13 6 35	13 469 5 1 17 8 4 5	5 280 7 2 10 3 5	1 68 2 - 2 2 - 1	2 39 2 - 1 -	1 130 5 6 2 4	E.S. CENTRAL Birmingham, Ala. Chattanooga, Tenn. Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, Ala. Nashville, Tenn.	668 69 67 91 92 164 47 20 118	400 45 41 62 54 95 31 10 62	145 15 17 16 20 26 10 5 36	70 7 2 8 11 22 3 3 14	23 1 2 3 2 9 2 2 2 2	29 1 5 2 5 12 1 3	45 2 4 12 8 12 - 7
Jersey City, N.J. New York City, N.Y. Newark, N.J. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§ Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y.	36 1,311 58 U 399 47 16 103 22 32 32 33 34 19 U	21 849 25 U 240 29 13 78 78 26 53 16 13 U	7 248 19 U 90 11 3 11 3 4 16 12 5 U	4 164 11 45 4 - 10 - 2 6 6 1 U	2 26 3 U 20 2 - 4 2 - 2 - 0 U	2 24 	2 60 4 U 21 4 2 9 1 1 6 2 1 U	W.S. CENTRAL Austin, Tex. Baton Rouge, La. Corpus Christi, Tex. Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La. San Antonio, Tex. Shreveport, La. Tulsa, Okla.	1,350 76 54 66 174 58 77 331 78 80 187 61 108	829 46 31 35 111 38 51 174 49 44 126 46 78	273 13 10 18 32 8 10 79 18 22 32 8 23	163 5 7 23 8 11 52 6 10 23 3 2	46 1 5 2 19 3 4 2 3 1	39 3 4 6 3 2 3 7 2 4 1 4	76 3 2 2 3 4 25 5 18 7 5
E.N. CENTRAL Akron, Ohio Canton, Ohio Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mich Indianapolis, Ind. Madison, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohio	2,059 42 21 413 144 174 158 124 220 37 46 182 73 133 133 41 42 46 102 U	1,361 234 98 107 106 95 131 244 30 100 46 109 56 95 29 28 38 78 U	390 96 26 34 37 20 46 9 10 1 8 5 9 22 9 5 4 12 U	187 51 511 18 11 8 30 2 4 2 1 13 5 4 2 6 4 9 U	70 1 1 19 6 7 3 1 9 1 2 5 3 2 - 5 1 3 - 1 U	50 1 12 3 8 1 4 1 - 5 3 3 7 - 2 U	159 648 84 13 15 10 2 1 5 6 9 4 3 0 1 4 U	MOUNTAIN Albuquerque, N.M. Colo. Springs, Colo Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, Utah Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawaii Long Beach, Calif. Pasadena, Calif. Pasadena, Calif. Portland, Oreg. Sacramento, Calif. San Diego, Calif.	793 91 50 85 127 28 142 21 105 144 1,269 23 64 U 78 74 U 29 116 154 162 54 162	510 56 34 48 88 22 79 18 62 103 847 15 38 0 36 51 U 25 79 109 109	142 18 9 14 29 14 19 222 6 13 U2 12 12 23 23 29	82 13 5 9 8 3 23 2 9 10 124 1 8 U 19 8 U 13 16 121	36 324 316 89 46 20910 5652	22 1 10 2 4 2 3 30 1 3 U 2 2 U 1 3 8 1	53 2 10 6 2 3 15 1 0 4 117 5 U 4 8 U 4 4 18 22
W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans. Kansas City, Mo. Lincoln, Nebr. Minneapolis, Minn. Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	838 90 33 40 80 28 200 81 135 66 85	602 64 29 24 43 25 145 64 97 51 60	125 14 12 14 1 32 7 24 7 13	57 73251 124959	29 4 1 3 1 6 5 2 2	13 1 3 5 1 1 1	32 6 2 - 3 1 10 4 - 3 3	San Francisco, Calif San Jose, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Tacoma, Wash. TOTAL	1, 145 159 U 131 48 86 11,270 <sup>¶</sup>	89 109 98 32 62 7,348	31 26 U 18 10 16 2,119	21 11 U 10 3 5 1,158	3 9 U 3 1 2 371	1 4 U 2 1 257	13 U 4 6 10 734

# TABLE III. Deaths in 121 U.S. cities,\* week ending October 7, 1995 (40th Week)

\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
 <sup>1</sup>Pneumonia and influenza.
 <sup>8</sup>Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
 <sup>1</sup>Total includes unknown ages.
 U: Unavailable -: no reported cases

## Urinary Incontinence — Continued

cians should emphasize behavioral treatments (e.g., bladder training and pelvic muscle exercises) for UI.

Reported by: L Branch, PhD, ABT Associates Inc; N Resnick, MD, C DuBeau, MD, Harvard Medical School; A Balsam, PhD, C Bottum, MPH, D Siegal, MPA, Massachusetts Dept of Public Health, Boston. A Yerkes, MPH, Oklahoma State Dept of Health; S McFall, PhD, College of Public Health, Univ of Oklahoma Health Sciences Center, Oklahoma City. Health Interventions and Translation Br, and Aging Studies Br, Div of Chronic Disease Control and Community Intervention, National Center for Chronic Disease Prevention and Health Promotion, CDC.

**Editorial Note**: In addition to its clinical effects, UI results in substantial health-care costs: in 1987, the annual direct costs for care of patients with UI were estimated to exceed \$10.3 billion (2). Although existing therapies can improve two thirds of UI cases, the findings in this report suggest that most primary-care physicians neither routinely ask their elderly patients about UI nor believe they are adequately prepared to evaluate and treat UI. Previous studies have indicated that approximately half of patients with UI reported their physicians had never asked about UI, treated the condition, or referred them for treatment (6-9).

One of the national health objectives for the year 2000 is to increase to 60% the proportion of primary-care providers (i.e., physicians, physicians' assistants, nurses, and physical and occupational therapists) who routinely evaluate their patients aged ≥65 years for UI (objective 17.17) (10). In both Massachusetts and Oklahoma, interventions were conducted after the surveys to prepare physicians to evaluate and treat UI. In Massachusetts, these interventions included a local conference about UI for urologists and chiefs of gynecology, organization of a series of hospital grand rounds presentations about UI by urologists, and a statewide mailing of program materials and information about the AHCPR guidelines to primary-care physicians. In Oklahoma, some physicians at area hospitals received briefings at department or general medical staff meetings to reinforce the importance of asking patients about UI; in addition, the Oklahoma Geriatric Education Center conducted an education session about treatment options for UI.

The health-care impact of UI is likely to increase because of the changing demographic composition of the U.S. population. As a consequence, clinical providers and public health programs will need to strengthen capacities to prevent UI and to ensure that patients with this condition can receive appropriate treatment. Health-care providers should routinely ask elderly patients about this condition and associated problems, educate patients about noninvasive behavioral interventions for UI, and if necessary, refer patients for appropriate treatment.

## References

- Urinary Incontinence Guideline Panel, Public Health Service. Urinary incontinence in adults: clinical practice guideline. Rockville, Maryland: Agency for Health Care Policy and Research, 1992; publication no. (AHCPR)92-0038.
- 2. Consensus Conference. Urinary incontinence in adults. JAMA 1989;261:2685–90.
- 3. Harris T. Aging in the eighties: prevalence and impact of urinary problems in individuals age 65 years and over. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, NCHS, 1986. (Advance data no. 121).
- 4. Wetle TT, Scherr P, Branch LG, et al. Difficulty with holding urine among older persons in a geographically-defined community: prevalence and correlates. J Am Geriatr Soc 1995;43:349–55.
- 5. Wyman JF, Harkins SW, Fantl JA. Psychosocial impact of urinary incontinence in the community-dwelling population. J Am Geriatr Soc 1990;38:282–8.
- 6. Goldstein M, Hawthorne E, Engberg S, et al. Urinary incontinence: why people do not seek help. J Gerontol Nurs 1992;18:15–9.

### Urinary Incontinence — Continued

- 7. Burgio KL, Ives DG, Locher JL, Arena VC, Kuller LH. Treatment seeking for urinary incontinence in older adults. J Am Geriatr Soc 1994;42:208–12.
- Branch LG, Walker LA, Wetle TT, DuBeau CE, Resnick NM. Urinary incontinence knowledge among community-dwelling people 65 years of age and older. J Am Geriatr Soc 1994;42:1257– 63.
- 9. Mitteness LS. Knowledge and beliefs about urinary incontinence in adulthood and old age. J Am Geriatr Soc 1990;38:374–8.
- Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.

## National Breast Cancer Awareness Month — October 1995

October is National Breast Cancer Awareness Month, and October 19 has been designated National Mammography Day. CDC supports breast and cervical cancer early detection efforts through cooperative agreements with state health departments in all 50 states. Through a partnership with CDC, 35 states and nine American Indian tribal organizations offer affordable screening mammograms to low-income women.

Additional information about CDC's Breast and Cervical Cancer Early Detection Program is available from the Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC, telephone (770) 488-4226.

# Mammography Use — Wisconsin, 1980–1993

In the United States, efforts to reduce mortality from breast cancer focus primarily on secondary prevention (i.e., early detection and treatment). Since 1980, private, public, and voluntary organizations in Wisconsin have promoted screening mammography as a means for reducing the death rate from breast cancer (*1,2*). To assess the effectiveness of these efforts, the Division of Health, Wisconsin Department of Health and Social Services (DOH), analyzed data from annual statewide surveys of mammography providers during 1989–1993 and data about self-reported mammography use from the Behavioral Risk Factor Surveillance System (BRFSS) during 1987–1993. This report summarizes these analyses and trends in the number of mammograms performed annually in Wisconsin during 1980–1993.

An annual survey of all registered mammography providers in Wisconsin has been conducted since 1989. During 1980–1993, the number of mammography providers ranged from 76 to 236 (Table 1). Survey questionnaires are mailed annually to all mammography providers in conjunction with a mailing of DOH radiation-protection registration materials. The questionnaire asks each facility to estimate the total number of mammography referral and follow-up procedures, fees, and availability of low-cost screening services. The 1989 survey requested estimates of the total number of mam-

Mammography Use — Continued

			•			
	Mammogr	aphy provider survey	<b>BRFSS</b> <sup>†</sup>	% Difference		
Year	No. providers	Estimated no. mammograms	Estimated no. women who had a mammogram	(% BRFSS greater than provider survey)		
1980	76	31,000	NA <sup>§</sup>	NA		
1981	76	34,000	NA	NA		
1982	83	39,000	NA	NA		
1983	85	50,000	NA	NA		
1984	93	74,000	NA	NA		
1985	126	130,000	NA	NA		
1986	142	188,000	NA	NA		
1987	145	237,000	389,000	64%		
1988	167	276,000	499,000	81%		
1989	183	334,000	499,000	45%		
1990	198	383,000	516,000	35%		
1991	218	455,000	608,000	34%		
1992	228	466,000	638,000	37%		

TABLE	1. Estimated	l annual ni	umber of	' mammograms –	– Wisconsin.	. 1980–1993*

\*Based on data from annual mammography provider surveys for 1989–1993 (the 1989 survey requested information for 1980–1989) and the Behavioral Risk Factor Surveillance System (BRFSS) for 1987–1993.

607,000

<sup>†</sup>Standard errors for annual BRFSS estimates ranged from  $\pm 1.5\%$  to  $\pm 1.7\%$ .

517,000

<sup>§</sup>Not available.

236

1993

mograms performed during 1980–1989. The response rates for the five surveys conducted during 1989–1993 were 75%, 89%, 90%, 91%, and 91%, respectively. Data were adjusted for nonresponse to provide statewide estimates of the annual number of mammograms performed.

Trends in self-reported mammography use were determined by analyzing data from the BRFSS, which has included questions about mammography use since 1987. The BRFSS is a random-digit-dialed telephone survey of household residents aged  $\geq$ 18 years that provides population-based surveillance data about selected health behaviors. The total number of mammograms performed in the state each year during 1987–1993 was estimated from the BRFSS by multiplying the adult female population in Wisconsin by the proportion of women who reported having had a mammogram during the preceding 12 months. The number of adult women interviewed in Wisconsin for the annual BRFSS ranged from 673 (in 1990) to 857 (in 1993).

Analyses of the mammography provider surveys (1989–1993) and the BRFSS (1987–1993) indicated steady increases in the number of mammograms performed each year during 1980–1993 (Table 1). Based on the provider survey, the total number of mammograms performed each year increased nearly 17-fold, from 31,000 in 1980 to 517,000 in 1993. Compared with the provider survey, estimates based on the BRFSS were consistently higher, varying from 81% higher in 1988 to 17% higher in 1993. In addition, the number of mammography providers increased 310%, from 76 in 1980 to 236 in 1993. Standard errors for annual BRFSS estimates ranged from  $\pm 1.5\%$  to  $\pm 1.7\%$ . *Reported by: P Lantz, PhD, M Bunge, E Cautley, JL Phillips, PL Remington MD, State Chronic Disease Epidemiologist, Div of Health, Wisconsin Dept of Health and Social Svcs. Div of Field Epidemiology, Epidemiology Program Office, CDC.* 

**Editorial Note:** The findings in this report document a nearly 17-fold increase in the annual number of mammograms performed in Wisconsin during 1980–1993. Although the estimated number of mammograms performed each year differed

17%

### Mammography Use --- Continued

substantially by data source, the trends were similar for both sources. Two important factors probably contributed to the increase in mammography use during this period: 1) the substantial increase in the acceptance and use of screening mammography among physicians during the 1980s (*3*) and 2) initiation of extensive efforts to educate the public and health-care professionals about national screening mammography guidelines, which were implemented during the late 1980s (*4*). Other possible contributing factors include the initiation of low-cost mammography screening programs (*5*) and wider availability of high-quality, low-cost mammography equipment beginning during the early 1980s.

The findings in this report are subject to limitations associated with the two data sources. Although the provider survey is an example of a low-cost, efficient method to characterize trends in mammography use, it does not collect information about sociodemographic variables and may overestimate mammography use because data were based on the number of mammograms performed and some women receive more than one mammogram each year. In addition, the estimates based on the selfreported BRFSS data probably were higher than those from the provider survey for at least three reasons. First, some women who reported having had a mammogram during the previous 12 months probably received the mammogram >12 months previously (6-8). Second, women who participated in the BRFSS may not be representative of the total population of women in Wisconsin because they had telephones, were better educated, or were more likely to have had insurance coverage-factors related to an increased likelihood of having received a mammogram. Third, the BRFSS is a household survey that does not include institutionalized women (e.g., those in long-term-care facilities), who are less likely than noninstitutionalized women to receive mammograms (9).

The findings in this report are being used in Wisconsin to further identify groups of women who underuse mammography screening, develop intervention strategies to increase mammography use, and assess progress toward the year 2000 national health objectives for breast cancer and mammography (objectives 16.11 and 16.16) (*10*). This approach can be adapted for use by health departments in other states to assess the effectiveness of efforts to promote mammography screening.

### References

- 1. Remington PL, Lantz P. Mammography guidelines and practices in Wisconsin, 1987–1988. Wis Med J 1989;88:38–42.
- 2. Lantz P, Bunge M, Remington PL. Trends in mammography in Wisconsin, 1980–1989. Wis Med J 1990;89:281–2.
- 3. Anonymous. 1989 Survey of Physician's Attitudes and Practices in Early Cancer Detection. CA Canc J Clin 1990;40:77–101.
- 4. Council on Scientific Affairs. Mammographic screening in asymptomatic women aged 40 years and older. JAMA 1989;261:2535–42.
- Richards MJS, Inhorn SL. Breast cancer detection awareness project in Wisconsin, 1987–1988. Wis Med J 1989;88:7–9.
- 6. Biemer PP, Groves RM, Lyberg LE, Mathiowetz NA, Sudman S, eds. Measurement errors in surveys. New York, New York: John Wiley & Sons, 1991:134–7.
- 7. Whitman S, Lacey L, Ansell D, Chen EH, Dell J, Phillips CW. Do chart reviews and interviews produce the same information about breast and cervical cancer? Int J Epi 1993;22:393–7.
- 8. Degnan D, Harris R, Ranney J, Quade D, Earp JA, Gonzalez J. Measuring the use of mammography: two methods compared. Am J Public Health 1992;82:1386–8.
- Kenny J, Keenan P. A survey of breast cancer detection methods in long-term care facilities. J Gerontol Nurs 1991;17:20–2.

### Mammography Use — Continued

 Public Health Service. Health people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)90-50212.

Notice to Readers

# Publication of Draft Guideline for Prevention of Intravascular Device-Related Infections

The Hospital Infection Control Practices Advisory Committee and CDC published for public comment the *Draft Guideline for Prevention of Intravascular Device-Related Infections* in the September 27, 1995, *Federal Register*.\* Copies of the document (stock number 069-001-000-89-1) are available for \$8.00 from the Order and Information Desk, U.S. Government Printing Office, Washington, DC 20402-9329; telephone, (202) 512-1800. The draft document also can be viewed and photocopied at U.S. government depository libraries or other public or academic libraries that receive the *Federal Register*. Comments must be received in writing by October 30, 1995, at CDC, Attention: IV Guideline, Mailstop E-69, 1600 Clifton Road, NE, Atlanta, GA 30333.

\*60 FR 49978-50006.

Notice to Readers

# Update: Availability of Electronic MMWR on Internet

Since January 27, 1995, the *MMWR* series has been available in an electronic format on the Internet (1); current and past copies (since January 15, 1993) in the *MMWR* series are available electronically. To access CDC's Internet file servers, users must have Internet access and software that retrieves files by file transfer protocol (FTP) or software that will access the World Wide Web (WWW). As of May 1, changes have been made in the names of some directories used to access the electronic *MMWR* files and Adobe<sup>TM</sup> Acrobat<sup>TM\*</sup> Reader software (produced by Adobe, Inc.) required to view the electronic *MMWR* in Adobe<sup>TM</sup> Acrobat<sup>TM</sup> portable document format (.pdf). Following are the revised instructions.

# Where to Obtain MMWR Through the Internet

Users can receive *MMWR* by connecting to the following servers:

**CDC FTP server.** Use FTP to connect to CDC's file server *ftp.cdc.gov.* Supply user name **anonymous**, and give the user's Internet e-mail address in response to the prompt for the password. Select the subdirectory **/pub/publications**, then subdirec-

<sup>\*</sup>Use of trade names and commercial sources is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

### Notices to Readers — Continued

tory **mmwr**. Select subdirectory **wk** for the *MMWR* (weekly), subdirectory **ss** for *CDC Surveillance Summaries*, or subdirectory **rr** for *MMWR Recommendations and Reports*. Then view the listing, and download the files of interest.

Each .pdf file represents a single issue of *MMWR* and is named according to the publication, volume, and issue number. For example, mm4301.pdf contains all pages for the *MMWR* (weekly) Volume 43, Number 1. Files with the prefix rr or ss represent *MMWR Recommendations and Reports* or *CDC Surveillance Summaries*, respectively.

**CDC WWW server**. Programs that browse the WWW (e.g., Mosaic) allow particularly easy navigation of the Internet. Use WWW software to connect to the *MMWR* WWW pages at either of the following addresses:

http://www.cdc.gov/

Go to **Publications, Products, and Subscription Services**, then **Morbidity and Mor-tality Weekly Report (MMWR)** to find the *MMWR*, OR

http://www.cdc.gov/epo/mmwr/mmwr.html

To access the *MMWR*, follow the instructions that appear on the screen.

## How to Obtain MMWR from the Public E-Mail List

An automatic service is available for receiving a weekly notification of the contents of the *MMWR* and instructions on how to electronically retrieve the complete *MMWR* file through e-mail. To subscribe, send an e-mail message to *lists@list.cdc.gov*. The body content of the e-mail should read **subscribe mmwr-toc**. The subscriber will be added automatically to the mailing list and receive a weekly table of contents and other announcements regarding the electronic *MMWR*. Subscribers will also receive instructions about additional e-mail commands, such as retrieving documents, sending messages to the system operator, canceling a subscription, or sending an e-mail change of address.

Some sites may have to process the received mail attachments with a uudecode utility to create an acceptable binary file readable by Acrobat<sup>TM</sup>. If the user's e-mail system does not have uudecode, the user should contact his/her e-mail administrator. Uudecode software is available free of charge at many FTP sites on the Internet. Questions about the list service should be sent to *mmwr-questions@list.cdc.gov* by e-mail.

## How to Obtain Free Reader Software

Adobe<sup>TM</sup> Acrobat<sup>TM</sup> Reader software is necessary to view the contents of the *MMWR* electronic files. Free Adobe<sup>TM</sup> Acrobat<sup>TM</sup> Reader software is available on the Internet from CDC and Adobe, Inc.

**From CDC FTP server.** To download Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader software through the Internet, use FTP to connect to CDC's file server **ftp.cdc.gov**. Supply the user name **anonymous** and your Internet e-mail address when prompted for the password. Select the subdirectory **pub**, then the subdirectory **Acrobat**. Download the appropriate file (DOS, Macintosh<sup>®</sup>, UNIX<sup>®</sup>, Windows<sup>™</sup>).

**From CDC WWW server.** Free software also can be downloaded by connecting to the WWW. Using WWW software, connect to the following addresses for *MMWR* documents:

Notices to Readers — Continued

http://www.cdc.gov/

Choose Publications, Products, and Subscription Services, then Morbidity and Mortality Weekly Report (MMWR), and finally Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader. Read the instructions. Then choose Obtain a free copy of the Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader. Select "download to disk" from the WWW software, and download the appropriate DOS, Macintosh<sup>®</sup>, UNIX<sup>®</sup>, or Windows<sup>™</sup> reader(s).

http://www.cdc.gov/epo/mmwr/mmwr.html

Choose Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader. Read the instructions. Then select Obtain a free copy of the Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader. Select *"download to disk"* from the WWW software, and download the appropriate DOS, Macintosh<sup>®</sup>, UNIX<sup>®</sup>, or Windows<sup>™</sup> reader(s).

**From Adobe, Inc., FTP server**. Free Adobe<sup>™</sup> Reader software is available by connecting to the anonymous FTP site *ftp.adobe.com* to download the software.

Adobe, Inc., also has a dial-in electronic bulletin board (BBS) at (206) 623-6984. Connecting to the BBS requires a modem and a terminal emulation program that supports VT-100 or ANSI emulation. Modem settings should be 8 data bits, 1 stop bit, and no parity. Adobe's BBS will support modems with speeds up to 14.4 kb. To use the BBS, the user should log in with his/her own name as the user ID, and select a password. Adobe BBS will not accept a blank as either the user ID or the password.

**From Adobe, Inc., WWW server.** Using WWW software, connect to *http://www. adobe.com/* and follow the instructions.

## **Adobe Software Support**

Adobe<sup>™</sup> Acrobat<sup>™</sup> software installation and use questions should be directed to Adobe<sup>™</sup> Acrobat<sup>™</sup> software support. Assistance is available Monday–Thursday 6 a.m.–5 p.m. and Friday 6 a.m.–2 p.m. (Pacific time) at the following telephone numbers: Adobe<sup>™</sup> Acrobat<sup>™</sup> Reader Support, (900) 555-2362; Adobe<sup>™</sup> Acrobat<sup>™</sup> Technical Support, (408) 986-6580; Adobe<sup>™</sup> Technical Support BBS, (206) 623-6984.

# Users should not call CDC's MMWR office for software support.

Reference

1. CDC. Availability of electronic MMWR on Internet. MMWR 1995;44:48-50.

## Erratum: Vol. 44, No. 37

In the report "Syringe Exchange Programs—United States, 1994–1995," the following limitation should have been included in the second full paragraph on page 691: "Because of incomplete reporting, the total number of syringes exchanged in 1992 is underestimated." In the next paragraph, the reference cited for the Tacoma hepatitis study is incorrect. The correct reference is "Hagan H, Des Jarlais DC, Friedman SR, et al. Reduced risk of hepatitis B and hepatitis C among injecting drug users participating in the Tacoma syringe exchange program. Am J Public Health (in press)." All subsequent references in the paragraph should be renumbered accordingly (i.e., references 7, 6, and 8 should become 7, 8, and 9).

The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to *lists@list.cdc.gov*. The body content should read *subscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at http://www.cdc.gov/ or from CDC's file transfer protocol server at *ftp.cdc.gov*. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (404) 332-4555.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Director, Centers for Disease Control and Prevention David Satcher, M.D., Ph.D. Deputy Director, Centers for Disease Control and Prevention Claire V. Broome, M.D. Director, Epidemiology Program Office Stephen B. Thacker, M.D. M.Sc.	Editor, <i>MMWR</i> Series Richard A. Goodman, M.D., M.P.H. Managing Editor, <i>MMWR</i> (weekly) Karen L. Foster, M.A. Writers-Editors, <i>MMWR</i> (weekly) David C. Johnson Darlene D. Rumph-Person Caran B. Wilhanks
Stephen B. Thacker, M.D., M.Sc.	Caran R. Wilbanks

☆U.S. Government Printing Office: 1996-733-175/27020 Region IV