Influenza – Continued

on December 5 and continuing to December 10, an outbreak of influenza-like illness among her students increased the class absentee rate to 50%. Throat swabs from the teacher and her husband and son were collected on December 7. The class was not tested. An influenza type A(H3N2) virus was isolated from the teacher's son.

In New York City, six type A(H3N2) influenza viruses were isolated from inmates at Rikers Island Prison in December. Five isolates were recovered from young adults in the adolescent detention unit of Rikers Island Prison who had influenza-like illnesses from December 17 to December 19. During the outbreak, the number of patients on sick call with upper respiratory illnesses increased from approximately five to 20 daily. In addition, seven type A(H3N2) influenza virus isolates were identified from elderly patients at an extended-care facility in New York City who had influenza-like illnesses in an outbreak that began in mid-December. From December 20 to December 28, there were 30 patients with influenza-like illnesses among the approximately 500 nursing-home residents.

In Illinois, two type A(H3N2) isolates were collected from students in school outbreaks that took place in mid-December in two counties outside Springfield. Four type A(H3N2) isolates were identified from students at the Chicago campus of Loyola University who reported to the student health center in December. Approximately 170 patients and staff members at the Hines Veterans Administration Hospital in Chicago had influenza-like illness in an outbreak that began in mid-December. Type A(H3N2) viruses were identified from each of the five specimens tested in the outbreak.

Isolates of influenza virus type A(H3N2) from sporadic cases have also recently been reported from Arizona, Colorado, Florida, New Jersey, and New Mexico. Type A(H3N2) isolates were reported from Utah in conjunction with school outbreaks in December. Twelve states have now reported isolates of type A(H3N2) influenza virus this season (Arizona, California, Colorado, Florida, Illinois, Nevada, New Jersey, New Mexico, New York, Texas, Utah, and Wisconsin). One type A(H1N1) isolate from Houston, Texas, and type B influenza virus isolates from Hawaii, Illinois, Ohio, and Texas have also been identified.

Reported by P Hom, MD, Sacramento County Health Dept, California Dept of Health Svcs; V Tucci, C Singer, MD, Long Island Jewish Hospital, Nassau County Health Dept, Long Island, D Bucher, PhD, Mt Sinai School of Medicine, H Neu, MD, Columbia Presbyterian Hospital, J Hayes, F Silverstone, MD, New York City, I Spigland, MD, R Cohen, MD, Montefiore Medical Center, New York City, S Beatrice, PhD, S Friedman, MD, New York City Dept of Health; B Haslam, Utah Dept of Health, M Beem, MD, Univ of Chicago Medical School, C Pachuki, MD, Hines Veterans Administration Hospital, M Wu, MD, Loyola University, Chicago, R Murphy, PhD, Illinois Dept of Public Health; C Linnemann, MD, Univ of Cincinnati Hospital, Ohio; P Gross, MD, Hackensack Medical Center, New Jersey; G. Meiklejohn, MD, University of Colorado, Denver; E Buff, MS, S Lieb, MS, F Wellings, PhD, Florida Dept of Health and Rehabilitative Svcs; State Epidemiologists and Laboratory Directors; Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Phytophotodermatitis among Grocery Workers — Ohio

On July 5, 1984, a 33-year-old woman presented to an Ohio medical clinic with a bullous, erythematous, nonpruritic, discrete rash of the left forearm of 6 days' duration. An occupational history indicated that she was a cashier at a supermarket. Several co-workers were reported to have had similar rashes that were attributed to handling celery.

The physician alerted the National Institute for Occupational Safety and Health (NIOSH), and a NIOSH medical officer visited the market. A cross-sectional study of all employees was undertaken. Fifty-two (95%) of 55 current full- and part-time employees were interviewed and examined between July and September. Fourteen (27%) of these workers had papular, well-circumscribed rashes confined to the upper extremities, with residual blistering or hyperpigmentation. Dates of rash onset ranged from April through August, with a peak in July. All

Phytophotodermatitis — Continued

cases occurred among cashiers, baggers, and produce clerks (Table 1). None occurred among shelf stockers, delicatessen clerks, meat clerks, or managers.

Cases were significantly more likely than noncases to have had contact with fresh vegetables (100%, compared with 39%; p = 0.009) and with fresh flowers (92%, compared with 29%; p = 0.009). Also, cases were signficantly more likely than noncases to have used a tanning salon during the outbreak period (36%, compared with 5%; p = 0.01). There was suggestive evidence of a multiplicative interaction between produce exposure and use of a tanning salon in the etiology of cases (Figure 1).

On the basis of history and physical examination, a diagnosis of phytophotodermatitis was made in this outbreak. NIOSH recommended that employees handling produce wash exposed areas of hands, wrists, and forearms regularly and avoid either tanning salons or excessive exposure to sunlight. No new cases occurred after October, which is typical for the seasonal pattern of occurrence of this disease.

Reported by Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Skin disorders appear to represent a widespread but largely unrecognized problem among supermarket employees. Many of the rashes among these workers appear to be phytophotodermatitis, a well-circumscribed rash evoked by contact with linear furanocoumarins (psoralens), followed by exposure of the skin to long-wave ultraviolet light (350 nm). It is associated with exposure to a wide variety of fruits, flowers, and vegetables, including celery, dill, parsley, oil from lime peels, parsnip, oil of Bergamont, and chrysanthemums. Exposure to sunlight is sufficient to provoke phytophotodermatitis following contact with psoralens. However, the use of artificial ultraviolet light in tanning salons appears in the present instance to have enhanced this effect.

In phytophotodermatitis, the reaction is typically confined to the initial site of contact and is characterized by redness and blistering in the absence of itching and by residual hyperpigmentation (*1*). This type of reaction differs from an allergic contact dermatitis in that it requires exposure to ultraviolet light and does not require a period of sensitization. In addition, an allergic dermatitis is usually pruritic.

This outbreak resembles a series of episodes investigated by NIOSH in supermarkets throughout the midwest in 1980-1981. In those episodes, baggers had the highest attack rates of dermatitis (51%). Frequent contact with unpackaged celery and exposure to sunlight during the work-shift were significantly associated with cases (*2*). Also, an investigation of agricultural field workers in Michigan in 1961 found that celery infected with pink rot (*Sclerotinia sclerotiorum*) was associated with an outbreak of photodermatitis (*3*).

It is not possible at present to ascribe the etiology of this outbreak to any single foodstuff. However, since only workers who had contact with fresh produce developed rash, it appears likely that the psoralen-containing agent in the present outbreak is to be found among the vegetables, fruits, or flowers handled in this market. Surveillance of skin rashes in supermarket workers and investigation of additional outbreaks may help to identify a specific etiologic agent.

TABLE 1. Phototoxic dermatitis among grocery workers — Ohio

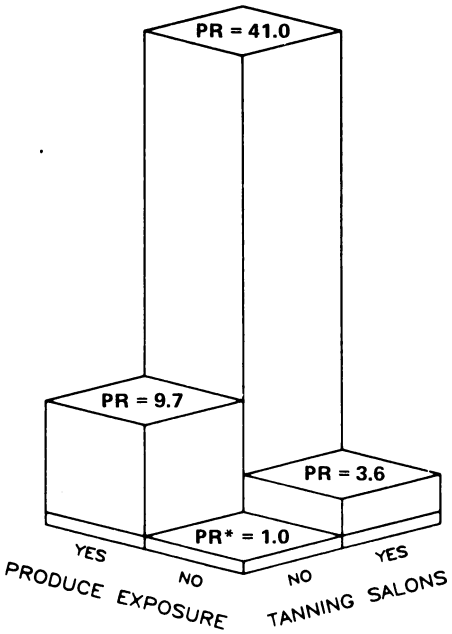
Job category	Employees	Cases (%)
Produce clerk	7	4 (57)
Bagger	10	5 (50)
Cashier	13	5 (38)
Other	22	0 (0)
Total	**52**	**14 (27)**

Phytophotodermatitis — Continued

References

1. Mitchell J, Rook A. Botanical dermatology: plants and photodermatitis injurious to the skin. Vancouver, British Columbia, Canada:Greenglass Ltd., 1979:41.
2. National Institute for Occupational Safety and Health. Health hazard evaluation determinination report no. HE 80-225, Cincinnati, Ohio: National Institute for Occupational Safety and Health, June 1982.
3. Birmingham DJ, Key MM,.Tubich, GE, Perone, VB. Phototoxic bullae among celery harvesters. Arch Dermatol 1961;83:127-41.

FIGURE 1. Risk of rash among grocery workers, by exposure to fresh produce and use of tanning salons — Ohio, April-August 1984



*Prevalence ratio, compared with a PR of 1.0 for workers with neither produce exposure nor exposure to tanning salons.

Reye Syndrome — United States, 1984

For the 1984 surveillance year,* 190 cases of Reye syndrome (RS) meeting CDC's case definition† were reported. Although delayed reports will increase the number of cases for 1984 somewhat, the 1984 total is presently among the lowest annual totals reported through the National Reye Syndrome Surveillance System (NRSSS) since its initiation in December 1973 (Table 1).

*For the purposes of surveillance, Reye syndrome years extend from December 1 to November 30 (i.e. the 1984 year runs from December 1, 1983, to November 30, 1984). The data for 1984 are preliminary and include cases reported as of January 8, 1985.

†The CDC case definition is (1) acute noninflammatory encephalopathy documented by the clinical picture of alteration in the level of consciousness and, if available, a record of cerebrospinal fluid containing eight leukocytes or less per mm^3, or histologic sections of the brain demonstrating cerebral edema without perivascular or meningeal inflammation; (2) fatty metamorphosis of the liver diagnosed by either biopsy or autopsy or a threefold or greater rise in the levels of either the SGOT, SGPT, or serum ammonia; and (3) no known more reasonable explanation for the cerebral or hepatic abnormalities.

CENTERS FOR DISEASE CONTROL

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Provisional Public Health Service Inter-Agency Recommendations for Screening Donated Blood and Plasma for Antibody to the Virus Causing Acquired Immunodeficiency Syndrome

In March 1983, the U.S. Public Health Service issued inter-agency recommendations on the prevention of acquired immunodeficiency syndrome (AIDS) (*1*). Included was the recommendation that members of groups at increased risk for AIDS should refrain from donating plasma and/or blood. That recommendation was made to decrease the risk of AIDS associated with the administration of blood or blood products, which accounts for about 2% of all reported AIDS cases in the United States.

Evidence has shown that a newly recognized retrovirus is the cause of AIDS. Although this virus has been given several names, including human T-lymphotropic virus type III (HTLV-III) (*2*), lymphadenopathy-associated virus (LAV) (*3*), and AIDS-associated retrovirus (ARV) (*4*), it is referred to as HTLV-III in this discussion. Tests to detect antibody to HTLV-III will be licensed and commercially available in the United States in the near future to screen blood and plasma for laboratory evidence of infection with the virus. The antibody tests are modifications of the enzyme-linked immunosorbent assay (ELISA), which uses antigens derived from whole disrupted HTLV-III (*5*).

There is considerable experience with the ELISA test in research laboratories, but much additional information will be gathered following its widespread application. In the early phases of testing, a number of false-positive tests may be encountered. Adjustments in interpretation are anticipated as more is learned about the performance of the test in an individual laboratory and about the specific proportion of falsely positive or falsely negative tests in the screening setting where the test is used.

The present recommendations concern the use of these tests to screen blood and plasma collected for transfusion or manufactured into other products. They are intended to supplement, rather than replace, the U.S. Food and Drug Administration's recently revised recommendations to blood and plasma collection facilities and the earlier inter-agency recommendations (*1*). Additional public health applications of these tests in the understanding and control of AIDS will be described in a subsequent report.

BACKGROUND

Antibody Detection Studies

The ELISA test has been used in many research programs for detecting antibodies to HTLV-III in patients with AIDS and with AIDS-related conditions. In different studies, HTLV-III antibody was found to range from 68% to 100% of patients with AIDS, and in 84%-100% of persons with related conditions, such as unexplained generalized lymphadenopathy (*5-7*). Serologic surveys have yielded variable seropositivity rates in groups at increased risk for AIDS: 22%-65% of homosexual men (*8-11*), 87% of intravenous-drug abusers admitted to a detoxification program in New York City (*12*), 56%-72% of persons with hemophilia A (*13,14*), and 35% of women who were sexual partners of men with AIDS (*15*). In contrast to