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Hepatitis A Outbreak In Central Virginia

Incidence

As of May 24, 92 cases of hepatitis A have been reported from Richmond City and the surrounding counties of Henrico, Hanover and Chesterfield, compared with 21 for the same time period in 1988 (see epidemic curve).

Community-wide outbreaks of hepatitis A usually involve the 5–9 year age group, in contrast to the 20–29 year age group most commonly affected during endemic transmission. Such a shift has not yet been observed in this outbreak, where 46% of cases have involved the 20–29 year age group (mean age of cases is 32 years with no significant difference in age among counties). The sex distribution (62% male) is similar to that noted in other community-wide outbreaks.

The incidence of hepatitis A infection has been rising throughout the United States for the past five years. This same trend has been observed in Virginia where the rate has increased from 3.0/100,000 population in 1985 to 6.1/100,000 population in 1988. This trend may be part of a cyclical pattern; the national epidemics of hepatitis A have taken place approximately once a decade, with the most recent peaks occurring in 1954, 1961 and 1971.

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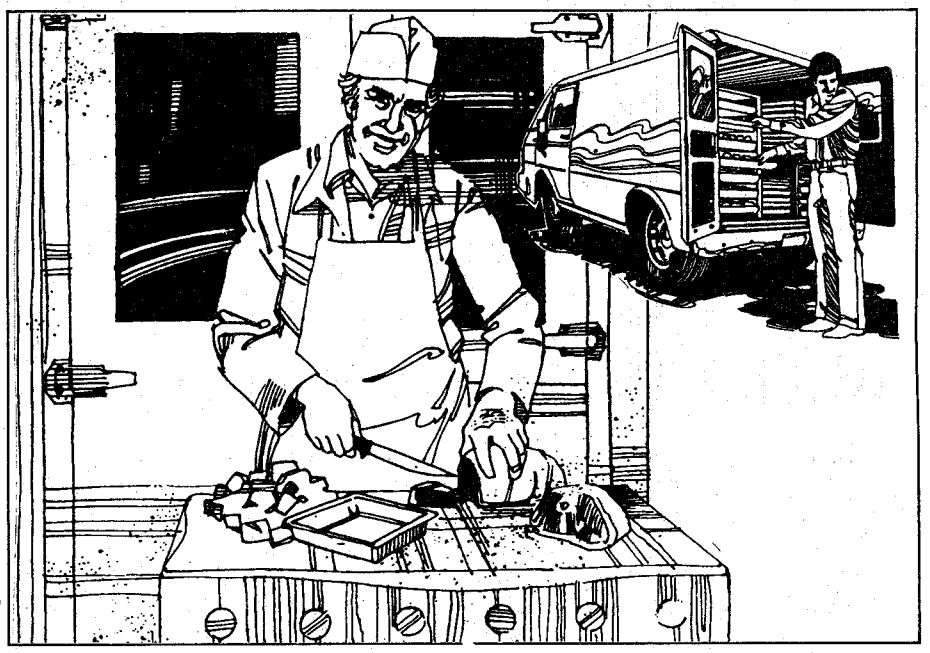

Mode of Transmission

The Richmond area outbreak appears to be caused primarily by person-to-person spread. Familial clusters, including husband and wife pairs, account for 16 of the reported cases. Two limited clusters were traced to foodborne transmission from food service workers, and one cluster was linked to a food preparer for a private party. Fourteen percent of the cases were employed in the food service industry, similar to the 12% of food service workers among cases reported to CDC from 1975–1980. Nationally, approximately 1000 cases in food service workers were reported to CDC per year from 1976–1980, with only 4 foodborne outbreaks for each of those years.

A risk factor recently identified in other community-wide outbreaks of hepatitis A is illicit drug use. This association has been noted for use of marijuana, cocaine, methamphetamine and heroin, including, for some drugs, only nonparenteral usage. The mode of transmission associated with drug use has not been described, although it has been suggested that practices associated with the concealment in body cavities or use of these drugs may facilitate fecal-blood transmission or fecal-oral transmission, or both.

Control Measures

The Virginia Department of Health and the respective local health departments have intensified

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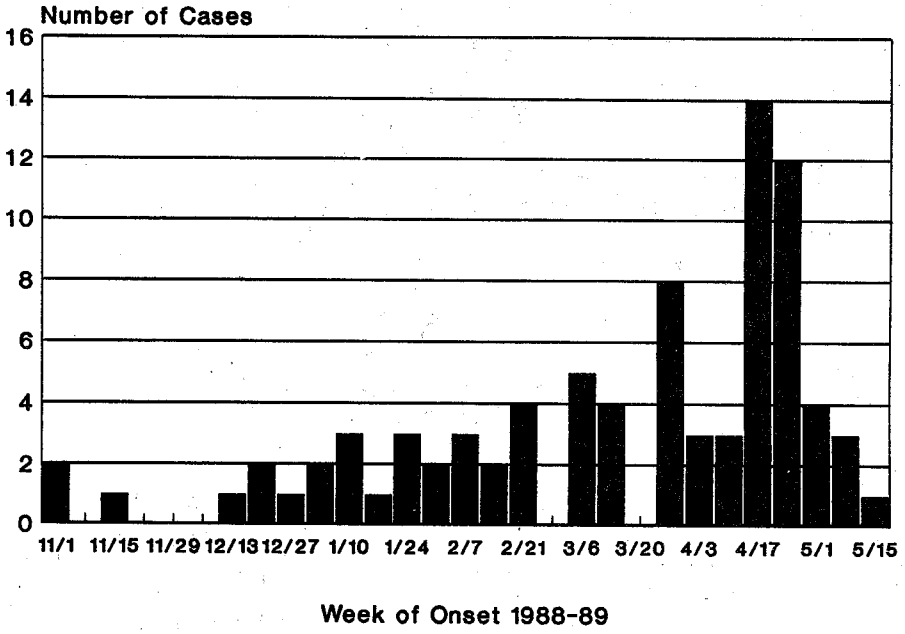
efforts to identify cases, interview cases, trace contacts of cases, and administer immune globulin. Area daycare centers and food service establishments have been notified of the outbreak and the need to reinforce personal hygiene recommendations. Additional measures have been taken when a case occurred in a high risk environment such as a restaurant or a daycare center.

In a recent letter, the Office of Epidemiology requested that physicians in the Richmond metropolitan area assist the Department by maintaining a high index of suspicion for hepatitis A in patients presenting with nonspecific symptoms of fever, nausea, malaise, anorexia, etc.; ordering an IgM antibody test on patients with suspected hepatitis A virus (HAV) infection; treating household contacts and sexual partners of confirmed cases with immune globulin ([IG], dose = .02 ml/kg IM) within two weeks of exposure; and promptly reporting cases to the local health department or the Office of Epidemiology, Virginia Department of Health.

Epidemic Curve for Hepatitis A Outbreak
Richmond Metropolitan Area



Syphilis Incidence Increasing

Recent Trends

In the past decade, the morbidity and associated demographics of syphilis have changed dramatically. An increase in the number of cases has been observed both nationally and in Virginia. The incidence of primary and secondary syphilis reported by the Centers for Disease Control was 14.6/100,000 population in 1987, a 25% increase over 1986. This rate was equal to that seen in 1982, and the highest rate since 1950. In Virginia, primary and secondary syphilis increased from a rate of 5.4/100,000 for 1985 through 1987 to 7.6/100,000 in 1988. This is much lower than the national average, but is still higher than the 1990 US Public Health Service objective of 7 cases/100,000.

The national rate of primary and secondary syphilis for 1987 in white males decreased from 6.4 to 5.7 per 100,000 population, apparently due to a decrease among homosexual men.[1] A similar phenomenon appears to be occurring in Virginia. Over the last two years, the proportion of reported cases in gay and bisexual males has decreased, probably as a result of safer sex practices.

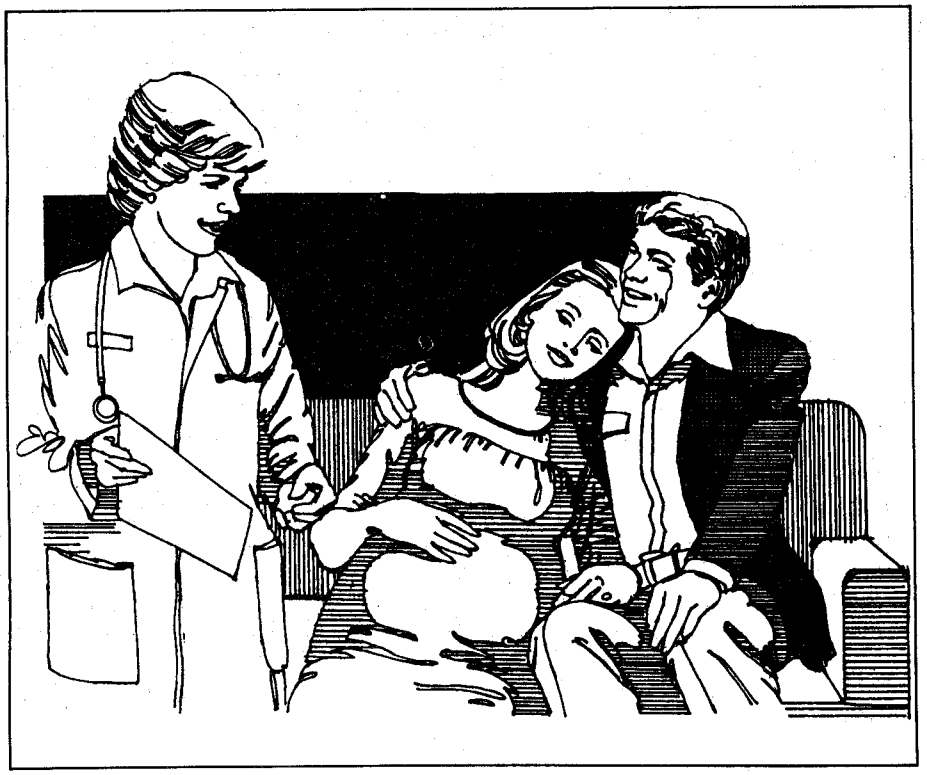
The increase noted in Virginia appears to be occurring in heterosexuals, predominantly in females. An increase in syphilis in women frequently results in an increase in the number of cases of congenital syphilis, and this has been observed over the past two years. In late 1988, a cluster of congenital syphilis cases occurred, with one fatal case. The number of cases in this cluster was greater than would have been expected based on the increased number of cases of syphilis in pregnant women, suggesting a failure in the detection and treatment of early syphilis in pregnant women. No single maternal characteristic was associated with failure to receive treatment in these cases. Eighty percent of these women received prenatal care. Of those, 50% were in the private sector for some part of that care, while 50% received their care from local health departments.

Prenatal Screening

Guidelines for prenatal screening for syphilis in pregnant women have been published by the Centers for Disease Control[2] and include the following:

- Perform a maternal serologic test for syphilis (STS) at the first visit, unless previous test results from this pregnancy are available.
- A second STS should be performed at the beginning of the third trimester of pregnancy (28 wks) unless the first visit was during the third trimester. Identifying and treating a case in the latter part of the third trimester may result in failure of treatment for the fetus. This is especially important for women with a history of a previous sexually transmitted disease (STD) and women with a history of drug abuse.

- All patients treated for another STD during pregnancy should be retreated for syphilis one month after treatment is completed.
- Although false positive tests may occur, pregnant women should be treated if they have a positive STS and syphilis cannot be excluded with certainty. If a patient has a reactive nontreponemal test i.e. VDRL (Veneral Disease Research Laboratory) or RPR (Rapid Plasma Reagin), a nonreactive treponemal test i.e. FTA-ABS (Fluorescent Treponemal Antibody Absorption) or MHA-TP (Microhemagglutination Assay for Antibody to *T. pallidum*), and is without clinical or epidemiologic evidence of syphilis, treatment is unnecessary. Both the quantitative nontreponemal and the confirmatory tests should be repeated in 4 weeks, since the treponemal tests may be negative early in the course of the disease. If clinical or serologic evidence of syphilis is present, or if the diagnosis cannot be excluded with reasonable certainty, then the patient should receive treatment. Because cases of syphilis often occur in populations in whom follow-up may be difficult, a high index of suspicion should be used in assessing the need for therapy.
- Nontreponemal tests tend to rise nonspecifically during pregnancy, which can confuse a diagnosis of reinfection. Patients who have a documented history of adequate treatment do not need to be retreated unless clinical, serologic or epidemiologic evidence of reinfection is present. This evidence consists of lesions with positive darkfield exams, a fourfold rise in titer for more than two weeks, or a history of recent exposure to someone with early syphilis.
- Provide each patient with a card that includes the test performed, the date, result and treatment received. The clinic or physician name and telephone number should be included for obtaining additional information if necessary.
- All physicians and clinics should maintain a list of STS results arranged by test date and patient's name for one year after the pregnancy is terminated.
- Label lab slip requests as "prenatal." This will allow the STD program monitoring those slips to readily identify positive test results in pregnant women and initiate rapid follow-up.



- To reduce the risk of acquiring syphilis, instruct pregnant women who are not involved in a monogamous relationship to insist that their sex partners use condoms throughout pregnancy.
- All confirmed cases of early syphilis should be reported to the local or state health department so that sex partner identification and treatment can be accomplished. If an infected sex partner remains untreated, the woman and fetus remain at high risk for reinfection.

Partner notification, a component of STD control programs for decades, is highly confidential and depends upon voluntary cooperation of the patient. Some patients choose to inform their sexual partners directly. Health department personnel can assist patients in doing this. Other patients request assistance in notifying all or some of their sexual partners. They voluntarily provide names, descriptions and addresses so that notifiction can be done by health department staff. Neither the patient's nor the physician's name is revealed to sex partners.

Pregnancy testing sites need to be aware that any woman with a positive pregnancy test should also have a card RPR performed on-site and at the same visit. If the test is positive, arrangements should be made for immediate referral for treatment. Pregnancy testing sites include those in family planning clinics, schools, adolescent health care clinics, hospital emergency rooms, as well as private walk-in clinics and detention facilities.

STD clinics should screen all women of childbearing age as to last menstrual period. If pregnancy is likely, patients should be scheduled for a pregnancy test as soon as possible. In addition, an RPR test should be performed on all patients at STD clinics. Patients who are diagnosed with another STD in a private physician's office should also have an RPR test performed.

Treatment of Syphilis in Pregnancy

Treatment of choice is penicillin regardless of the stage of pregnancy, except in penicillin allergic patients. Dosage schedules for treatment of maternal syphilis are as follows:[1]

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- Primary, secondary or early latent (duration <1 year) should be treated with benzathine penicillin G, IM, in a total dose of 50,000 U/kg, not to exceed 2.4 million U.
- Syphilis of >1 year duration, except neurosyphilis,[3] should be treated with benzathine penicillin G 50,000 U/kg IM (not to exceed 2.4 million U), weekly for three successive weeks.

Recommendations for penicillin allergic patients are as follows. Penicillin may be given to penicillin allergic patients if skin tests to minor and major penicillin determinants are negative or skin tests are positive but the patient is desensitized. Tetracycline is not recommended for pregnant women because of possible adverse effects on the fetus. Erythromycin is generally not recommended except for women with documented penicillin allergy who are not candidates for desensitization. If erythromycin is used, there is a risk of treatment failure, and these women and their infants need to be followed closely to assess that possibility.[4]

To insure adequate treatment of pregnant women with syphilis and to guard against treatment failures and reinfection, women who have undergone treatment should be tested monthly during the remainder of their pregnancy. If they show a fourfold rise in titer, they should be retreated, since treatment failure or reinfection cannot be ruled out. Treated women who do not show a fourfold drop in titer over a three month period should also be retreated. After delivery, follow-up is as for nonpregnant patients.

Congenital Syphilis

The diagnosis of congenital syphilis is not always clinically obvious. To make matters worse, there are reported cases of congenital syphilis in which an initial STS performed on the infant was negative. Space does not permit a discussion of the appropriate clinical workup of suspected congenital syphilis. For that information and current treatment guidelines for infected infants, physicians should consult the Office of Epidemiology at 804/786-6261 or refer to published guidelines.[1,5]

The provisional case definition now used by the Virginia Department of Health includes every infant <12 months of age with one of the following:

- A reactive nontreponemal test confirmed by a treponemal test for syphilis, or
- A positive darkfield examination of a lesion on a non-oral mucous membrane, or
- A positive fluorescent antibody exam for syphilis on any lesion.

All cases that meet the provisional definition should be reported to the local or state health department.

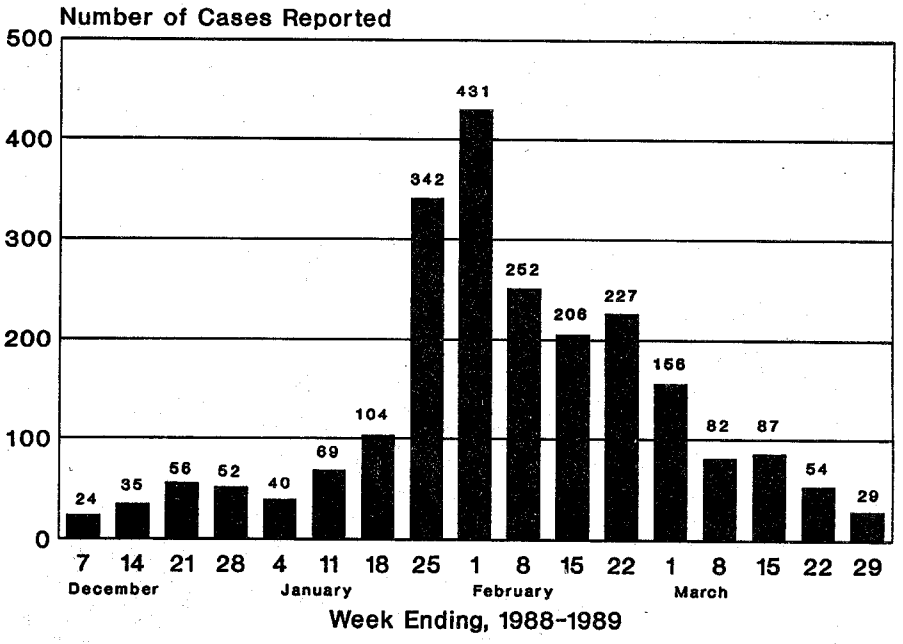
In summary, early syphilis and congenital syphilis are increasing both in Virginia and across the country. Maintaining a high index of suspicion for the diagnosis, along with aggressive treatment and intensive (and timely) follow up of cases may limit this trend.

Submitted by: L. Penberthy, R. Wimberley, M. Cader, Office of Epidemiology, Virginia Department of Health.

References:

1. Centers for Disease Control. Syphilis and congenital syphilis—United States, 1985–1988. MMWR 1988; 37:486–89.
2. Centers for Disease Control. Guidelines for the prevention and control of congenital syphilis. MMWR 1988; 37 (Suppl no. S-1):1–13.
3. Centers for Disease Control. 1985 STD Treatment Guidelines. MMWR 1985; 34 (Supl):75s–108s.
4. Mascola L., Pelosi R. Inadequate treatment of syphilis in pregnancy. Am J Obstet Gyn 1984; 150:945–47.
5. Committee on Infectious Diseases. 1988 Red Book. 21st Ed. American Academy of Pediatrics. Elk Grove Village Ill, pp. 400–7.

Influenza-like Illness in Virginia
Cases Reported by Sentinal Physicians



Surveillance was based on weekly reports from 39 physicians representing the 5 health districts in Virginia. Influenza B/Victoria was isolated from the Central, Eastern and Northwest regions. Influenza A/Taiwan was isolated from the Northwest, Eastern and Central regions. No isolates of A/Sichuan were identified. Positive serologies for both A/Taiwan and B/Victoria were identified from the Southwest region.

THIS SIDE TO BE COMPLETED BY PHYSICIAN OR HEALTH CARE PROVIDER

VIRGINIA DEPARTMENT OF HEALTH
MEMORY LOSS DISORDERS QUESTIONNAIRE

GENERAL INSTRUCTIONS: This form should be filled out as fully as possible for any adult in the State of Virginia who has progressive memory loss, as provided in the Code of Virginia, Title 32.1, Article 9.1. Please mail completed forms to:

Virginia Department of Health, ADRD Registry
109 Governor Street, Room 701
Richmond, Virginia 23219

Date of Report: _____

PATIENT'S FULL NAME: _____ **DATE OF BIRTH:** _____

Provider's Name: _____ Speciality: _____

Name of Facility: _____ Type of Facility: _____

Street Address: _____ Telephone Number: (____)_____

City: _____ County: _____ State: _____ Zip Code: _____

May we contact this patient's guardian for additional information pertaining to memory loss?
☐ Yes ☐ No (If yes, provide name and address on reverse side.)

CLINICAL PROCEDURES AND RESULTS

TEST	NORMAL	ABNORMAL	NOT DONE	YEAR DONE
B12				
Folate				
Thyroid Function Test				
Syphilis Serology				
CT Scan of Head				
EEG				
Lumbar Puncture				
Brain Biopsy				
Autopsy (specify laboratory)				
Other (specify)				

CAUSES OF CHRONIC DEMENTIA	PRESENT AND RELATED	PRESENT AND UNRELATED	PRESENT AND MAY OR MAY NOT BE RELATED
AIDS			
Alcohol Abuse			
Probable Alzheimer's Disease			
Cerebral Vascular Disease			
Creutzfeldt-Jacob Disease			
Depression			
Head Trauma			
Normal Pressure Hydrocephalus			
Parkinson's Disease			
Space-Occupying Lesion			
Toxic or Metabolic Disorder			
Other (specify)			

Has cognitive impairment been identified by neuropsychological testing? ☐ Yes ☐ No
What year was the dementia diagnosis made? 19 _____

Name of Person Completing This Side of Form: _____

NOTE: The primary purpose of this report is to collect information on persons with Memory Loss in Virginia. All information shall be kept confidential. Patient and physician identities will be released only for research studies approved by the Commissioner of Health and will not be included in any publications or reports resulting from such research.

THIS SIDE TO BE FILLED OUT BY FAMILY OR CAREGIVER

VIRGINIA DEPARTMENT OF HEALTH
MEMORY LOSS DISORDERS QUESTIONNAIRE

GENERAL INSTRUCTIONS: This form should be filled out as fully as possible for any adult in the State of Virginia who has MEMORY LOSS. Please mail completed forms to:

Virginia Department of Health, ADRD Registry
109 Governor Street, Room 701
Richmond, Virginia 23219

Date of Report: _____

Patient's Last Name: _____ First: _____ M.I.: _____
Street Address: _____
City: _____ County: _____ State: _____ Zip Code: _____
Date of Birth: _____ Age: ____ Date of Death: _____ Social Security Number: _____

SEX:
- ☐ Male
- ☐ Female

MARITAL STATUS:
- ☐ Never Married
- ☐ Married
- ☐ Widowed
- ☐ Divorced
- ☐ Other

RACE:
- ☐ Black
- ☐ White
- ☐ Hispanic
- ☐ American Indian
- ☐ Asian/Pacific Islander
- ☐ Other (Specify) _____

PATIENT'S PRESENT LIVING ARRANGEMENTS:
(If in a hospital, check the expected living arrangement upon discharge)
- ☐ Living Alone
- ☐ Living with Someone Else
- ☐ Nursing Home or Other Facility

SOURCE(S) OF HEALTH CARE PAYMENT:
- ☐ Medicare/Federal Insurance
- ☐ Medicaid
- ☐ Private Insurance
- ☐ None

SERVICES CURRENTLY USED:
- ☐ None
- ☐ Adult Day Care
- ☐ Home for Adults
- ☐ In Home Care by Relative
- ☐ In Home Care by Paid Attendant
- ☐ Respite Care (relief for caregiver)
- ☐ Support Group
- ☐ Other

Services Needed: _____

CHANGES IN EVERYDAY ACTIVITIES BECAUSE OF MEMORY LOSS

THE PERSON:

	Independently	Needs Assistance	Totally Dependent
1. Performs Simple Tasks?	☐	☐	☐
2. Handles Small Sums of Money?	☐	☐	☐
3. Remembers Short Lists of Items?	☐	☐	☐
4. Recognizes Familiar Objects?	☐	☐	☐
5. Recalls Events?	☐	☐	☐
6. Responds to Own Name?	☐	☐	☐

What year did the signs or symptoms of memory loss begin? 19 ____

DOES THIS PERSON HAVE A:
1. Hearing Impairment? ☐ No ☐ Slight ☐ Severe
2. History of Alcohol Abuse? ☐ Yes ☐ No
3. History of Head Injury? ☐ Yes ☐ No
4. History of a Stroke? ☐ Yes ☐ No
5. Family History of Dementia? ☐ Yes ☐ No
   Relationship: _____
6. Family History of Down's Syndrome? ☐ Yes ☐ No
   Relationship: _____
7. What was the Person's Primary Occupation? _____

NAME OF RELATIVE OR PERSON RESPONSIBLE FOR THE PATIENT'S AFFAIRS:
Last Name: _____ First: _____ M.I.: _____
Street Address: _____
City: _____ County: _____ State: _____ Zip Code: _____
Relationship to Patient: ☐ Spouse ☐ Guardian ☐ Son/Daughter ☐ Other Relative ☐ Friend ☐ Paid Helper ☐ Other

MAY WE CONTACT THE DOCTOR THAT EXAMINED THE PATIENT FOR MEMORY PROBLEMS? ☐ Yes ☐ No
Dr. _____
Street Address: _____
City: _____ County: _____ State: _____ Zip Code: _____

INFORMATION REQUEST:
I would like to receive information regarding services available to dementia patients and their families: ☐ Yes ☐ No
I am willing to release my name to service organizations for this purpose: ☐ Yes ☐ No
I am interested in a state-funded autopsy for my loved one if it is available when he or she dies: ☐ Yes ☐ No

Name of Person Completing This Side of Form: _____

NOTE: The primary purpose of this report is to collect information on persons with Memory Loss in Virginia. All information shall be kept confidential. Patient and physician identities will be released only for research studies approved by the Commissioner of Health and will not be included in any publications or reports resulting from such research.

Alzheimer's Disease and Related Disorders Registry

Memory Loss in Virginia: What is Being Done?

Alzheimer's Disease and related disorders are characterized by a slow loss of thinking, remembering, and reasoning which eventually interferes with a person's daily functioning.

The key to finding the causes and cures for Alzheimer's Disease and other memory loss disorders, is to expand research. Medical research offers the only hope for understanding and eliminating these disorders. Although much research is being conducted, there is very little information known about how the disease occurs and who gets it.

The Goals and Objectives of the Registry

The search for a cause and a means of preventing disease often begins with identifying risk factors and common elements. In 1987, the General Assembly amended the Code of Virginia by adding in Chapter 2, Title 32.1, Article 9.1, establishing the Statewide Alzheimer's Disease and Related Disorders Registry. One goal of the Registry will be to identify some of these risk factors. Other purposes of the Registry include:

- To provide information to be utilized in the planning of resources related to health care;
- To be an avenue for communications regarding available private and/or public resources;
- To serve as a patient database for researchers in the state for studies of treatment and prevention;*
- To provide data to support research on Alzheimer's Disease and Related Disorders;*
- To obtain a better measure of the incidence and other descriptive statistics of all dementias;
- To fund postmortem examinations (autopsies) for diagnostic quality assurance on a random sampling of patients entered in the registry.

In order to collect this necessary and valuable information, the Virginia Department of Health has developed a Memory Loss Questionnaire. It has been designed to allow anyone the opportunity to complete it. One side of the questionnaire is to be filled out by a family member or person caring for someone with a memory loss disorder. The reverse side should be completed by a health care provider (doctor, nurse, and other allied health care professionals).

Ideally, one questionnaire should be completed for every individual with memory loss. Only persons living in the State of Virginia with memory loss disorders on or after July 1, 1989 will be entered into the registry. Family/caregivers and health care providers are encouraged to combine efforts in completing both sides of the questionnaire. If for one reason or another this is not feasible, as much information as possible may be provided by either party. The questionnaire should then be mailed to the address on the form (109 Governor St., Room 701, Richmond, VA 23219). The person will then be entered into the registry. Registry staff will then try to obtain any missing information. The time and effort of all who provide data is appreciated. The information provided will help the Virginia Department of Health to meet the goals and objectives of the registry. It is hoped that the information collected will display the problems associated with memory loss in Virginia. The focus then can be aimed toward availability of adequate services and other measures to improve conditions of persons with memory loss and their caregivers.

Questionnaires can be obtained from the Virginia Department of Health—ADRD Registry as well as many of the Alzheimer's Association Chapters, Area Agencies on Aging, Hospitals, Nursing Homes and other service organizations which may have contact with persons afflicted with memory loss disorders.

**All information will be kept confidential. Only pertinent statistical information relevant to practitioners and researchers will be released. The identities of persons with memory loss and their health care providers will be released only for research studies approved by the Commissioner of Health. Identities will not be included in any reports resulting from such research.*

Cases of selected notifiable diseases, Virginia, for the period May 1 through May 31, 1989.

Disease	State					Regions				
	This Month	Last Month	Total to Date 1988	Total to Date 1989	Mean 5 Year To Date	This Month N.W.	N.	S.W.	C.	E.
Measles	10	1	116	11	34	0	0	2	0	8
Mumps	4	12	80	47	36	0	2	1	0	1
Pertussis	0	1	11	4	14	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	0	0
Meningitis—Aseptic	6	10	41	63	56	1	2	2	0	1
*Bacterial	15	25	69	98	100	0	0	3	1	11
Hepatitis A (Infectious)	62	20	160	128	95	3	1	0	52	6
B (Serum)	25	19	113	117	181	0	7	6	6	6
Non-A, Non-B	5	7	30	24	33	0	1	1	0	3
Salmonellosis	82	61	395	365	432	10	11	23	20	18
Shigellosis	25	27	146	204	73	0	5	2	5	13
Campylobacter Infections	53	55	131	205	169	7	13	7	10	16
Tuberculosis	26	44	184	147	159	3	7	3	6	7
Syphilis (Primary & Secondary)	40	40	172	224	155	4	5	6	14	11
Gonorrhea	1135	968	5334	6076	6789	—	—	—	—	—
Rocky Mountain Spotted Fever	0	0	3	0	3	0	0	0	0	0
Rabies in Animals	25	18	177	114	123	9	5	4	6	1
Meningococcal Infections	7	4	30	28	37	0	2	3	0	2
Influenza	8	90	2392	1754	1899	0	0	3	0	5
Toxic Shock Syndrome	3	0	0	4	2	1	2	0	0	0
Reye Syndrome	0	0	0	1	1	0	0	0	0	0
Legionellosis	1	0	6	2	6	0	0	1	0	0
Kawasaki Syndrome	0	0	8	3	12	0	0	0	0	0
Acquired Immunodeficiency Syndrome	30	35	153	170	—	2	9	5	6	8

Counties Reporting Animal Rabies: Albemarle 1 raccoon; Alleghany 1 fox, 1 raccoon; Botetourt 1 skunk; Chesterfield 1 skunk; Hanover 2 raccoons; Henrico 1 cat; Lee 1 skunk; Loudoun 1 fox, 3 raccoons; Madison 1 raccoon; Nottoway 2 raccoons; Orange 1 cat, 1 fox; Page 1 raccoon, 1 skunk; Prince William 1 opossum; Rockbridge 1 horse; Shenandoah 2 skunks; Westmoreland 1 cat.

Occupational Illnesses: Asbestosis 36; Carpal Tunnel Syndrome 12; Coal Workers' Pneumoconiosis 26; Loss of Hearing 9; Mesothelioma 1; Occupational Asthma 1; Repetitive Trauma Disorder 3.

*other than meningococcal

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