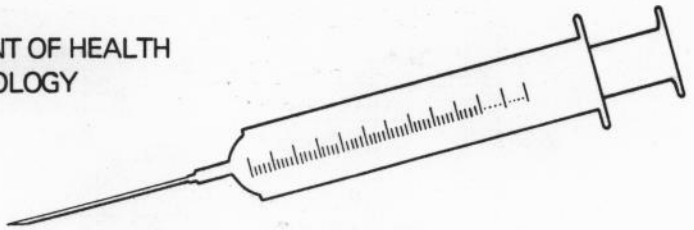
VIRGINIA DEPARTMENT OF HEALTH
DIVISION OF EPIDEMIOLOGY



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EPIDEMIOLOGY BULLETIN

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NONGONOCOCCAL URETHRITIS

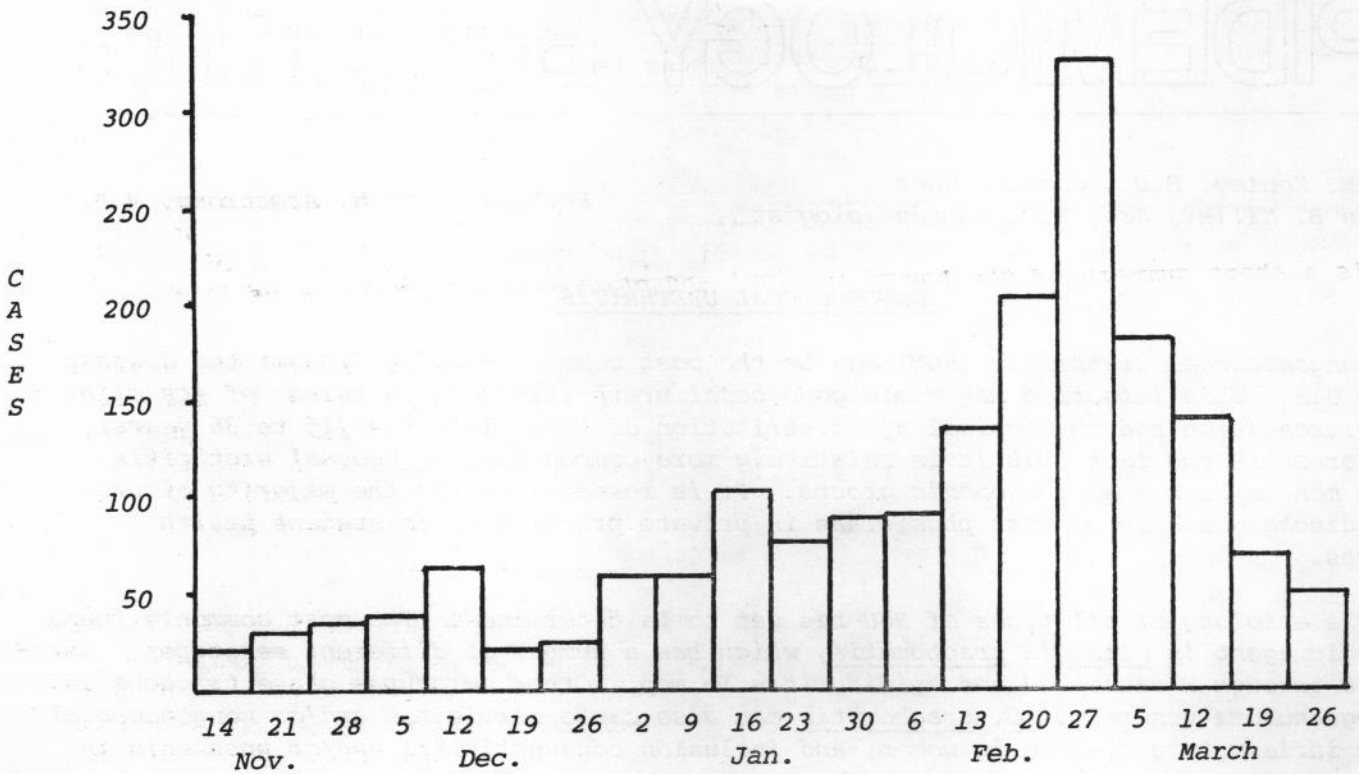
Nongonococcal urethritis (NGU) may be the most common sexually transmitted disease in the U.S. This infection may mimic gonococcal urethritis both in terms of its clinical presentation and the typical age distribution of those infected (15 to 35 years). Of interest is the fact that it is relatively more common than gonococcal urethritis amoung men in higher socioeconomic groups. It is responsible for the majority of urethral discharges seen by most physicians in private practice or in student health services.

The etiology of all types of NGU has yet to be determined. The most commonly found etiologic agent is Clamydia trachomatis, which has a number of different serotypes. Serotypes D through K cause NGU and epididymitis in men. Other serotypes cause trachoma and lymphogranuloma venereum. C. trachomatis can also cause cervicitis and/or nongonococcal pelvic inflammatory disease in women, and inclusion conjunctivitis and/or pneumonia in infants born to infected women.

The incubation period of NGU is generally longer than that for gonococcal urethritis: it averages two to three weeks. Although the discharge from NGU tends to be less profuse and more watery (less purulent) than the discharge from gonococcal urethritis, it is not possible to consistently differentiate these two infections based on physical examination alone. Ten percent of men with NGU are asymptomatic. Diagnosis is one of exclusion, since specialized laboratories are required for culturing clamydiae. A gram-stained smear of the discharge which shows at least four polymorphonuclear leukocytes per high power field but shows no gram negative diplococci is good presumptive evidence of NGU. In cases where the gram stain is equivocal, gonococcal infection can be excluded by negative growth on selective media (such as Thayer Martin). Patients should be questioned about surrepticious use of antibiotics, since partially-treated gonococcal urethritis may resemble NGU.

Treatment with tetracycline or erythromycin is usually effective. NGU does not respond to penicillin. The dosage for tetracycline or erythromycin is 0.5 GM orally four times a day. Although uncomplicated gonococcal infections respond to a five day course of tetracycline, duration of therapy for NGU must be longer, and a 7- to 21-day course of therapy is advised.

In an effort to reduce the incidence of non-gonococcal PID in women and the incidence of clamydial pneumonia in infants, sexual partners of men with NGU should be offered epidemiologic treatment.



FLU SYNDROMES REPORTED BY WEEK FROM THIRTY EIGHT SENTINEL PHYSICIANS

INFLUENZA ACTIVITY DECLINES

Influenza surveillance reports monitored by the Division of Epidemiology indicate a steady decline in activity (see above graph). The influenza outbreak appears to have extended from early February to mid-March. Specimens submitted for influenza virus isolation and sera submitted for influenza titers continue to indicate that Influenza B virus was the predominant virus circulating in Virginia. Further studies are in progress to determine what antigenic strain of Influenza B virus was circulating.

A total of 16 cases of Reye's Syndrome have been reported to date, two of which were fatal. Two cases were preceded by Varicella infection (chickenpox), while the remainder were preceded by a "flu-like" illness or upper respiratory infection. No cases have been reported in the last two weeks.

CAMPYLOBACTER TEST AVAILABLE

The Division of Consolidated Laboratory Services (DCLS) is prepared to assist physicians, hospitals and health departments in the isolation of Campylobacter fetus. The DCLS will also provide Cary-Blair media in screw-top vials for transportation of stool specimens. Anyone interested in having this test performed is requested to consult Dr. Frank Lambert at (804) 786-3756. If specifically requested, the DCLS can also attempt isolation of Vibrio parahemolyticus and Yersinia enterocolitica from these specimens. These tests should assist clinicians treating patients with suspected bacterial enteritis from whom more familiar pathogens have not been isolated. Below is a short summary of the known clinical and epidemiologic features of Campylobacter fetus.

Most human campylobacter infections lead to a "gastroenteritis" which may be clinically indistinguishable from the illness produced by numerous other bacterial and viral agents. There is usually little or no prodrome before the onset of fever, headache, myalgias and abdominal cramping. Diarrhea follows within 24 hours and may be bile stained, mucoid, or bloody. Vomiting is rarely reported. The illness is usually self-limiting and of less than one week's duration, although a small number of patients have a more protracted illness. Campylobacter infections are much more common than previously recognized. One reason is the previous lack of laboratories capable of isolating the organism. The true incidence is unknown, both because of the difficulty with laboratory diagnosis, and because isolated cases are not reportable in most states, including Virginia. Outbreaks reported nationally have varied from small household clusters to community-wide epidemics. In several studies where all stool cultures from diarrheal patients submitted to a laboratory were screened for campylobacter, the organism was found in 5% to 7.1% of cases. It was not uncommon for this rate to exceed the rate of isolation of salmonella and shigella organisms.

Campylobacter fetus is a motile gram-negative rod which was previously known as Vibrio fetus. It has long been known to veterinarians as a cause of infectious abortion in cattle. There are three subspecies (ss) of this organism: ss. intestinalis, fetus, and jejuni. C. fetus ss. jejuni is the cause of most gastroenteritis due to campylobacter. C. fetus ss. intestinalis is the subspecies most often associated with campylobacter bacteremia or focal infection (endocarditis, meningitis, etc.). C. fetus ss. fetus does not infect humans, but is a pathogen for cattle.

The epidemiology of campylobacter remains to be completely understood. The reservoir is unknown but some likely candidates under investigation are cattle, sheep, poultry, dogs and cats. There are probably several modes of transmission. In a large outbreak in Vermont, transmission was traced to city water which was being inadequately treated. Unpasteurized milk, ill puppies, poultry (alive or dressed), and children have all been implicated as sources of infection but more conclusive studies are necessary to define likely modes of transmission, including the possibility of person-to-person transmission. The incubation period appears to be anywhere from two to ten days.

Although controlled trials have yet to document it's efficacy, erythromycin may be beneficial for the treatment of protracted or severe cases.

Outbreaks of confirmed or suspected campylobacter enteritis should be reported to the appropriate local health department.

MONTH: MARCH

DISEASE	STATE					REGIONS				
	THIS MONTH	LAST MONTH	TOTAL TO DATE 1980	TOTAL TO DATE 1979	MEAN 5 YEAR TO DATE	THIS MONTH N.W.	N.	S.W.	C.	E
CHICKENPOX	59	26	102	508	360.8	2	7	17	10	23
MEASLES	86	54	151	58	335.2		25		31	30
MUMPS	16	8	34	41	104.6		4	6	3	3
PERTUSSIS			2	6	3.8					
RUBELLA	4	2	7	15	69.0			1	2	1
MENINGITIS – ASEPTIC	6	2	20	24	15.6			1		5
BACTERIAL	16	10	50	49	33.6	2		3	2	9
ENCEPHALITIS – INFECTIOUS	1		1	6	4.6				1	
POST-INFECTIOUS	2		2	2	1.4			1		1
HEPATITIS A (INFECTIOUS)	28	27	84	68	83.0	1	9	7	5	6
B (SERUM)	51	37	149	103	73.0	4	12	11	14	10
SALMONELLOSIS	66	57	163	189	133.0	10	16	8	13	19
SHIGELLOSIS	9	17	41	88	40.4	1	6	1		1
TUBERCULOSIS – PULMONARY	76	29	145	147	159.8	6	13	10	15	17
EXTRA-PULMONARY	12	4	23	30	27.6	1		3	2	4
SYPHILIS (PRIMARY & SECONDARY)	35	51	134	159	154.4	1	7	7	6	14
GONORRHEA	1,711	1,495	4,771	5,425	5573.8					
ROCKY MOUNTAIN SPOTTED FEVER					0.2					
RABIES IN ANIMALS				3	15.0					
MENINGOCOCCAL INFECTIONS	6	5	17	34	17.8		1	1	2	2
INFLUENZA	515	132	684	199	4726.6			316	199	
MALARIA	5	4	12	6	3.6		4			
OTHER: REYE'S SYNDROME	15	1	16	5	3.6	2		3	7	3

COUNTIES REPORTING ANIMAL RABIES:

OCCUPATIONAL ILLNESSES: Occupational pneumoconioses 15, Occupational dermatitis 1, Occupational hearing loss 3, Asbestosis 1, Farmer's Lung 1.

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