



# EPIDEMIOLOGY BULLETIN

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## MEASLES IN VIRGINIA

At the time of this writing, the Division of Epidemiology has learned of a suspected outbreak of rubeola in Halifax County. Using a case definition (suspected case) of (a) fever  $\geq 101^{\circ}\text{F}$  (b) generalized rash of 4 or more days duration and (c) one of the following: cough, coryza, conjunctivitis, (and Koplik's spots if confirmed by an M.D.), 6 cases have been identified in students attending the C. H. Friend Elementary School and 5 cases have been identified in the Halifax County High School. An additional 10 possible cases in the high school are being investigated. An outbreak investigation has begun and arrangements are being made to begin school-based immunization clinics for susceptible children.

COMMENT: The elimination of indigenous measles in the United States by 1982 is a major health goal in the nation and in Virginia. In the Commonwealth, the number of cases of measles has decreased significantly from 2,774 in 1977 and 3,837 in 1978 to 288 to date in 1979. As the number of cases is reduced, it becomes more important to insure that all suspected cases are investigated and confirmed by laboratory testing. Your assistance is needed to reach the above objective by continuing to report all suspected rubeola cases by calling the local health department immediately and by obtaining paired blood specimens on all suspected cases. The regional immunization staff is available to assist you by drawing bloods when necessary, particularly second specimens on patients who do not return to the office. The Division of Consolidated Laboratories in Richmond will perform the serological testing for measles after the lab receives the paired specimens - one obtained during the acute phase of illness and the second obtained 2 - 3 weeks later.

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## FOLLOW-UP ON VACCINE USE AND HANDLING

The November 29, 1979 issue of the Bulletin outlined the proper methods of vaccine use and handling. A number of questions have been received regarding the recommendations for measles, mumps, rubella vaccine (MMR). Although the information was technically correct, the following clarification may resolve any confusion surrounding the original statements: "After reconstitution, MMR vaccine should be used as soon as possible. Reconstituted vaccine should be used within 8 hours if kept at 90°F when refrigeration is not available e.g. during field vaccination campaigns in remote areas. When refrigeration is available e.g. vaccines administered in local health department clinics, then MMR vaccine should be kept refrigerated at all times since exposure to heat and light may reduce the potency of the vaccine. Even when refrigerated, reconstituted vaccine should be discarded after eight hours".

## SWIMMING POOL OUTBREAK IN LUNENBURG COUNTY

During the month of July, 1979, 72 cases of gastroenteritis occurred in Victoria, Virginia. An epidemiologic investigation revealed that the outbreak was restricted to members of the Victoria Community Pool and that illness was significantly associated ( $p < .001$ ) with attendance at the pool between July 14th and 17th. The highest attack rate (64%) was for those members who went to the pool on July 16th only. Illness was also significantly associated ( $p < .05$ ) with time spent in the water and use of the water slide or diving board. Illness was not associated with drinking from the water fountain. Based on the symptoms (nausea 84%, vomiting 80%, diarrhea 71%, headache 55%, and fever 51%), the incubation period (mean 1.8 days), the duration of illness (mean 36 hours), the clustering of onset dates between July 16th and 23rd, and the association of illness with swimming, a waterborne outbreak due to a viral agent was suspected. Stool samples and sera from ill persons were tested for rotavirus, adenovirus and Norwalk agent by radioimmunoassay and immune electron microscopy techniques (performed at CDC and NIH). Bacterial stool cultures did not detect any pathogens. Samples of the pool water did not reveal the presence of fecal coliforms although chlorine levels had been increased prior to the taking of those samples. In spite of negative results from these tests, a viral etiology is still felt to be most consistent with the evidence. Recommendations included draining the pool, refilling it with clean water, and careful monitoring of chlorine and pH levels. No further cases were reported during the remainder of the season.

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\*indicates weekly issue of the Communicable Disease Weekly Report (CDWR).

REGIONAL DISEASE TOTALS INCLUDED

This is the first issue of the 1980 Epidemiology Bulletin. In addition to the enlarged format, the list of reported diseases (on the back page) has been slightly shortened and regional totals for most diseases will now be included. This will provide more meaningful information to practitioners, since statewide data tends to "dilute out" the data from local outbreaks.

For those unfamiliar with the public health regions, Region I (Northwest) has a total population of approximately 676,321 and includes Albemarle, Augusta, Bath, Caroline, Clarke, Culpeper, Fauquier, Fluvanna, Frederick, Greene, Highland, King George, Louisa, Madison, Nelson, Orange, Page, Rappahannock, Rockbridge, Rockingham, Shenandoah, Spotsylvania, Stafford, and Warren counties and the independent cities\* of Charlottesville and Fredericksburg.

Region II (Northern) has a total population of approximately 1,057,729 and includes Arlington, Fairfax, Loudoun, and Prince William counties, and the city\* of Alexandria.

Region III (Southwest) has a total population of approximately 1,217,636 and includes Alleghany, Amherst, Appomattox, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Lee, Montgomery, Patrick, Pittsylvania, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe counties, and the cities\* of Danville, Lynchburg, and Roanoke.

Region IV (Central) has a total population of approximately 932,035 and includes Amelia, Brunswick, Buckingham, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Goochland, Greensville, Halifax, Hanover, Henrico, Lunenburg, Mecklenburg, New Kent, Nottoway, Powhatan, Prince Edward, Prince George, Surry and Sussex counties, and the cities\* of Hopewell, Petersburg, and Richmond.

Region V (Eastern) has a total population of approximately 1,331,705 and includes Accomac, Essex, Gloucester, Isle of Wight, James City, King and Queen, King William, Lancaster, Mathews, Middlesex, Northampton, Northumberland, Richmond, Southampton, Westmoreland and York counties, and the cities\* of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Suffolk and Virginia Beach.

\*separate disease tabulation is only done for the larger independent cities.

MONTH: January

DISEASE	STATE					REGIONS				
	THIS MONTH	LAST MONTH	TOTAL TO DATE		MEAN 5 YEAR TO DATE	THIS MONTH				
			1980	1979		N.W.	N.	S.W.	C.	E.
CHICKENPOX	17	16	17	180	132.4	2	2	1	6	6
MEASLES	12	9	12	2	16.6				12	
MUMPS	10	13	10	12	26.8	2			7	1
PERTUSSIS	2	4	2	3	1.6		2			
RUBELLA	1	5		1	4.8			1		
MENINGITIS - ASEPTIC	12	19	12	9	6.6	1	2	2	3	4
BACTERIAL	26	21	26	33	16.4	6	2	8	4	6
ENCEPHALITIS - INFECTIOUS	-	-	-	1	1.2					
POST-INFECTIOUS	-	-	-	-	0.2					
HEPATITIS A (INFECTIOUS)	30	25	30	20	25.2	4	11	6	6	3
B (SERUM)	61	47	61	22	24.0	2	16	7	22	14
SALMONELLOSIS	40	86	40	47	43.4	4	3	7	10	16
SHIGELLOSIS	15	27	15	20	9.0	1	8	5		1
TUBERCULOSIS - PULMONARY	40	103	40	41	68.6					
EXTRA-PULMONARY	7	18	7	8	6.4					
SYPHILIS (PRIMARY & SECONDARY)	38	64	38	50	55.4					
GONORRHEA	1,565	2,120	1,565	1,594	1991.0					
ROCKY MOUNTAIN SPOTTED FEVER	---	---	---	---	---					
RABIES IN ANIMALS	---	---	---	---	3.6					
MENINGOCOCCAL INFECTIONS	6	6	6	9	4.6	2	1	2	1	
INFLUENZA	37	24	37	30	617.6			37		
MALARIA	3	6	3	5	2.0		3			
OTHER: <i>Hepatitis, Unspecified</i>	18	24	18	17	15.6		5	10	2	1
<i>Kawasaki Disease</i>	4	--	4	2	N/A		1		3	

COUNTIES REPORTING ANIMAL RABIES: \_\_\_\_\_  
 OCCUPATIONAL ILLNESSES: Occupational pneumoconioses 13; Occupational dermatitis 3;  
Occupational hearing loss 4; Occupational Asbestosis 2; Occupational Byssinosis 1;  
Occupational Silo Fillers Disease 1

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