

West Virginia Sudden Unexplained Infant Deaths

Calendar Year 2016 (January—December)



Office of Maternal, Child and Family Health 350 Capitol Street, Room 427 Charleston, WV 25301 Melissa Baker, MCH Epidemiologist

WEST VIRGINIA SUDDEN UNEXPLAINED INFANT DEATHS Calendar Year 2016

Sudden unexpected infant death (SUID) is any infant death (a child under one year of age) that is unexpected and initially unexplained. SUID also describes the sudden death of an infant that remains unexplained following autopsy, review of medical records and death investigation performed by the medical examiner. Characteristically, these deaths occur quickly and usually during a sleep period; in most cases, the baby seems healthy. Both are referred to as SUID since all are unexpected and most are ultimately determined unexplained.

These unexplained deaths were formerly attributed to Sudden Infant Death Syndrome (SIDS), but recognition by the medical community of limitations in detecting accidental and non-accidental asphyxia in infancy has led to a nationwide change in diagnostic terminology. As a consequence, the use of "SUID," a diagnostic term which encompasses the possible contribution of asphyxia, as well as other avoidable injuries, to sudden infant death has gradually replaced the "diagnosis" of SIDS. SUID is now recognized as the major cause of death in babies from one month to one year of age.

During calendar year 2016, there were 35 resident SUID deaths reported by the West Virginia Department of Health and Human Resources (DHHR), Health Statistics Center. These infant deaths were identified with a cause of death listed on the death certificate as ICD codes R95–R99 (Sudden Infant Death Syndrome, Other Sudden Death, Cause Unknown and Other III-Defined and Unspecified Causes of Mortality), W75 (Accidental Suffocation and Strangulation in Bed), Y12 (Poiscning by Narcotics and Psychodysleptics, Hallucinogens, Undetermined), Y20 (Hanging, Strangulation and Suffocation, Undetermined Intent), Y34 (Event of Undetermined Intent) and P04.2 (Newborn Affected by Maternal Use of Tobacco). These unexpected/unexplained infant deaths are the deaths included in this report.

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Medical examiners and scene investigators identify SUID risk factors that include hazardous sleeping environments such as co-sleeping/bed sharing, very soft or uneven bedding surfaces, heavy bedding, maternal smoking, smoke exposure in the home and caretaker impairment. The findings are recorded on death certificates, in autopsy reports and in scene investigation reports for the use of public health and safety professionals.

The following tables offer summaries of the demographics and identified risk factors of SUID deaths occurring in West Virginia resident infants during calendar year 2016. Data reporting sources include DHHR's Health Statistics Center, Birth Score Program and Office of the Chief Medical Examiner. Demographics and risk factors include the month of death, county of residence, age at death, sex of infant, race of infant, the position of the infant when placed to sleep and position found, use of hazardous bedding, maternal smoking during pregnancy, exposure to second-hand smoke in the home, prenatal care initiation, co-sleeping/bed sharing, gestation, birthweight, Birth Score, Medicaid status and caretaker drug/alcohol impairment. It is important to note that information on out-of-state births and deaths is not always available and is therefore shown as "unknown."

The most prevalent identified risk factors in SUID deaths for 2016 were co-sleeping/bed sharing, hazardous bedding and smoke exposure. Co-sleeping/bed sharing was reported in 34% of cases with 31% of cases having unknown sleeping status. Hazardous bedding was reported in 71% of cases with 29% of cases having unknown bedding status. Maternal smoking during pregnancy was reported in 57% of the cases and second-hand smoke exposure in the home was reported in 29% of cases, with 57% of cases having unknown status of smoke exposure in the home. These risk factors are

the most modifiable behavioral factors that could significantly impact the rate of infant deaths, specifically SUID. One other variable of interest was the Medicaid status of the infant at time of death; 80% of cases reported Medicaid as the primary source of insurance.

Research shows that firm bedding, placing the infant on his/her back to sleep in an appropriate infant sleep product such as a crib, not smoking cigarettes prenatally or exposing infant to second hand smoke and not co-sleeping/bed-sharing with the infant can be effective preventive measures in reducing SUID.

DHHR's Bureau for Public Health, Office of Maternal, Child and Family Health (OMCFH) has been an ongoing participant in the national *Back to Sleep* campaign since its inception in 1996 and continues to participate in the expanded *Safe to Sleep* campaign. OMCFH disseminates pertinent, current information about risk factors such as co-sleeping/bed sharing, early prenatal care, maternal smoking during pregnancy, infant exposure to second hand smoke and a safe sleeping environment. OMCFH provides current, relevant educational material statewide to health care providers as well as parents, grandparents and other caregivers of West Virginia's infants.

WEST VIRGINIA SUID January through December 2016

It is important to note that information on out-of-state births and deaths is not always available and is therefore shown as "unknown." Also, information for in-state births and deaths that is missing or left blank on the investigative report or other documents is shown as "unknown."

Deaths by Month								N HE				
Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
3	2	1	4	1	2	5	2	4	3	4	4	35

Deaths by Sex of Infant				
Male	Female	Total		
19	16	35		

Deaths by Race of Infant						
White	Black	Bi-Racial	Unknown	Total		
34	0	1	0	35		

	D	eaths by Cou	nty of Reside	ence	
Barbour	Brooke	Cabell	Fayette	Jackson	Jefferson
1	1	4	3	1	1
Kanawha	Logan	Marshall	Mercer	Monongalia	Ohio
5	1	2	1	4	1
Raleigh	Randolph	Taylor	Wayne	Wood	Total
3	1	1	1	4	35

Deaths by Age of Infant in Months							
<1	1	2	3-5	6-8	9-12	Total	
5	4	6	15	2	3	35	

Deaths by Infant Birth Weight*					
Normal	Low	Unknown	Total		
24	10	1**	35		

*Normal: >2500 grams Low: <2500 grams

** Includes 1 out-of-state birth - no information available

The Statestante	Deaths by Gestation*					
Full Term	Premature	Unknown	Total			
20	14	1**	35			

*Full Term: >37 weeks Premature: <37 weeks

** Includes 1 out-of-state birth - no information available

Deaths by Co-Sleeping/Bed-Sharing						
Yes Co-Sleeping/Bed Sharing	No Co-Sleeping/Bed Sharing	Unknown	Total			
12	12	11*	35			

*Includes 2 out-of-state deaths - no information available

Deaths by Type of Prenatal Care						
Early Prenatal Care*	Late Prenatal Care	No Care	Unknown	Total		
23	10	1	1**	35		

*Entered first trimester

**Includes 1 out-of-state birth - no information available

Deaths by Type of Bedding						
Appropriate Bedding	Hazardous Bedding*	Unknown	Total			
0	25	10**	35			

*Any bedding other than crib with no other sleeping environment risks **Includes 3 out-of-state deaths – no information available

Deaths by Position of Infant Placed to Sleep						
On Back	On Side	On Stomach	Unknown	Total		
13	3	7	12*	35		

*Includes 3 out-of-state deaths - no information available

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On Back	On Side	On Stomach	Unknown	Total
6	4	10	15*	35

*Includes 3 out-of-state deaths - no information available

Deaths by Smoking Status of Mother During Pregnancy			
Smoking	Non-Smoking	Unknown	Total
20	13	2	35

Deaths by Smoking Status in the Home			
Smoking	Non-Smoking	Unknown	Total
10	5	20*	35

*Includes 3 out-of-state deaths - no information available

Deaths by Birth Score*			
Low	High	Unknown	Total
26	7	2**	35

*Scores above 99 considered high and at-risk infants; scores below 99 considered normal and low-risk infants

**Includes 1 out-of-state birth - no information available

Deaths by Medicaid Status			
Yes	No	Unknown	Total
28	6	1*	35

*Includes 1 out-of-state birth - no information available

Deaths by Caretaker Drug/Alcohol Impaired*			
Yes	No	Unknown	Total
4	24	7**	35

*Variable first added in CY 2011 report due to number of cases indicating impairment but still not captured consistently **Includes 3 out-of-state deaths - no information available