Yakima Health District
BULLETIN

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Firearm Safety and Firearm Mortality Data

Requested Actions

- Ask patients about firearm possession.
- Recommend the following for gun owners, especially when children or adolescents live in or have access to the home:
  - Store guns in a locked cabinet or case to which children and adolescents have no access.
  - Install trigger safety locks.
  - Keep guns unloaded at all times when not in use and keep ammunition stored and locked separately.
  - Hide gun and ammunition storage keys away from your household keys.
  - Ensure that guns are not accessible to family or friends who are depressed, angry, or otherwise at risk for suicide or homicide (e.g., major emotional loss, broken relationship, bankruptcy, foreclosure, loss of employment, etc.).

Additional Key Message

Keeping firearms unloaded, properly stored-and-locked, and inaccessible to children, adolescents and other individuals who are prone to impulsive choices can reduce the risk of firearm related injury and death.

Firearm Mortality Data Summary (See Figure 1 and Tables 1-3 on page 2)

- Firearm-related mortality trends in Yakima County have varied by cause over the past two decades, with homicide waxing and waning, suicide essentially stable with a possible recent uptick, and a long-term decline in the smaller number of accidental shooting deaths (Figure 1).
- Most firearm mortality in Yakima County is suicide, and to a somewhat lesser extent, homicide (Table 1).
- Firearm-related suicide rates are about the same locally and statewide.
- Age-specific rates of firearm-related suicide are highest for adults 45-64 years of age, but relative rates compared to state-wide figures are greatest for youth aged 15-24 years.
- Firearm-related homicide rates are about three times the state-wide figure; almost all of these homicide victims are 25-44 years of age.
- Over half of all suicides in Yakima County involve the use of a firearm, and nearly two-thirds of homicides employ this means.

Additional Resources

- Seattle Children's Hospital and Medical Center. Safety and Injury Prevention: Gun Safety. http://www.seattlechildrens.org/kids-health/parents/first-aid-and-safety/home-sweet-home/gun-safety/
- Washington State Department of Health. Injury and Violence Prevention. http://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention
- Centers for Disease Control & Prevention. Injury and Violence Prevention. http://www.cdc.gov/violenceprevention/index.html
- American Academy of Pediatrics. Gun Violence Prevention. https://www.aap.org/en-us/advocacy-and-policy/federal-advocacy/pages/aapfederalgunviolencepreventionrecommendationstowhitehouse.aspx

Inside this issue:

Figure 1. Trends in Firearm-related Mortality, Yakima County, 1990-2014

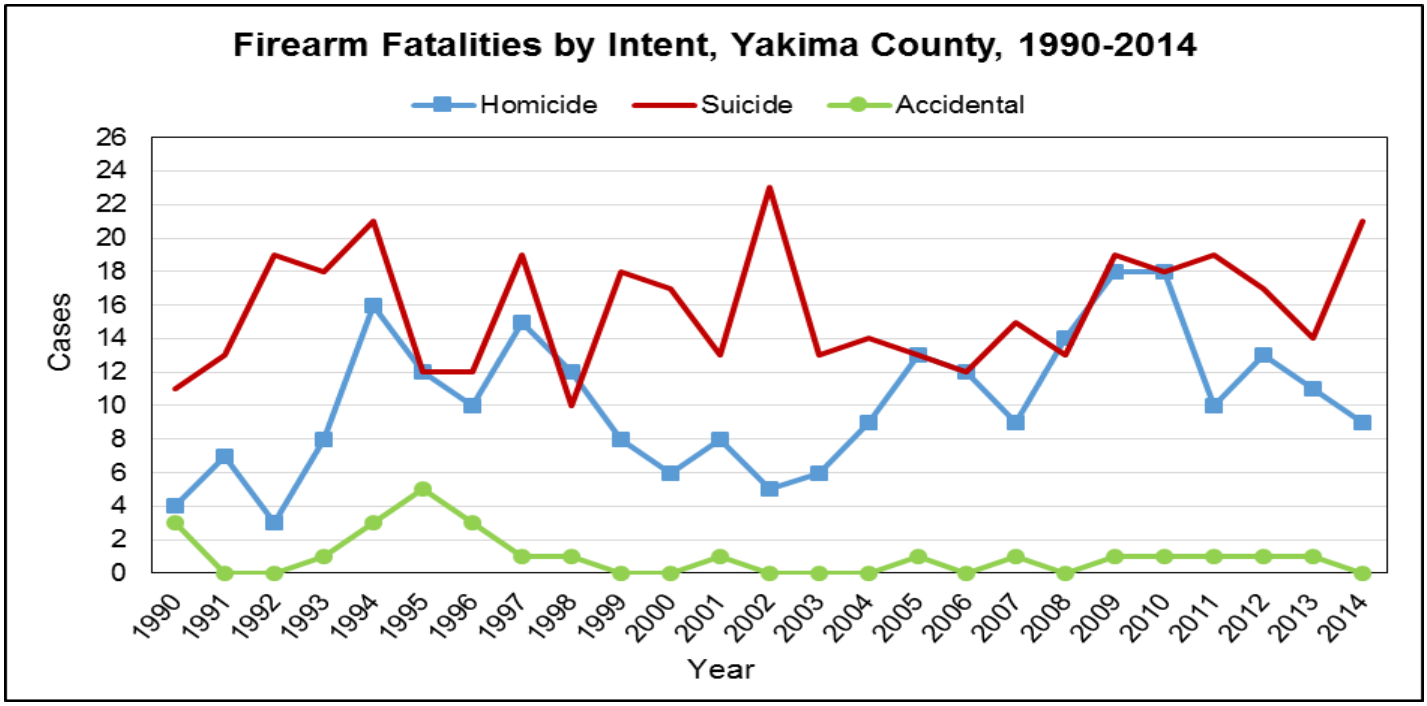


Table 1. Firearm-related Mortality, Yakima County and Washington State, 2010-2014

Intent	Yakima Co. Deaths	Yakima Co. Rate	WA State Rate
Homicide	61	4.96	1.68
Suicide	89	7.24	7.33
Accidental	4	0.33	0.12
Other/Undetermined	3	0.24	0.30

Age-Specific Firearm-related Mortality, Yakima County and Washington State, 2010-2014

Age (years)	Homicide			Suicide		
	Yakima Co.		WA State Rate	Yakima Co.		WA State Rate
	N	Rate		N	Rate	
<1	0	0.00	0.00	0	0.00	0.00
1-14	0	0.00	0.20	0	0.00	0.31
15-24	30	17.46	3.78	16	9.31	5.89
25-44	28	8.98	2.88	26	8.34	7.77
45-64	3	1.07	1.01	34	12.17	9.72
≥65	0	0.00	0.6	13	8.62	13.26
Total	**61**	**4.96**	**1.68**	**89**	**7.24**	**7.33**

Firearm-relatedness of Suicide & Homicide, Yakima County & Washington State, 2010-2014

Means	Homicide		Suicide	
	Yakima Co.	WA State	Yakima Co.	WA State
Firearm Related	61	573	89	2503
Other Means	37	430	73	2590
Total	98	1003	162	5093
% Firearm	**62**	**57**	**55**	**49**

Source: Washington State Department of Health Death Certificate Data.

Sleep Safety for Infants

Requested Actions

- Be aware that…
  - infant death from suffocation is now equally to or more common that SIDS in Yakima County, and
  - sleep-related deaths are the most common cause of post-neonatal infant mortality (42% in Yakima County; 34% statewide).
- Routinely advise pregnant women and mothers of infants about sleep safety.
- Ensure that newborns have a designated safe sleeping space prior to release from the nursery.

Recommendations for Infant Sleep Safety

- "Back to sleep for every sleep" (i.e., supine sleeping position).
- Use a firm sleep surface.
- Keep soft objects and loose bedding out of the crib.
- Room-sharing without bed-sharing is recommended.
- Breastfeeding is recommended.
- Consider offering a pacifier at nap time and bedtime once breastfeeding is firmly established (e.g., after 1 month of age).
- Avoid overheating.
- Do not use home cardiorespiratory monitors or other commercial devices marketed to reduce the risk of SIDS.
- Supervised, awake tummy time is recommended to facilitate development and to minimize development of positional plagiocephaly.
- And for mothers…
  - Pregnant women should receive regular prenatal care.
  - Avoid smoke exposure during pregnancy and after birth.
  - Avoid alcohol and illicit drug use during pregnancy and after birth.

Terminology

Sudden unexpected infant death (SUID), also known as sudden unexpected death in infancy (SUDI), is a term used to describe any sudden and unexpected infant death, whether explained or unexplained. Sudden infant death syndrome (SIDS) is a specific type of unexplained SUID. After case investigation, SUIDs also can be attributed to suffocation, asphyxia, entrapment, infection, ingestions, metabolic diseases, cardiac arrhythmia, and trauma (intentional or unintentional).

Child Death Review

A local, multidisciplinary Child Death Review Committee (CDRC) reviews all SUID and other unexpected child deaths (<18 years of age) in Yakima County to identify preventable circumstances and consider strategies to improve health and safety for all children. CDRC members include perinatal specialists, public health, social services, and law enforcement.

SIDS and Infant Suffocation

SIDS is defined as the sudden death of an infant younger than one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history. This definition emphasizes the necessity of a complete investigation to exclude other explanations for the sudden unexpected infant death that can mimic SIDS, including suffocation.

SIDS is the leading cause of infant mortality between one month and one year of age in the United States. The rate of SIDS peaks between two and four months of age, and 90 percent of cases occur before six months of age. SIDS probably has more than one cause, although the final process appears to be similar in most cases. The specific mechanism of sudden death is unknown. Candidate hypotheses include: congenital brainstem abnormalities, serotonin signaling abnormalities, and/or maturational delay in cardiorespiratory regulation. These underlying causes may also require a trigger event such as airflow obstruction.

Risk factors for SIDS include the following:

- Maternal age <20 years
- Maternal smoking during pregnancy

- Late or no prenatal care
- Preterm birth and/or low birth weight
- Prone sleeping position
- Sleeping on a soft surface and/or with bedding accessories such as loose blankets and pillows
- Bed-sharing (e.g., sleeping in parents' bed)
- Overheating

In 1992, the American Academy of Pediatrics (AAP) issued a recommendation to reduce the risk of SIDS by placing infants in a supine position for sleep. Between 1992 and 2001, the SIDS rate in the United States fell from 1.2 to 0.56 per 1000 live births, while the proportion of infants sleeping in the supine position increased from 13 to 72 percent. However, this decline has plateaued in recent years and other causes of sudden unexpected infant death that occur during sleep, including suffocation, asphyxia, entrapment, and ill-defined or unspecified causes of death have increased in incidence. The mechanisms, risk factors and prevention strategies for SIDS and infant suffocation overlap considerably.

Local Data

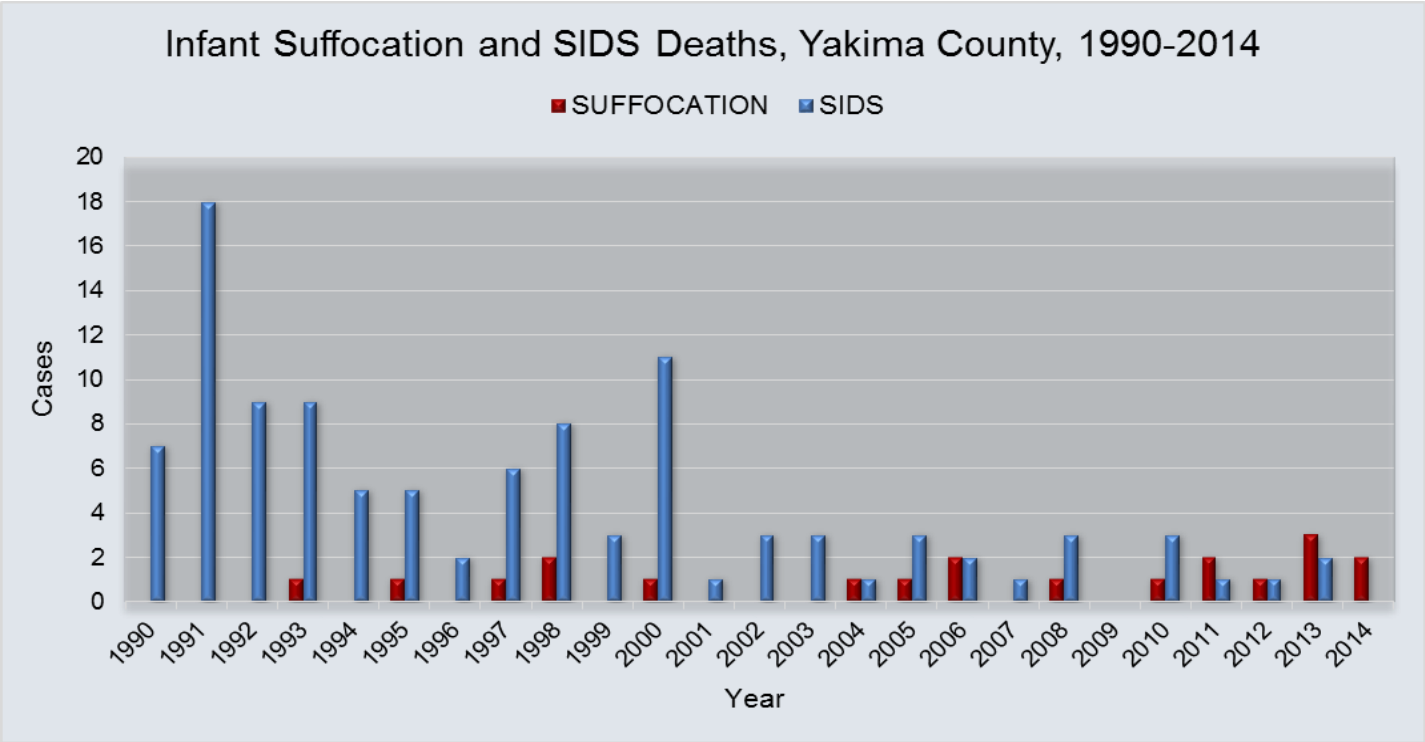
The following table and figure show that in recent years suffocation has become at least as common as SIDS in Yakima County. The infant suffocation rate in Yakima County is double that for the state (0.41 versus 0.18 per 1,000 live births). Of the nine infant suffocation deaths occurring in Yakima County during 2010-2014, seven (78%) were unintentional; one was intentional (i.e., infanticide) and the other was of undetermined intent. The rate in non-Hispanics (0.58 per 1,000 live births) was greater than for Hispanics (0.33), and the rate in males (0.51) was greater than for females (0.29).

Table 1. Infant Suffocation and SIDS Cases and Rates, Yakima County and Washington State, 2010-2014

	Yakima County		Washington State	
	N	**Rate***	**N**	**Rate***
SIDS	7	0.34	253	0.58
Suffocation	9	0.41	89	0.18
Post-neonatal mortality	38	1.79	710	1.62
Total Infant Mortality	113	5.33	2007	4.67

*per 1,000 live births
Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data

Figure 1. Trend in Infant Suffocation and SIDS Deaths, Yakima County, 1990-2014



Circumstances surrounding recent infant suffocation deaths reviewed by the CDRC have included:

- obstruction of breathing by the body of an adult in the same bed,
- suffocation by sheets/blankets on an adult bed, and
- suffocation while sleeping on a dog bed.

Additional Efforts

YHD is working with the CDRC and maternity care providers to

- ensure that all newborns have a designated safe sleeping place and safety plan prior to discharge from the nursery, and
- provide a simple, low-cost prototype bed to give to mothers who do not have an adequate safe sleeping space set aside. Example: www.babyboxco.com.

Resources

American Academy of Pediatrics. SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284.full.pdf+html (accessed 15 February 2016).

National Institutes of Health. Many new mothers report no physician advice on infant sleep position, breastfeeding: NIH-funded survey finds consistent advice lacking on infant care recommendations. *https://www.nichd.nih.gov/news/releases/Pages/072715-infant-sleep.aspx (accessed 15 February 2016).*

Washington State Department of Health. Child Death Review and Prevention. http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/LocalHealthResourcesandTools/ChildDeathReview

For more information on the Child Death Review Committee or the prototype sleeping space under development, please contact Sheryl DiPietro, RN, MSN, at (509) 249-6517.

Folic Acid Intake Recommendations for Women

Requested action

Recommend that all women with childbearing potential (i.e., from menarche to menopause) take folic acid 400 micrograms daily (ideally as part of a daily prenatal vitamin) in combination with a healthy, balanced diet.

Background

- Folic acid supplementation and education directed and women of childbearing age about folic acid intake have been instrumental in lowering the incidence of neural tube defects over the past two decades.
- However, more than two-thirds pregnant of women in our region do not take a folic acid-containing vitamin every day. This costs a retail consumer about 10 cents or less per day.
- The Washington State Health Care Authority (i.e., DSHS, Apple Health, ProviderOne) now covers prenatal vitamins prescribed for any woman of childbearing age (11-49 years).
- Free prenatal vitamins for uninsured, low-income women of childbearing age are being distributed through Life Choices, Sunnyside Community Hospital Clinics, the Yakima Health District, and the Benton-Franklin County Health District courtesy of a generous donation from Vitamin Angels.
- Women with prior neural tube defect-affected pregnancies and their female relatives may reduce the risk of a recurrence by taking high-dose folic acid (4000 micrograms daily starting one month prior to efforts to conceive). Affected women should discuss this with their health care provider; this dose requires a prescription.

For more information about folic acid and prenatal vitamins, or to explore making free prenatal vitamins available to low-income, uninsured women in your setting, please contact Sheryl DiPietro, RN, MSN, at (509) 249-6517.

Resources

- Washington State Department of Health. Folic Acid Handouts. http://here.doh.wa.gov/materials/folic-acid-b-aware
- Washington State Department of Health. Anencephaly Investigation. http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/BirthDefects/AnencephalyInvestigation.

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http://www.yakimapublichealth.org

Notifiable Condition *(includes confirmed and probable cases)*	Total Cases by Year	Total Cases by Year	Total Cases by Year
	2015	**2014**	**2013**
Campylobacteriosis	153	97	154
Chlamydia	1597	1504	1379
Cryptosporidiosis	7	7	3
Genital Herpes - Initial	111	60	56
Giardiasis	25	16	11
Gonorrhea	376	406	181
Hepatitis A acute	0	0	4
Hepatitis B acute	0	0	0
Hepatitis B chronic	18	11	6
Hepatitis C acute	1	2	0
Hepatitis C chronic	223	300	176
HIV/AIDS Cumulative Living	196	195	192
HIV/AIDS Deaths	3	2	4
HIV/AIDS New	5	8	8
Meningococcal Disease	0	1	0
Pertussis	11	18	128
Salmonellosis	49	53	31
Shigellosis	2	14	6
STEC (enterohemorrhagic E. coli)	20	15	21
Syphilis - Primary and Secondary	7	15	14
Tuberculosis	12	4	9

Notifiable Conditions Year End Summary 2015