DBH
DIVISION OF BEHAVIORAL HEALTH

Commission on Native Children: Mental Health and Suicide Prevention

March 11, 2022

Pamela End of Horn, DSW, LICSW

Pamela End of Horn, DSW, LICSW, National Suicide Prevention Consultant, Indian Health Service Headquarters, Rockville, Maryland. Pamela is responsible for oversight of the Suicide Prevention and Care Program. Her work focuses on policy development, program implementation and evaluation. Pamela has a Doctorate Degree in Social Work from the University of Pennsylvania and currently holds advanced practice licenses in North Dakota and Minnesota. Pamela is an enrolled member of the Oglala Lakota Sioux of the Pine Ridge Indian Reservation, Pine Ridge, South Dakota.

Review of the data

What do we know?

Suicide Reporting Form: Indian Health Service Suicide Prevention Surveillance Data

- The Suicide Reporting Form supports Public Health Initiatives
  - Department of Health and Human Services National Strategy for Suicide Prevention
  - IHS Division of Behavioral Health Suicide Prevention Initiative
  - Clinical Quality Performance for the Government Performance Results Act (GPRA) measure
- Developed by
  - IHS Office of Information Technology and Division of Behavioral Health
  - Federal, Tribal and Urban Behavioral Health providers and subject matter experts

Purpose of the Suicide Reporting Form

- Improve data collection
- Inform suicide prevention activities
  - Standardized and systematic method for documenting incidents of suicide
  - Accurate suicide data at the point of care
  - Timely data
  - Capture specificity of location and associated risk factors

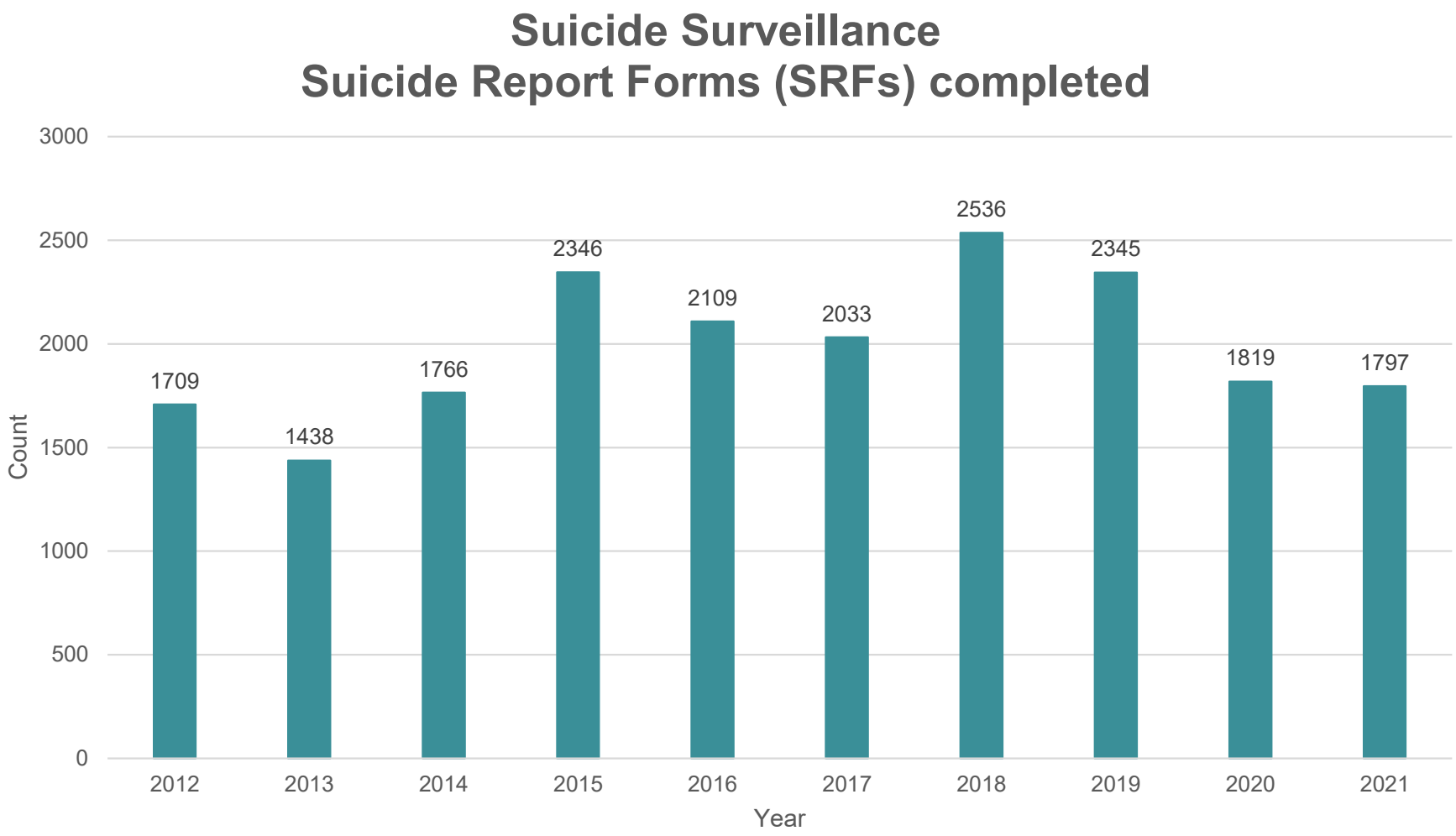
Data Captured

- Provider who completed the Suicide Reporting Form
- Patient demographics
- Type of suicide incident
  - Ideation with intent and plan
  - Attempt
  - Completion
  - Combination Suicide/Homicide
- Standard suicide epidemiological data
  - Method
  - Substances involved
  - Contributing factors

Limitation of Suicide Reporting Form Data

- Not all IHS, Tribal or Urban facilities utilize the EHR, RPMS, where the SRF is utilized.
- Non-RPMS Facilities can manually enter paper SRFs to be included in the database but none submit data.
- All data reported was provided by IHS, Tribal, and Urban Facilities using RPMS.

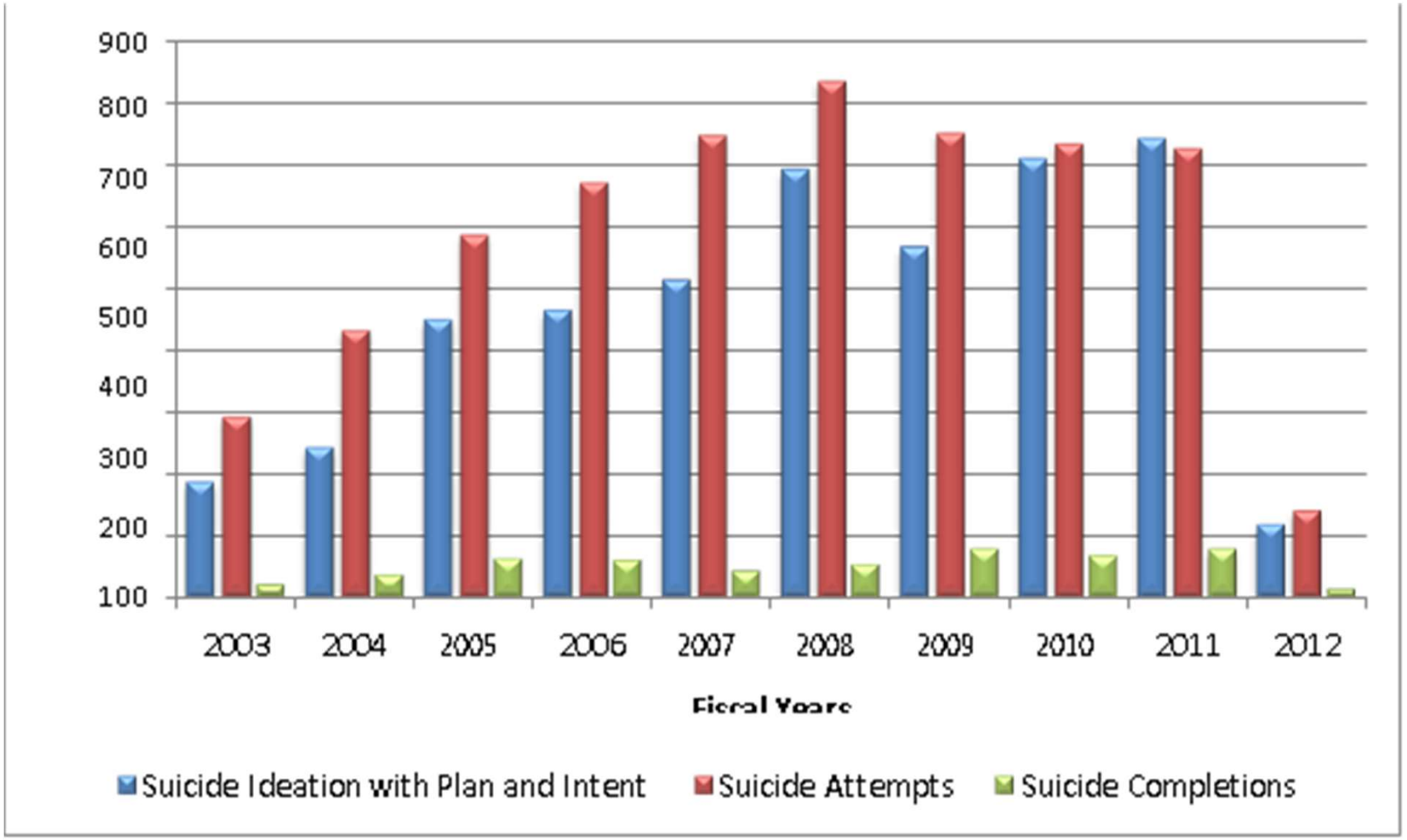
FY 2012 - 2020


Suicide Surveillance
Suicide Report Forms (SRFs) completed
3000
2500
2000
1500
1000
500
0
Count
1709
1438
1766
2346
2109
2033
2536
2345
1819
1797
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year

IHS RPMS SRF Aggregate Database Analysis

- IHS Division of Behavioral Health and the Great Lakes Inter-Tribal Epidemiological Center partnered to aggregate SRF data
- The SRF database contained 41 variables containing:
  - 12,928 event-specific records of suicidal behavior.
- The vast majority of records (95.4%) reported on suicidal behaviors which occurred between October 1, 2003 and January 30, 2012.

Suicide Aggregate 2003 - 2012



Suicide Related Behavior

Ideation with Plan & Intent

- Females (55.1%)
- Ages 15 – 19 years old (23%)
- Less than 12 years of Education (42.4 %)
- Single (62.7 %)
- Unemployed (51.9%)

Attempts

- Females (59.6%)
- Ages 15 – 19 years old (27.3%)
- Less than 12 years of Education (38.9 %)
- Single (59 %)
- Unemployed (51.4%)

Suicide Completion

- Males (72.5%)
- Ages 15 – 19 years old (25.1%)
- Less than 12 years of Education (27.6 %)
- Unemployed & Single (49.4 %)

Suicide Methods & Means

Ideation with Plan & Intent

- Overdose (25%)
- Stabbing/Laceration (19.6%)
- Hanging (18.7%)

Attempts

- Overdose (58%)
- Stabbing/Laceration (23.8%)
- Hanging (14.3%)

Suicide Methods & Means

- Completions
  - Hanging (61.8%)
  - Gunshot (25.5%)
  - Overdose (9.5%)

Suicides Among American Indian/Alaska Natives — National Violent Death Reporting System, 18 States, 2003–2014

- In 2015, AI/AN suicide rate in the 18 participating in the National Violent Death Reporting System (NVDRS) was **21.5 per 100,000**, more than **3.5 times higher** than those among racial/ethnic groups with the lowest rates.
- More than one third (35.7%) of AI/AN decedents were aged 10 to 24 years (9.8% aged 10 to 17 years, 25.9% aged 18 to 24 years) versus 11.1% of whites.
- More than two thirds (69.4%) of AI/AN decedents resided in **non-metropolitan areas**.
- The largest portion of both AI/AN and white decedents died by **firearm** (42.1% and 52.9%, respectively) with **hanging/strangulation/suffocation** being the next larges proportion (39.7% and 22.5%, respectively).

Circumstances precipitating suicide deaths of non-Hispanic American Indian/Alaska Natives compared with non-Hispanic whites — National Violent Death Reporting System, 18 states,* 2003–2014

Circumstance	No. (%)† AI/AN	No. (%)† White	aOR (95% CI)§
Total decedents	1,531 (100)	103,986 (100)	—
Cases with known circumstances¶,**	1,339 (87.5)	93,403 (89.8)	—
Suicide event			
History of suicidal thoughts or plan††	111 (33.4)	6,955 (32.7)	—§§
History of suicide attempts¶	308 (23.0)	18,935 (20.3)	1.0 (0.9–1.2)
Disclosed suicidal intent¶	457 (34.1)	26,377 (28.2)	1.3 (1.1–1.4)
Interpersonal			
Intimate partner problem¶	524 (39.1)	27,464 (29.4)	1.2 (1.1–1.3)
Family relationship problem¶¶	83 (10.6)	4,965 (8.8)	—§§
Victim of interpersonal violence within past month¶	21 (1.6)	444 (0.5)	—***
Perpetrator of interpersonal violence within past month¶	91 (6.8)	3,107 (3.3)	2.0 (1.6–2.4)
Argument preceded death¶,¶¶	154 (19.7)	6,102 (10.8)	1.4 (1.2–1.7)
Life stressor			
Victim in custody¶,**	76 (5.0)	2,458 (2.4)	1.7 (1.4–2.2)
Released from institution within previous month¶,†††	17 (4.6)	1,885 (8.2)	—***
Criminal legal problem¶	201 (15.0)	8,493 (9.1)	1.5 (1.3–1.7)
Civil legal problem¶	34 (2.5)	3,420 (3.7)	—***
Physical health problem¶	144 (10.6)	21,655 (23.2)	0.9 (0.7–1.0)
Job problem¶,§§§	92 (7.6)	12,038 (13.2)	0.5 (0.4–0.6)
Financial problem¶,§§§	76 (6.3)	11,211 (12.3)	0.5 (0.4–0.7)
School problem¶¶¶	36 (21.4)	688 (22.0)	—§§
Eviction/Loss of home	25 (1.9)	2,525 (2.7)	—§§
Suicide of friend or family member¶	79 (5.9)	1,797 (1.9)	2.4 (1.9–3.1)
Death of friend or family member¶	118 (8.8)	6,116 (6.6)	1.7 (1.4–2.1)
Any crisis within past 2 weeks	411 (30.7)	26,815 (28.7)	—§§
Mental health/Substance use			
Current mental health problem¶	371 (27.7)	43,614 (46.7)	0.4 (0.4–0.5)
Current depressed mood¶	489 (36.5)	38,940 (41.7)	0.9 (0.8–1.0)
Current mental health treatment¶	261 (19.5)	31,987 (34.2)	0.5 (0.4–0.5)
History of mental health treatment¶	311 (23.2)	37,499 (40.2)	0.4 (0.4–0.5)
Reported alcohol use in hours preceding death¶	651 (48.6)	23,370 (25.0)	2.7 (2.4–3.0)
Alcohol abuse problem¶	371 (27.7)	17,242 (18.5)	1.8 (1.6–2.1)
Substance abuse problem other than alcohol	202 (15.1)	14,365 (15.4)	—§§

Toxicology* results of non-Hispanic American Indian/Alaska Native suicide decedents compared with non-Hispanic white suicide decedents — National Violent Death Reporting System, 18 states,† 2003–2014

	AI/AN		White		
Toxicology	No. (%) tested	No. (%) positive	No. (%) tested	No. (%) positive	aOR (95% CI)§
Alcohol	846 (55.3)	449 (53.5)	66,955 (64.4)	23,436 (35.0)	2.1 (1.9–2.5)
Amphetamine	593 (38.7)	47 (8.0)	42,762 (41.1)	1,966 (4.7)	1.4 (1.1–1.9)
Antidepressant	389 (25.4)	77 (20.2)	39,489 (38.0)	11,329 (28.7)	0.7 (0.5–0.9)
Benzodiazepine	148 (9.7)	23 (15.8)	11,142 (10.7)	4,003 (36.1)	—¶
Cocaine	607 (39.7)	24 (4.0)	45,757 (44.0)	2,786 (6.1)	—¶
Marijuana	481 (31.4)	98 (20.7)	35,374 (34.0)	3,802 (10.9)	1.5 (1.2–1.8)
Opioid	614 (40.1)	72 (11.7)	46,773 (45.0)	11,126 (24.1)	0.5 (0.4–0.7)

The State of State Territorial, and Tribal Suicide Prevention: Findings from a Web-Based Survey

- Domain 1: Awareness of Recent Suicide Trends
- Domain 2: Data Sources
- Domain 3: Infrastructure
- Domain 4: Prevention Planning
- Domain 5: Collaboration
- Domain 6: Legislation/Policy
- Domain 7: Prevention Readiness/Capacity
- Domain 8: Population Addressed
- Domain 9: Risk and Protective Factors Addressed
- Domain 10: Facilitators and Barriers

Outcomes

- While the National Vital Statistics System (NVSS) collects suicide mortality data on AI/AN populations, error exists with regard to coding of race/ethnicity on the death certificate, especially among AI/AN.31 Additionally, NVSS does not provide data on suicide rates among tribes, so a true understanding of the problem is limited.
- In terms of readiness to carry out suicide prevention activities, data were sparse, but about a quarter of tribes reported being in the very early stages of readiness, reporting “vague awareness” of suicide prevention in their communities or “preplanning.”

Suicide Rates for Females and Males by Race and Ethnicity: United States, 1999 and 2017

- The largest increase occurred for non-Hispanic American Indian or Alaska Native (AIAN) females (139%, from 4.6 to 11.0).
- In 2017, for the three age groups for which reliable rates could be computed for all race and ethnicity groups (15–24, 25–44, and 45–64), rates for females aged 15–24 and 25–44 were highest for non-Hispanic AIAN females (20.5 and 20.7, respectively).
- For males, age-adjusted suicide rates increased significantly between 1999 and 2017 the largest increase observed among non-Hispanic AIAN males (71%, from 19.8 to 33.8).
- In 2017, for the three age groups for which reliable rates could be calculated for all race and ethnicity groups, rates for males aged 15–24 and 25–44 were highest for non-Hispanic AIAN males (53.7 and 58.1, respectively).

Overview of programs.

What works?

Grants

- Substance Abuse Prevention, Treatment and Aftercare (SAPTA)
- Suicide Prevention, Intervention, and Postvention (SPIP)
- Zero Suicide Initiative (ZSI)
- Behavioral Health Integration Initiative (BH2I)

Pilots and Partnerships

- Memorandum of Understanding with National Institutes of Health/National Institute of Mental Health
- National Memorandum of Understanding with Bureau of Indian Education

Discussion

- Suicide rates among AI/AN are historically higher than those of the total U.S. population.
- Approximately 70% of AI/AN decedents resided in nonmetropolitan areas, including rural settings, underscoring the importance of implementing suicide prevention strategies in rural AI/AN communities.
- Suicide prevention efforts should incorporate evidence-based, culturally relevant strategies at individual, interpersonal, and community levels and need to account for the heterogeneity among AI/AN communities.
- Number of deaths for race and ethnicity groups may be underestimated.

Recommendations

- Increase sustainable funding focusing on small, under resourced Tribes.
- Increase formative research to address needs of the AI/AN population in suicide prevention.
- Implement consistent Tribal consultation on mental health/behavioral health and suicide prevention related topics.
- Increase access to infrastructure related resources.

Question & Answers

Contact Information

Pamela End of Horn, DSW, LICSW
National Suicide Prevention Consultant
Indian Health Service - Headquarters
OCPS/Division of Behavioral Health
Mail Stop 08N34-A
5600 Fishers Lane
Rockville, Maryland 20857
301-443-8028
pamela.endofhorn@ihs.gov