



Infant Mortality
Arizona, 2006-2016



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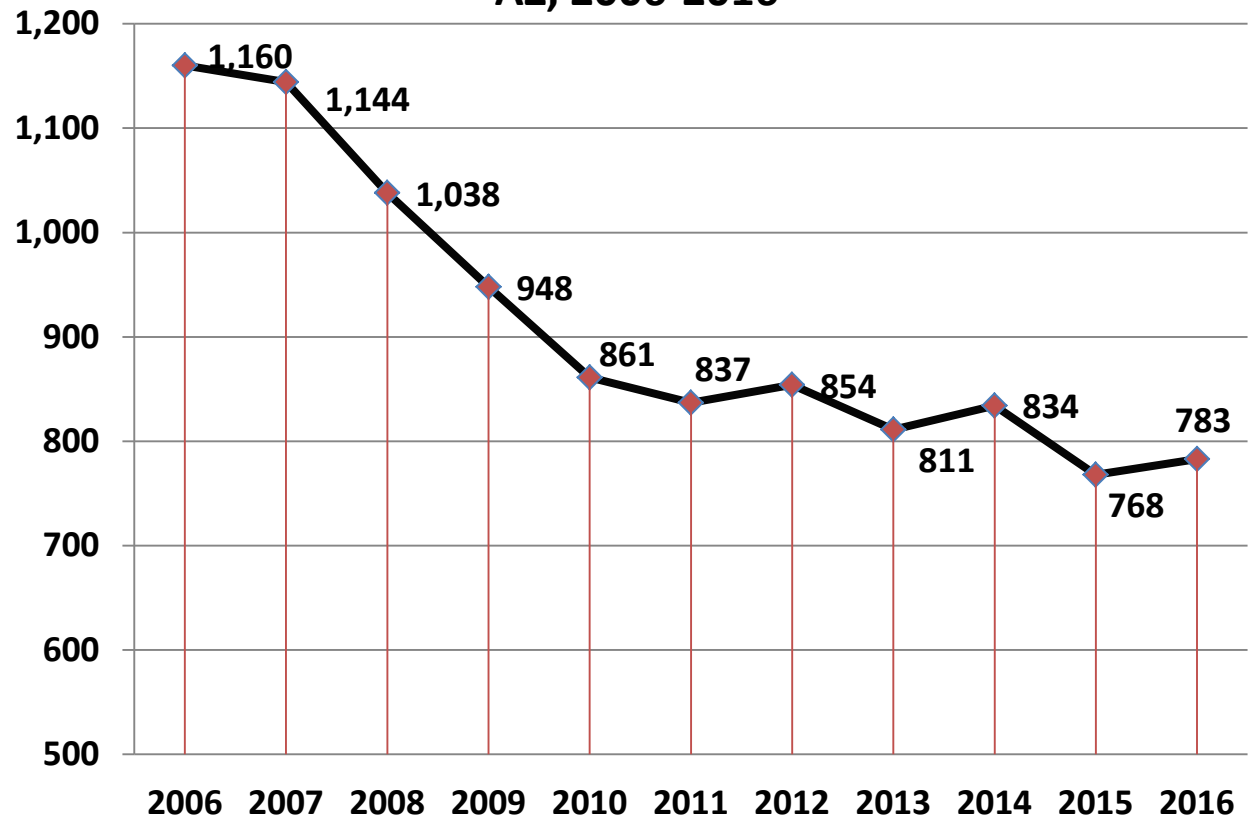
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Kyle Gardner, MSPH, CHES
Injury Epidemiologist

Arizona Child Fatality Review

- Children under the age of 18, who died in Arizona
- Each of these deaths are reviewed by local county teams (diverse member)
- Death Review- request records, compile information, and make conclusion on the manner/cause of death, and recommendations to prevent deaths
- Data and Results are reported to National Child Fatality Review Database and State produces annual report

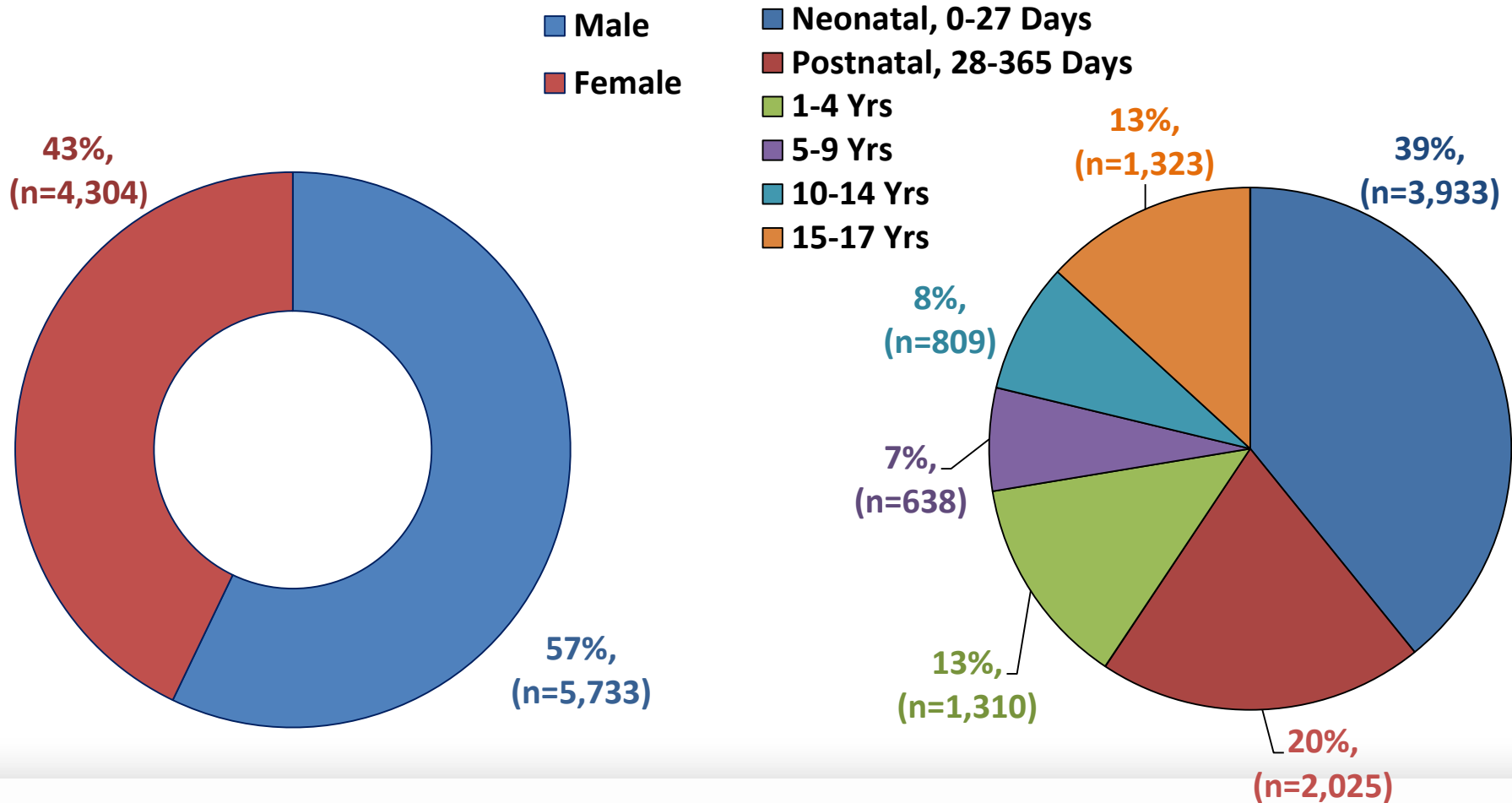
**Number of Children Deaths < 18 Yrs,
AZ, 2006-2016**



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Percentage of Child Deaths < 18 Yrs, by Sex and Age Group, Arizona, 2006-2016 (n=10,038)



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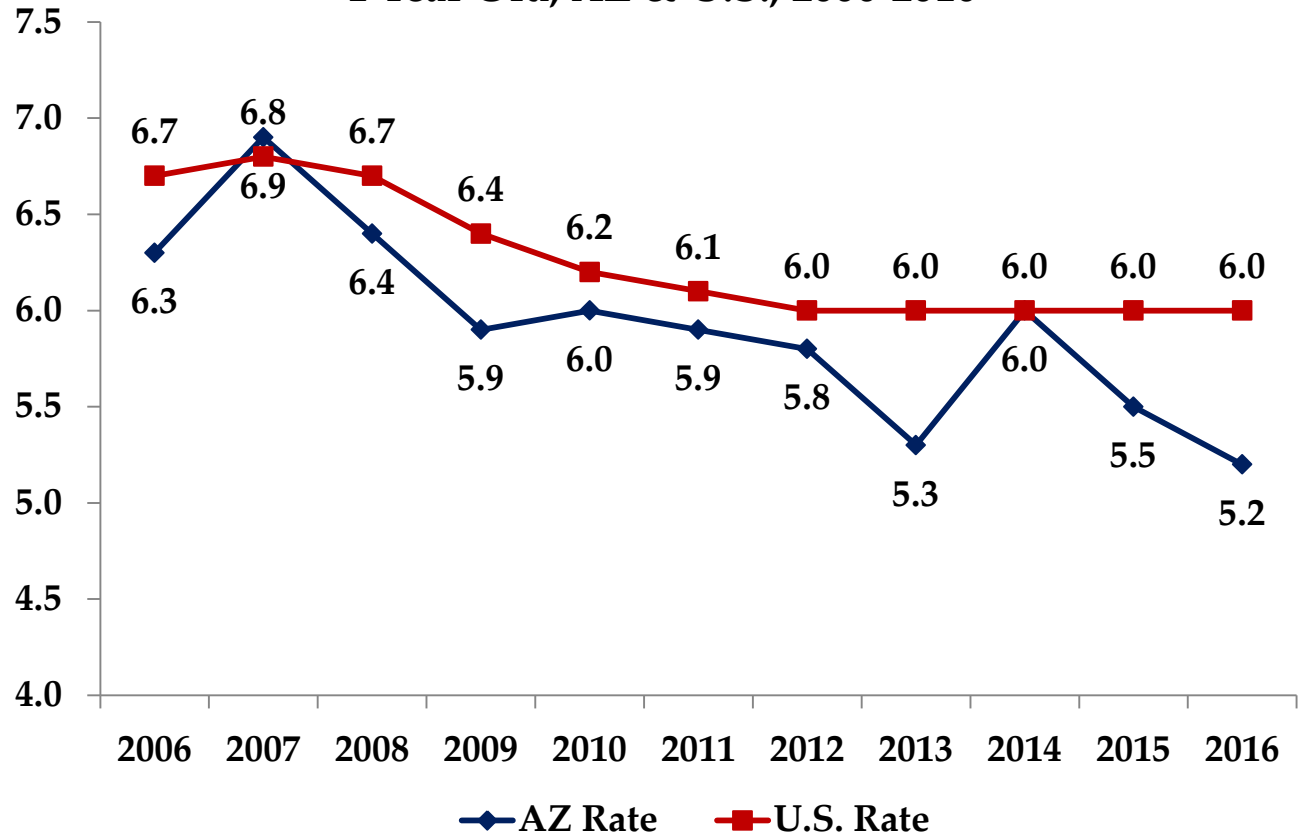
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Infant Mortality

By Year

Death Year	N	%
2006	646	10.8
2007	711	11.9
2008	634	10.6
2009	550	9.2
2010	525	8.8
2011	509	8.5
2012	497	8.3
2013	454	7.6
2014	524	8.8
2015	465	7.8
2016	443	7.4
Total	5,958	

Infant Mortality Rates per 1,000 Live Births, Less than 1 Year Old, AZ & U.S., 2006-2016



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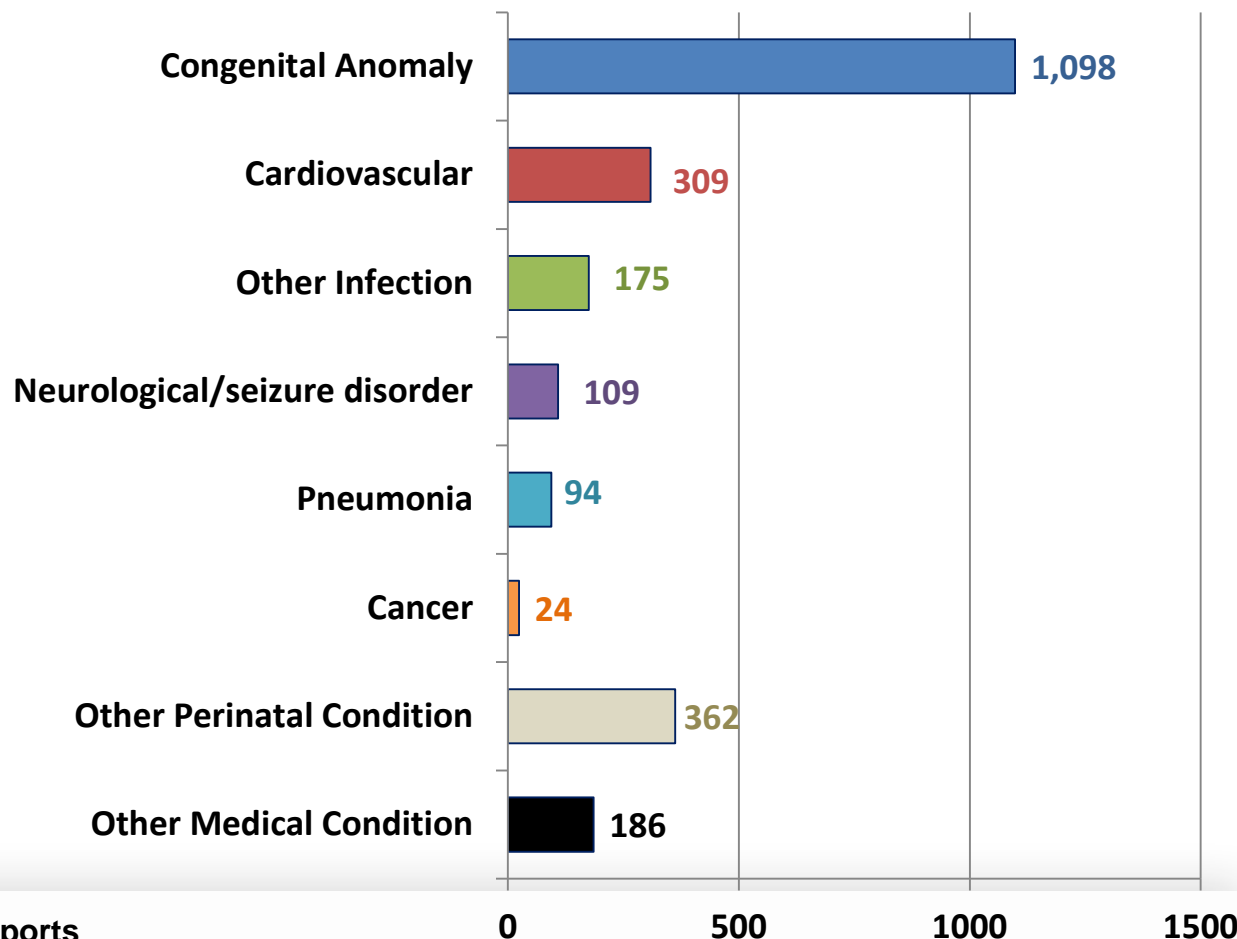
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Infant Mortality: Cause of Death (COD), AZ, 2006-2016

By COD

COD	N	%
Prematurity	2,461	41.4
Medical (No SIDS or Prematurity)	2,357	39.6
Suffocation	418	7.0
Undetermined	395	6.6
SIDS	116	1.9
Blunt Force Trauma	84	1.4
Motor Vehicle Crash	46	0.7
Other Injury	74	1.2
Total	5,951	100
*SUID/SIDS	894	15.0

By Medical (No SIDS or Prematurity)



*Represents 79.7% reported from CFR Reports

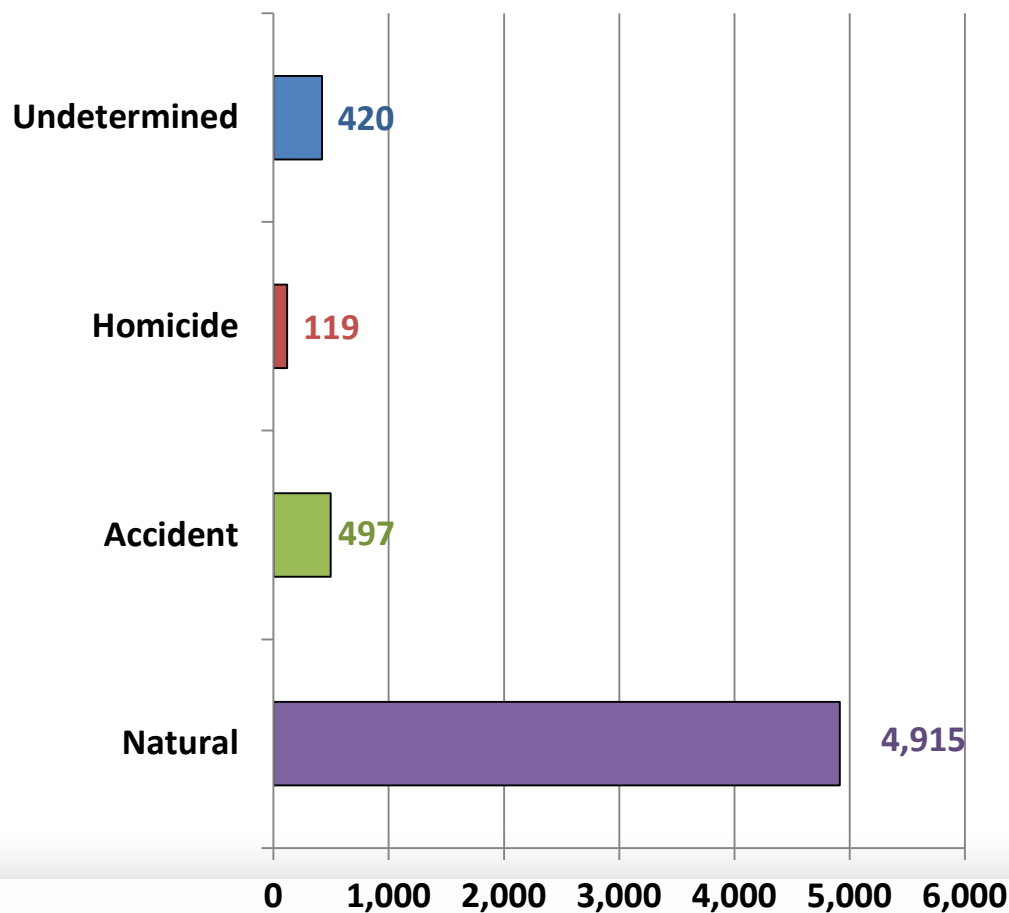


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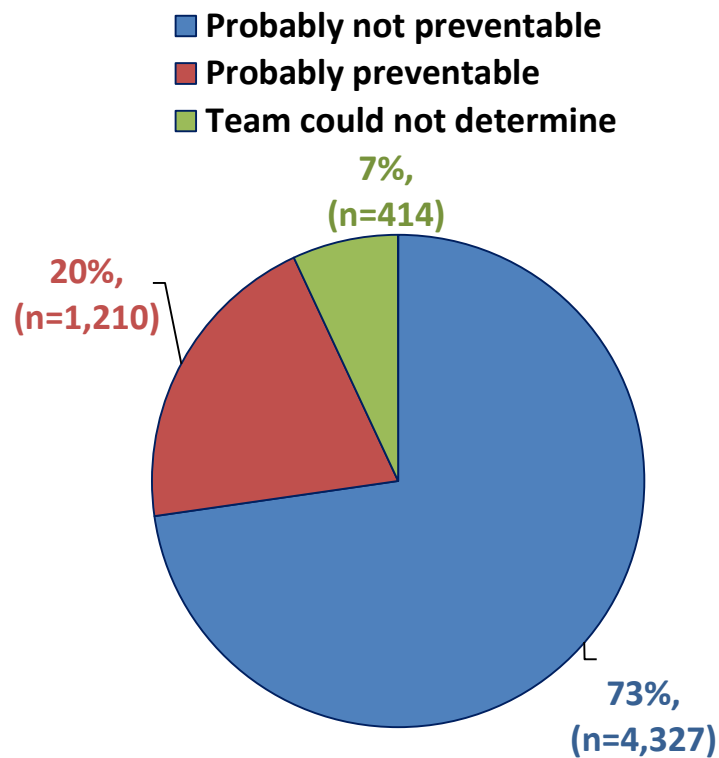
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Infant Mortality: Manner & Preventability, AZ, 2006-2016

Manner



Preventability

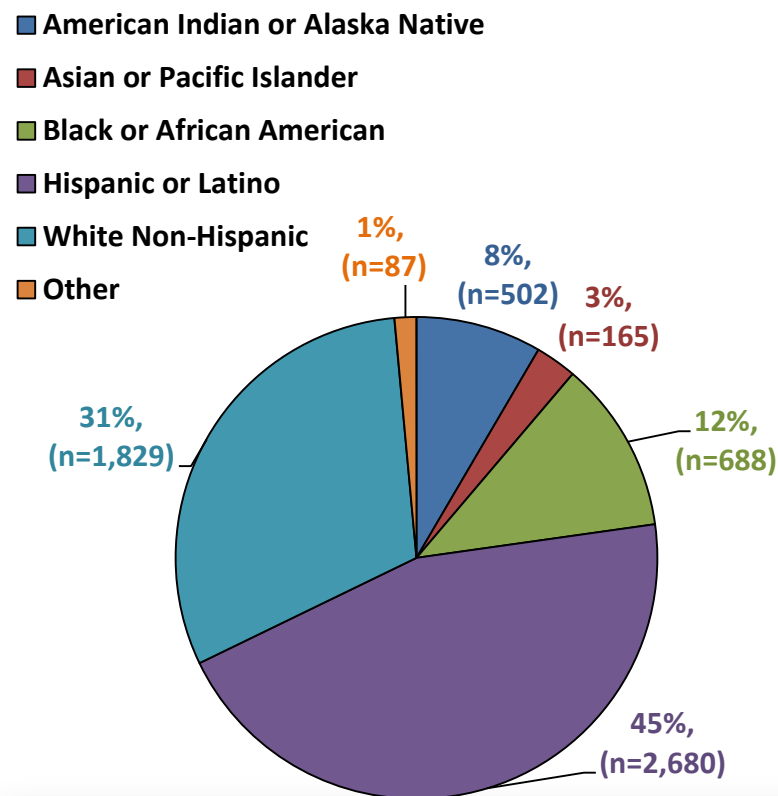


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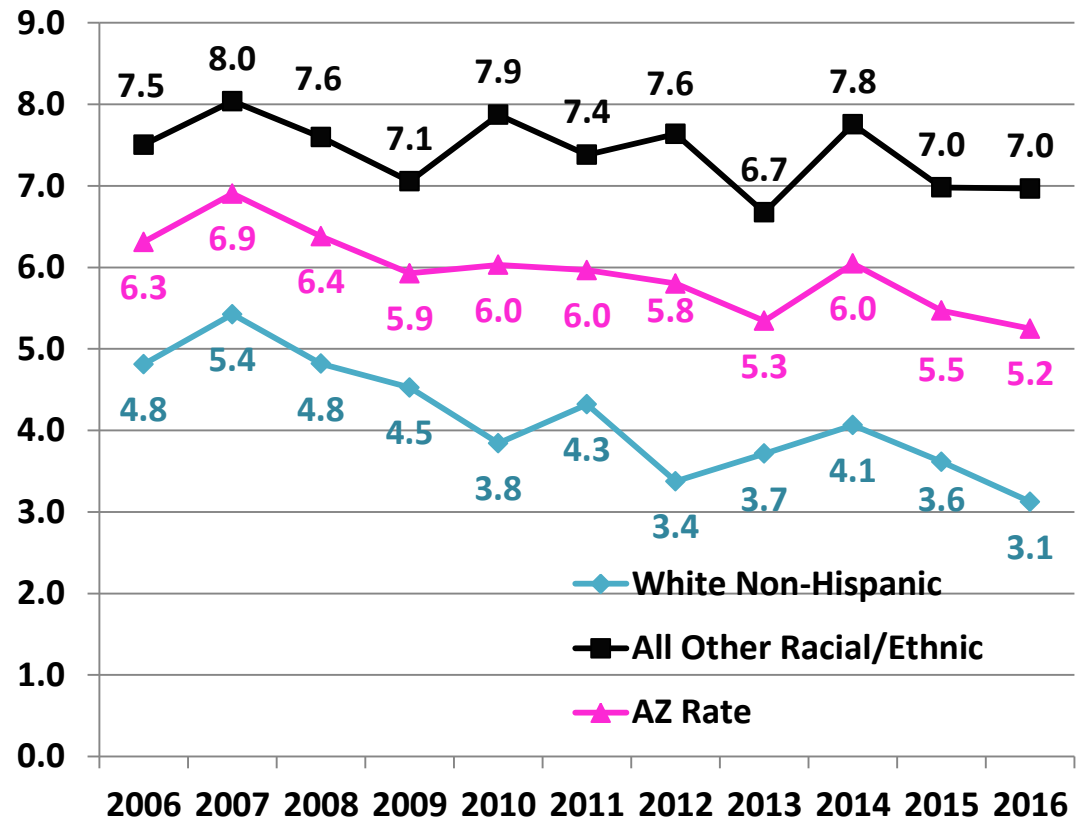
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Infant Mortality: Race/Ethnicity Group

Percentage of Infant Deaths, by
Race/Ethnicity Group, AZ, 2006-2016
(n= 5,951)



Infant Mortality Rates per 1,000 Live Births, < 1 Year
Old, by Race/Ethnicity Group, AZ, 2006-2016

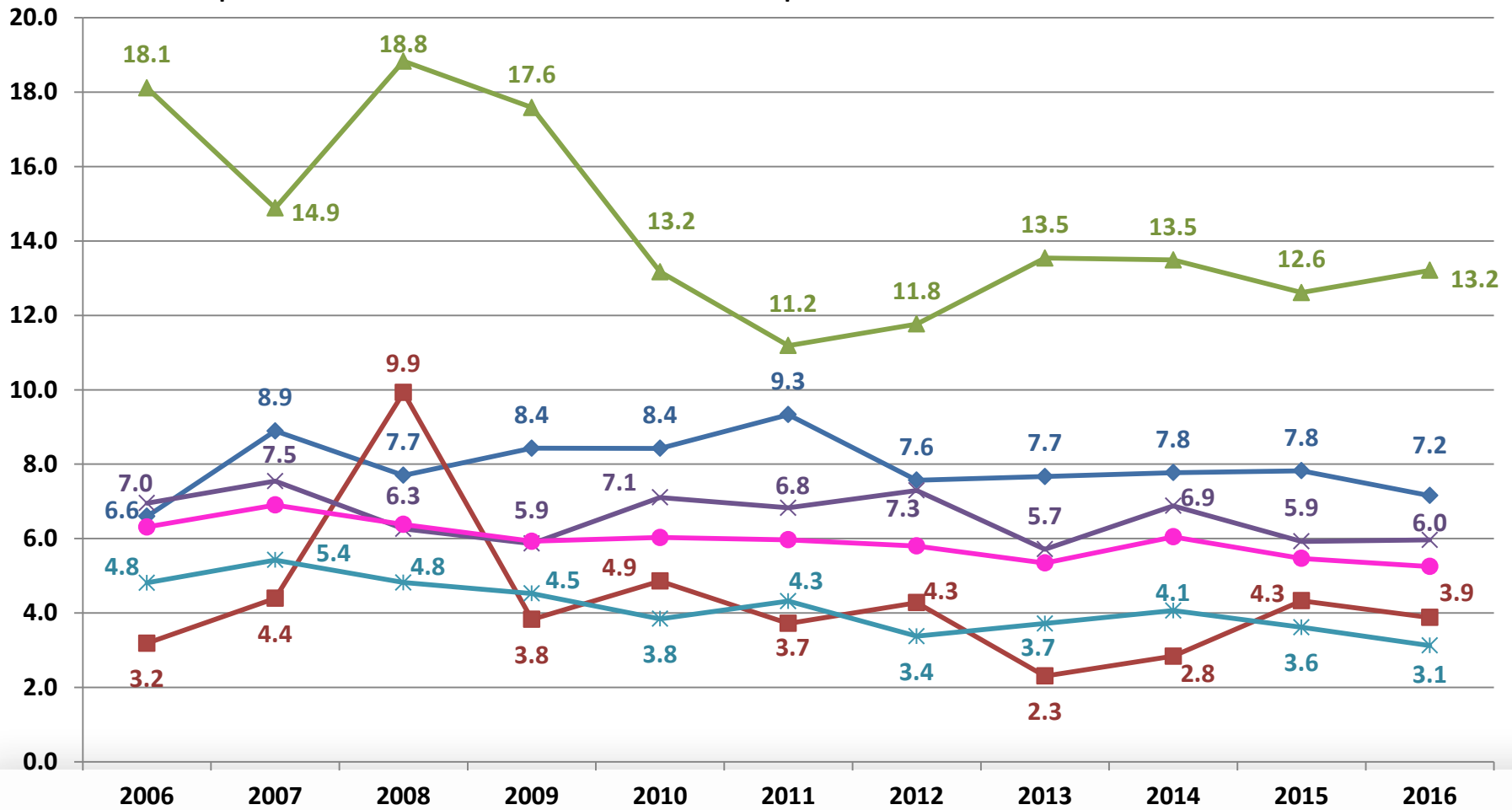


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Infant Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016

◆ American Indian or Alaska Native ■ Asian or Pacific Islander ▲ Black or African American
✕ Hispanic or Latino * White Non-Hispanic ● AZ Rate



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Infant Mortality: County

By County

Infant Mortality Rates per 1,000 Live Births, < 1 Year Old, by County, AZ, 2006-2016

County	N	%
Apache	83	1.4
Cochise	127	2.1
Coconino	113	1.9
Gila	53	0.9
Graham	39	0.7
Greenlee	7	0.1
La Paz	16	0.3
Maricopa	3,721	62.5
Mohave	123	2.1
Navajo	126	2.1
Pima	818	13.7
Pinal	316	5.3
Santa Cruz	40	0.7
Yavapai	134	2.3
Yuma	235	3.9
Total	5,951	100

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Apache	5.0	3.5	6.6	9.7	6.4	9.3	4.3	10.5	5.9	7.3	8.8
Cochise	9.4	8.6	6.7	5.4	8.4	5.4	5.3	8.1	4.9	7.7	3.9
Coconino	4.8	6.1	6.0	4.2	8.5	4.0	5.3	6.2	4.7	6.3	6.8
Gila	4.5	14.4	4.3	5.7	10.4	11.3	6.6	5.1	7.7	6.9	5.1
Graham	3.7	12.0	10.9	3.1	7.5	3.3	9.5	8.3	3.3	1.7	3.6
Greenlee	0.0	0.0	0.0	0.0	9.5	25.2	0.0	8.0	13.9	0.0	0.0
La Paz	4.4	4.3	0.0	11.5	10.0	5.8	14.7	14.7	4.7	10.1	0.0
Maricopa	6.2	6.5	6.2	5.7	5.8	5.9	5.9	5.3	6.2	5.3	5.5
Mohave	6.5	6.2	3.9	5.4	5.4	9.7	2.9	4.0	7.1	5.4	3.3
Navajo	4.3	11.4	8.7	4.2	5.2	7.3	8.6	4.5	6.8	8.6	2.7
Pima	7.3	7.5	7.8	6.4	6.3	5.1	5.1	4.9	5.7	4.2	4.7
Pinal	6.5	7.6	5.6	8.1	4.4	5.6	5.4	4.2	6.2	6.3	5.4
Santa Cruz	5.3	6.5	0.0	5.3	13.0	4.3	8.9	4.6	1.7	4.8	3.1
Yavapai	8.0	7.9	4.5	6.8	5.5	3.8	5.6	4.9	5.7	7.5	5.9
Yuma	5.4	7.4	8.3	6.5	6.8	9.1	5.8	6.4	5.9	7.6	4.7
Total	6.3	6.9	6.4	5.9	6.0	6.0	5.8	5.3	6.0	5.5	5.2



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Infant Mortality Rates per 1,000 Live Births, for Minorities < 1 Year Old, by County, AZ, 2006-2016

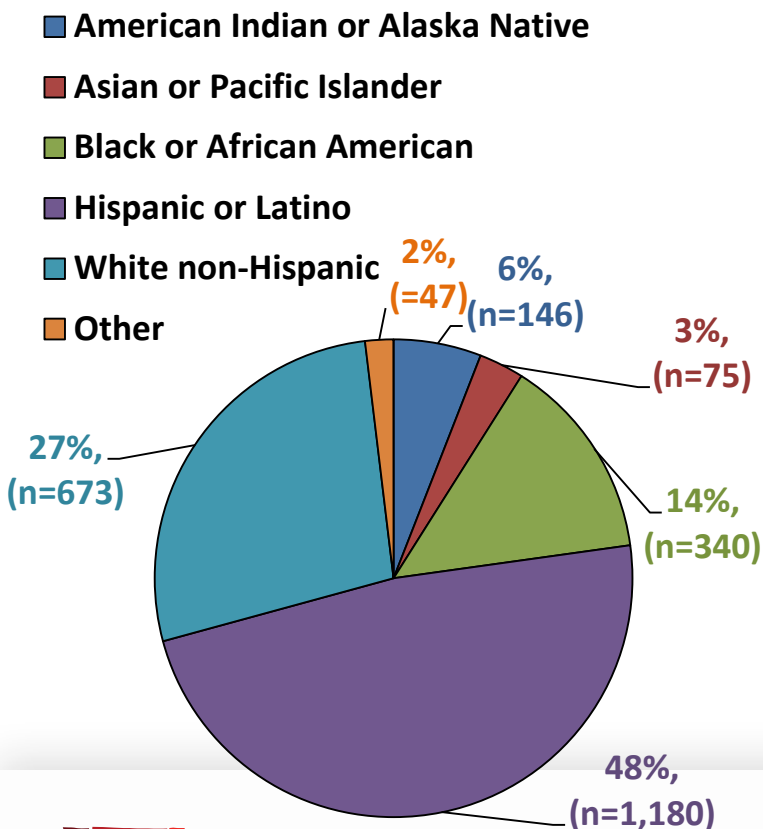


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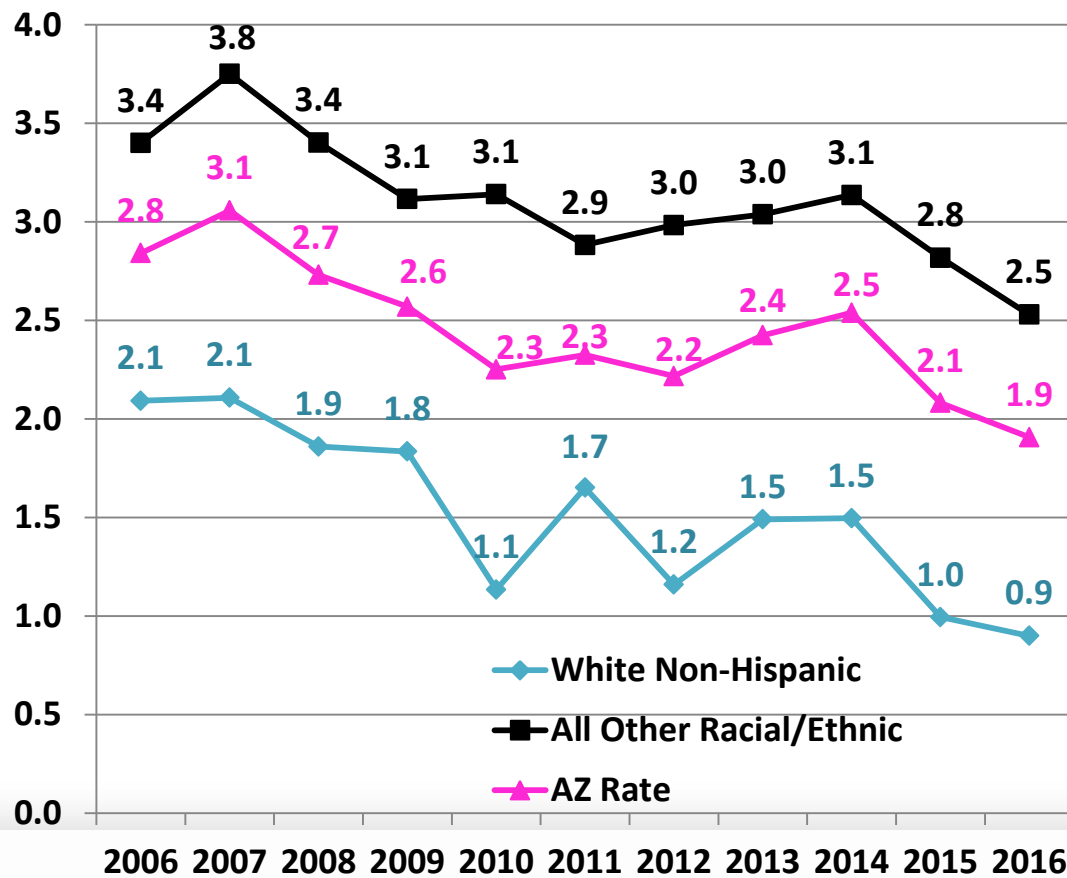
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Infant Mortality due to Prematurity: Race/Ethnicity Group

Percentage of Infant Deaths, by
Race/Ethnicity Group, AZ, 2006-2016
(n=2,461)



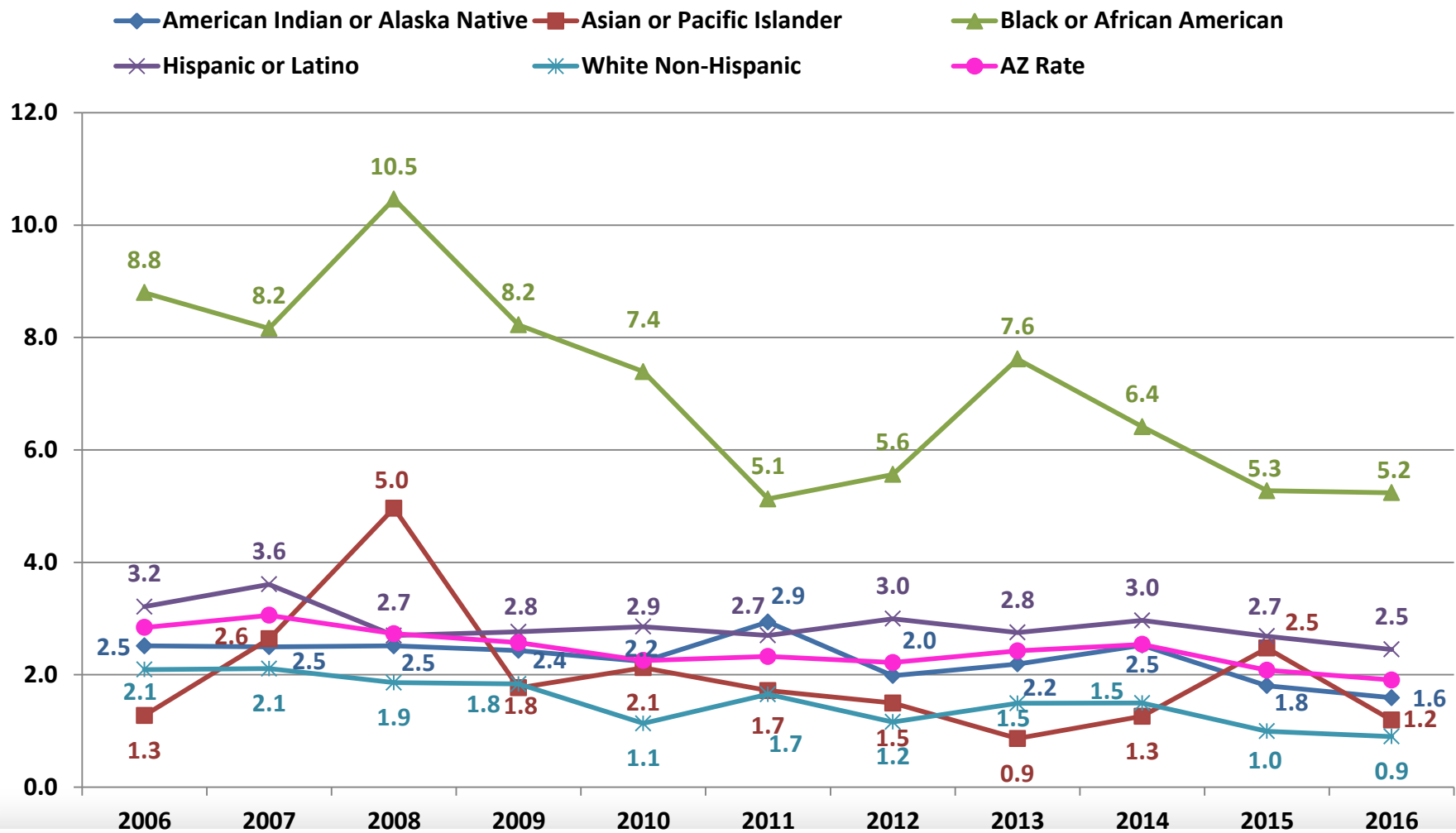
Prematurity Mortality Rates per 1,000 Live Births,
< 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016



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Prematurity Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016



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Infant Mortality due to Prematurity: County

By County

Prematurity Mortality Rates per 1,000 Live Births, < 1 Year Old, by County, AZ, 2006-2016

County	N	%
Apache	12	0.5
Cochise	61	2.5
Coconino	25	1.0
Gila	19	0.8
Graham	17	0.7
Greenlee	< 6	< 0.1
La Paz	< 6	< 0.1
Maricopa	1,583	64.3
Mohave	50	2.0
Navajo	37	1.5
Pima	340	13.8
Pinal	130	5.3
Santa Cruz	16	0.7
Yavapai	53	2.2
Yuma	114	4.6
Total	2,461	100

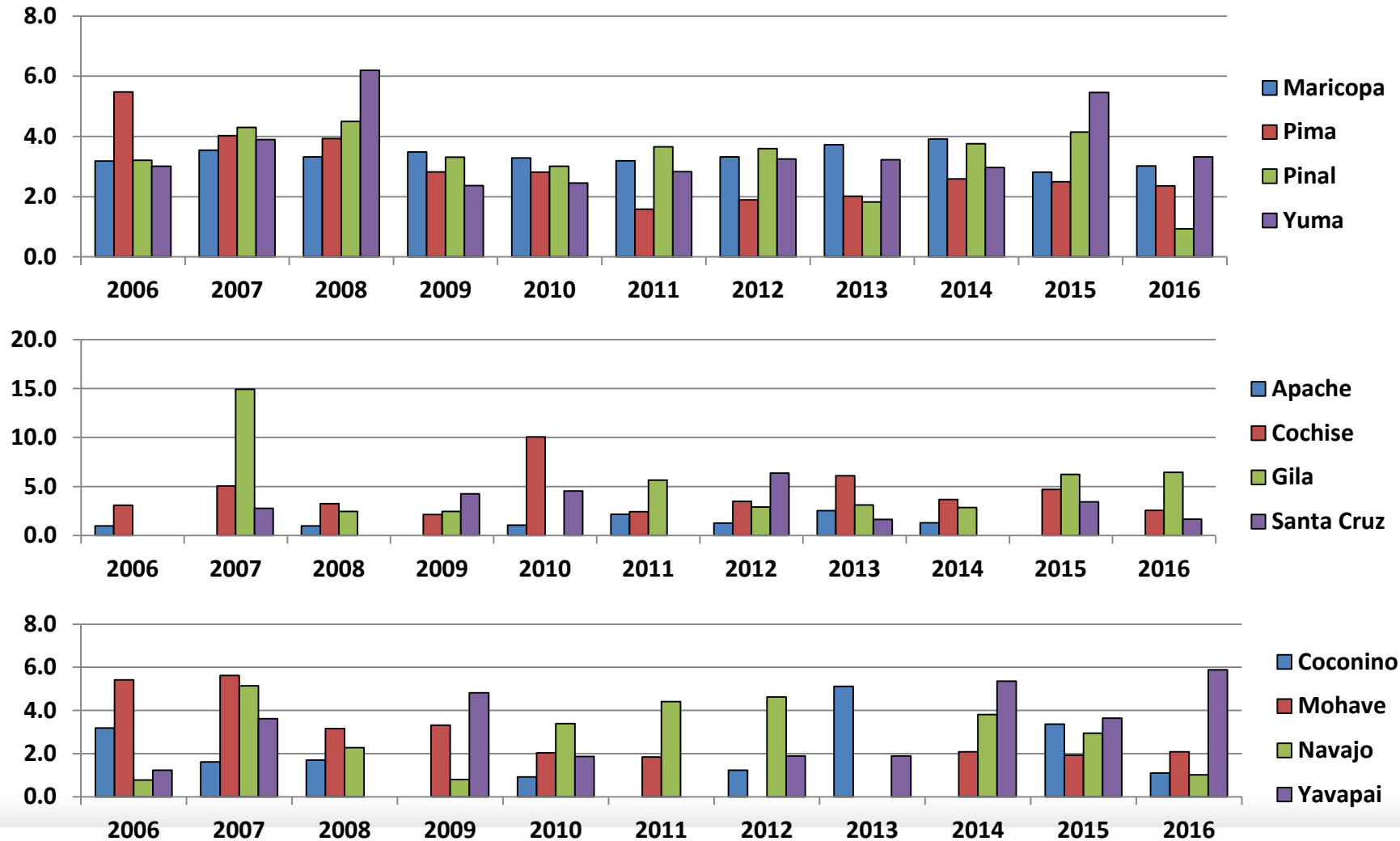
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Apache	0.8	0.0	0.8	0.8	0.9	2.8	1.1	3.2	1.0	0.0	0.0
Cochise	3.9	4.3	3.4	1.1	6.2	1.2	2.9	5.0	2.4	3.8	1.3
Coconino	2.9	0.9	2.0	0.0	0.6	0.6	0.6	3.7	0.0	1.9	0.6
Gila	0.0	10.1	1.4	1.4	0.0	3.2	1.6	1.7	1.5	3.4	5.1
Graham	3.7	5.2	1.6	3.1	5.7	3.3	1.9	1.7	0.0	0.0	3.6
Greenlee	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0
La Paz	4.4	0.0	0.0	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0
Maricopa	2.8	2.9	2.6	2.7	2.2	2.5	2.3	2.5	2.7	1.9	2.0
Mohave	3.6	4.1	1.3	1.8	1.0	4.1	1.2	1.7	2.2	1.1	1.7
Navajo	0.5	3.5	1.5	0.5	2.3	3.0	3.1	1.3	3.1	2.0	0.7
Pima	3.9	3.5	3.8	2.9	1.9	1.3	1.6	1.9	2.3	1.8	1.8
Pinal	2.2	3.2	3.1	3.0	2.6	2.6	2.1	1.1	2.9	2.7	0.9
Santa Cruz	0.0	2.6	0.0	3.9	4.3	0.0	6.0	1.5	0.0	3.2	1.6
Yavapai	1.3	2.5	0.9	3.9	2.2	1.1	2.8	2.7	3.1	3.2	3.2
Yuma	3.0	4.3	4.8	1.9	2.8	3.1	2.6	3.2	2.3	5.0	3.0
Total	2.8	3.1	2.7	2.6	2.3	2.3	2.2	2.4	2.5	2.1	1.9



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Prematurity Infant Mortality Rates per 1,000 Live Births for Minorities < 1 Year Old, by County, AZ, 2006-2016

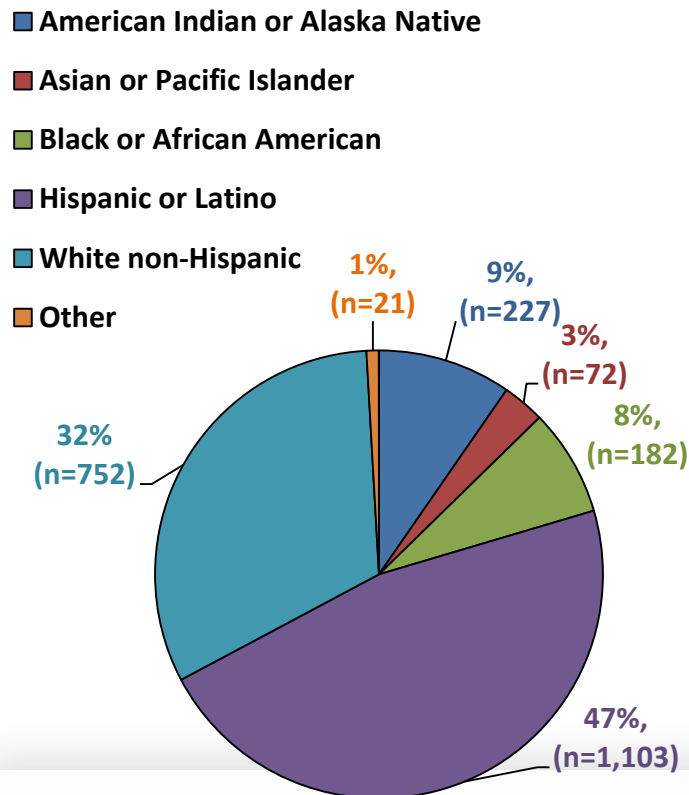


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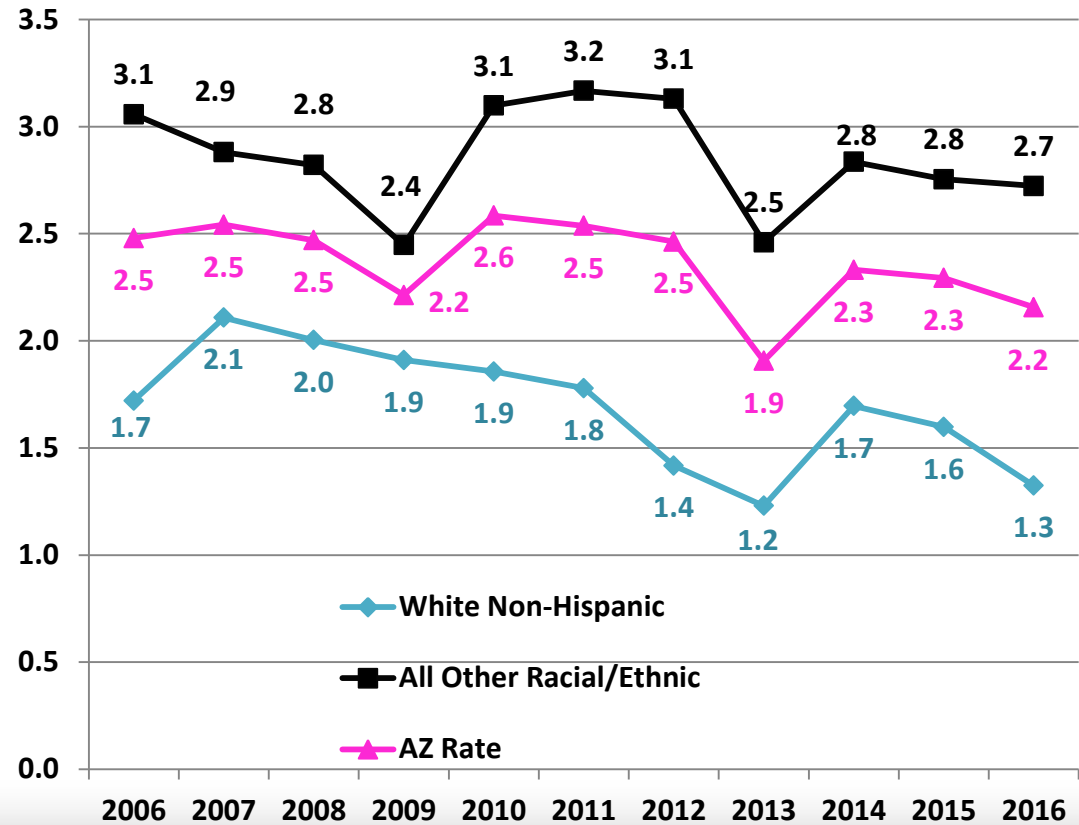
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Infant Mortality due to Medical Condition: Race/Ethnicity Group

Percentage of Infant Deaths, by
Race/Ethnicity Group, AZ, 2006-2016
(n=2,357)



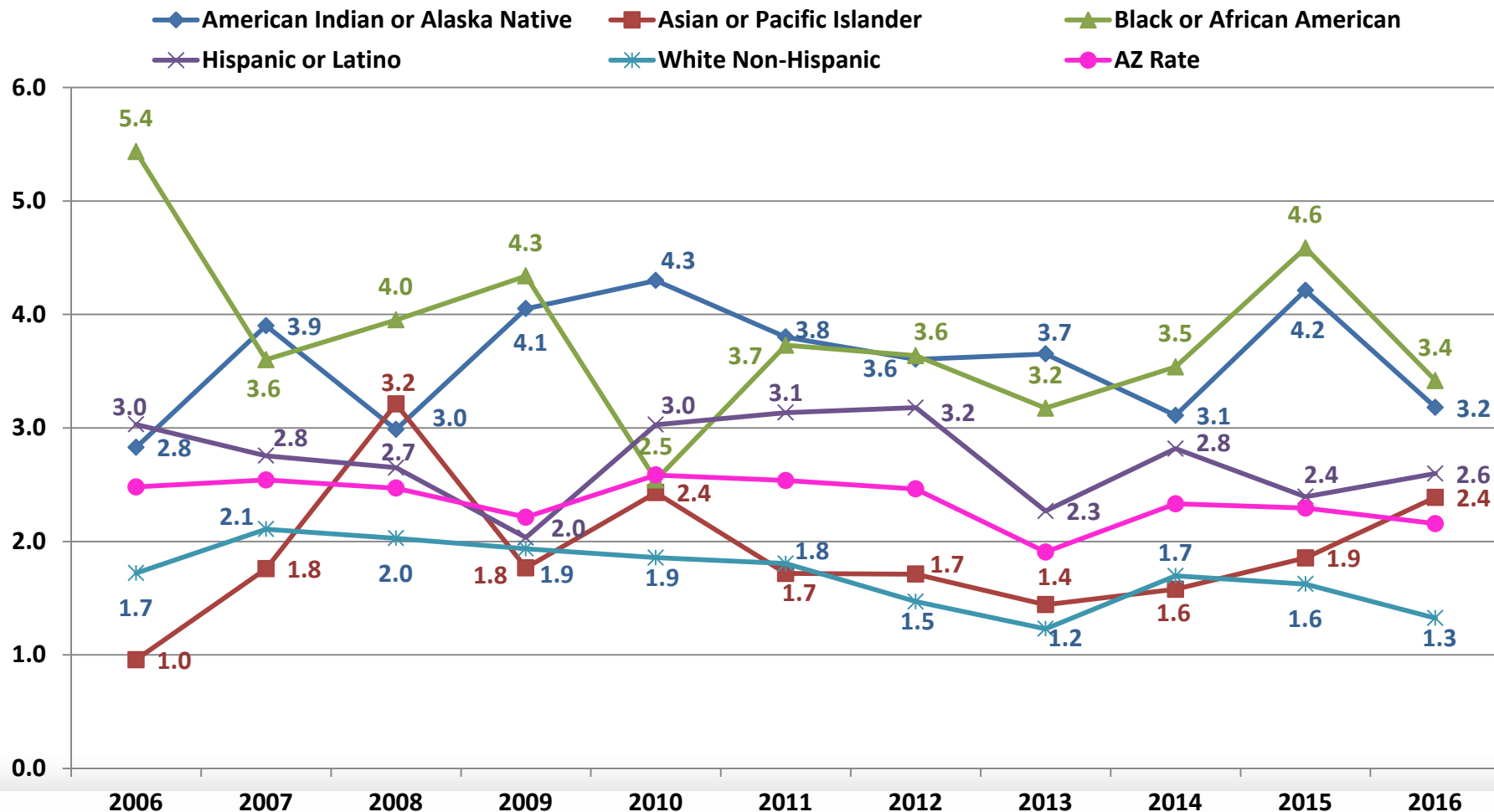
Medical Cond. Mortality Rates per 1,000 Live Births,
< 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016



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Medical Co. Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016



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Infant Mortality due to Medical Condition: County

By County

County	N	%
Apache	51	2.2
Cochise	49	2.1
Coconino	54	2.3
Gila	22	0.9
Graham	13	0.6
Greenlee	< 10	< 0.6
La Paz	< 10	< 0.6
Maricopa	1,431	60.7
Mohave	41	1.7
Navajo	63	2.7
Pima	324	13.7
Pinal	119	5.0
Santa Cruz	22	0.9
Yavapai	58	2.5
Yuma	97	4.1
Total	2,357	100

Medical Cond. Mortality Rates per 1,000 Live Births, < 1 Year Old, by County, AZ, 2006-2016

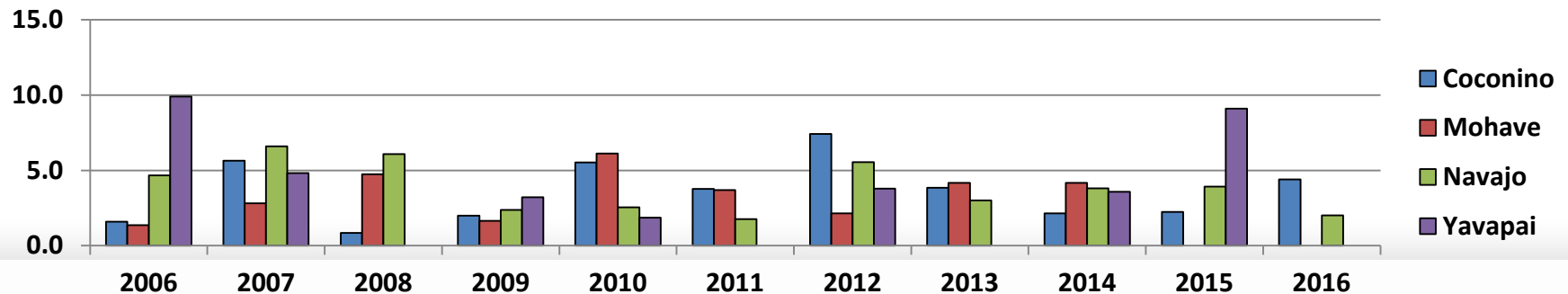
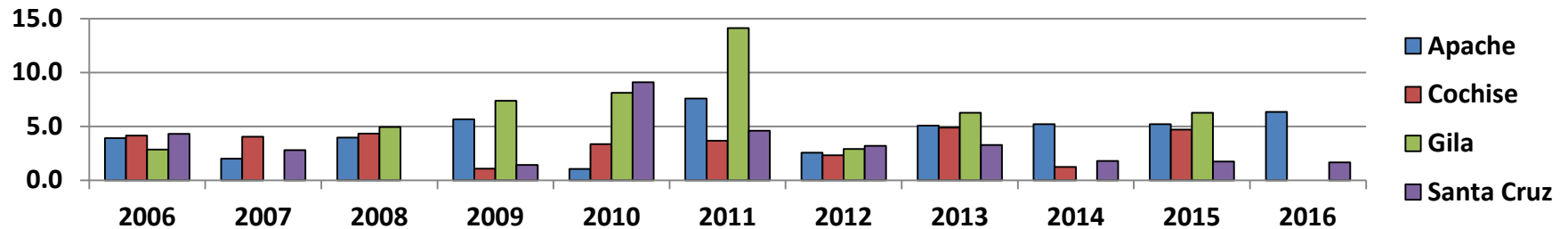
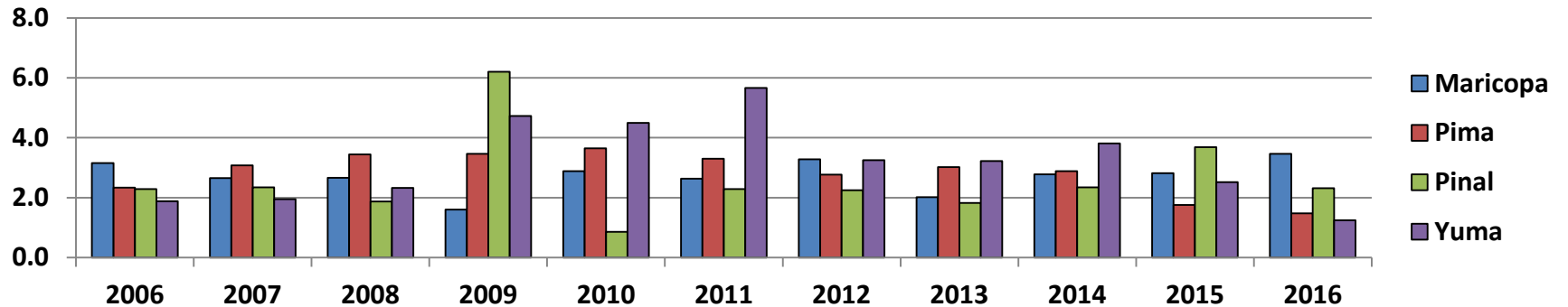
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Apache	3.4	2.6	4.1	4.8	1.8	6.5	2.2	5.3	4.9	6.3	5.9
Cochise	3.3	3.2	2.8	3.8	2.2	2.4	1.8	3.1	1.8	3.2	0.7
Coconino	1.0	3.8	1.0	2.6	5.6	2.3	3.6	1.8	2.4	1.9	4.3
Gila	1.5	1.4	2.9	4.3	4.5	8.1	3.3	3.4	1.5	3.4	0.0
Graham	0.0	1.7	7.8	0.0	1.9	0.0	3.8	3.3	1.7	1.7	0.0
Greenlee	0.0	0.0	0.0	0.0	0.0	16.8	0.0	8.0	6.9	0.0	0.0
La Paz	0.0	4.3	0.0	11.5	5.0	0.0	9.8	4.9	4.7	5.0	0.0
Maricopa	2.5	2.4	2.3	1.8	2.4	2.1	2.5	1.7	2.3	2.4	2.5
Mohave	1.2	0.8	2.2	1.8	3.5	3.6	1.2	1.1	3.8	1.1	0.0
Navajo	3.2	5.0	6.2	2.6	2.3	2.4	3.7	1.9	3.1	4.0	1.3
Pima	2.4	2.6	2.9	2.5	3.3	3.2	2.2	2.1	2.0	1.5	1.2
Pinal	2.9	2.8	1.9	3.8	0.8	2.4	2.1	2.0	2.0	1.8	2.0
Santa Cruz	4.0	2.6	0.0	1.3	8.7	4.3	3.0	3.1	1.7	1.6	1.6
Yavapai	5.5	4.6	2.3	2.9	1.1	1.1	1.7	1.1	2.6	2.7	2.1
Yuma	1.5	1.5	3.0	4.0	4.0	5.0	2.6	2.6	2.9	2.3	1.0
Total	2.5	2.5	2.5	2.2	2.6	2.5	2.5	1.9	2.3	2.3	2.2



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Minority Medical Co. Infant Mortality Rates per 1,000 Live Births, < 1 Year Old, by County, AZ, 2006-2016

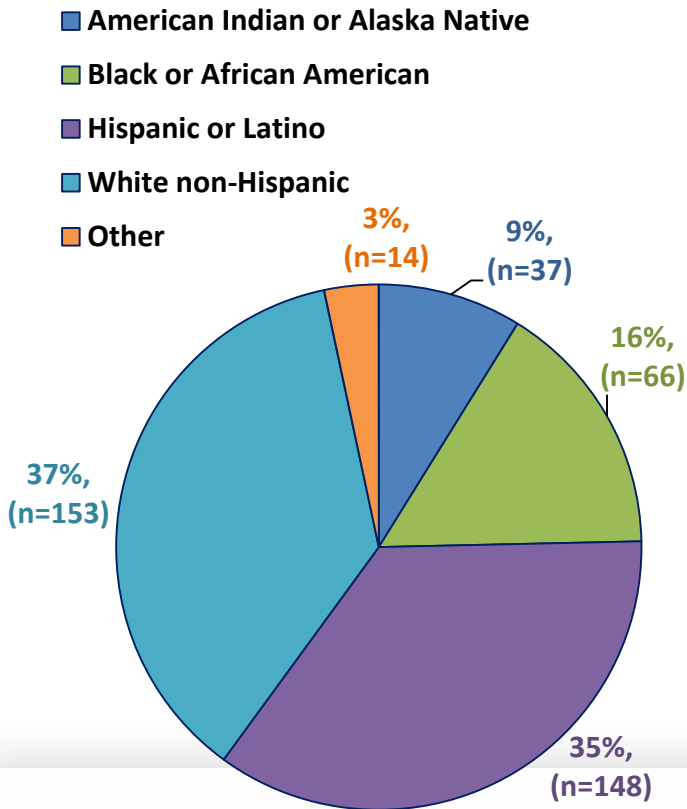


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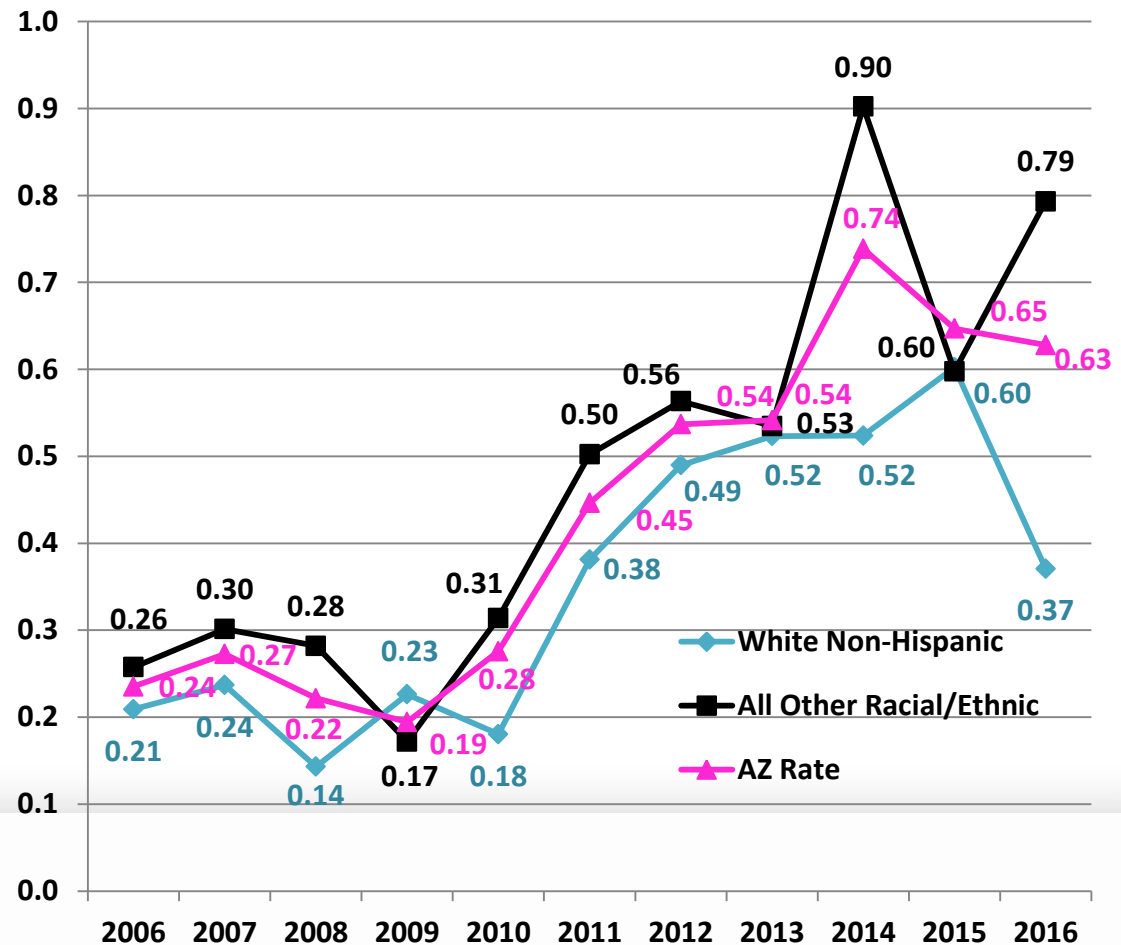
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Infant Mortality due to Suffocation: Race/Ethnicity Group

Percentage of Infant Deaths, by
Race/Ethnicity Group, AZ, 2006-2016
(n=418)



Suffocation Mortality Rates per 1,000 Live Births,
< 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016

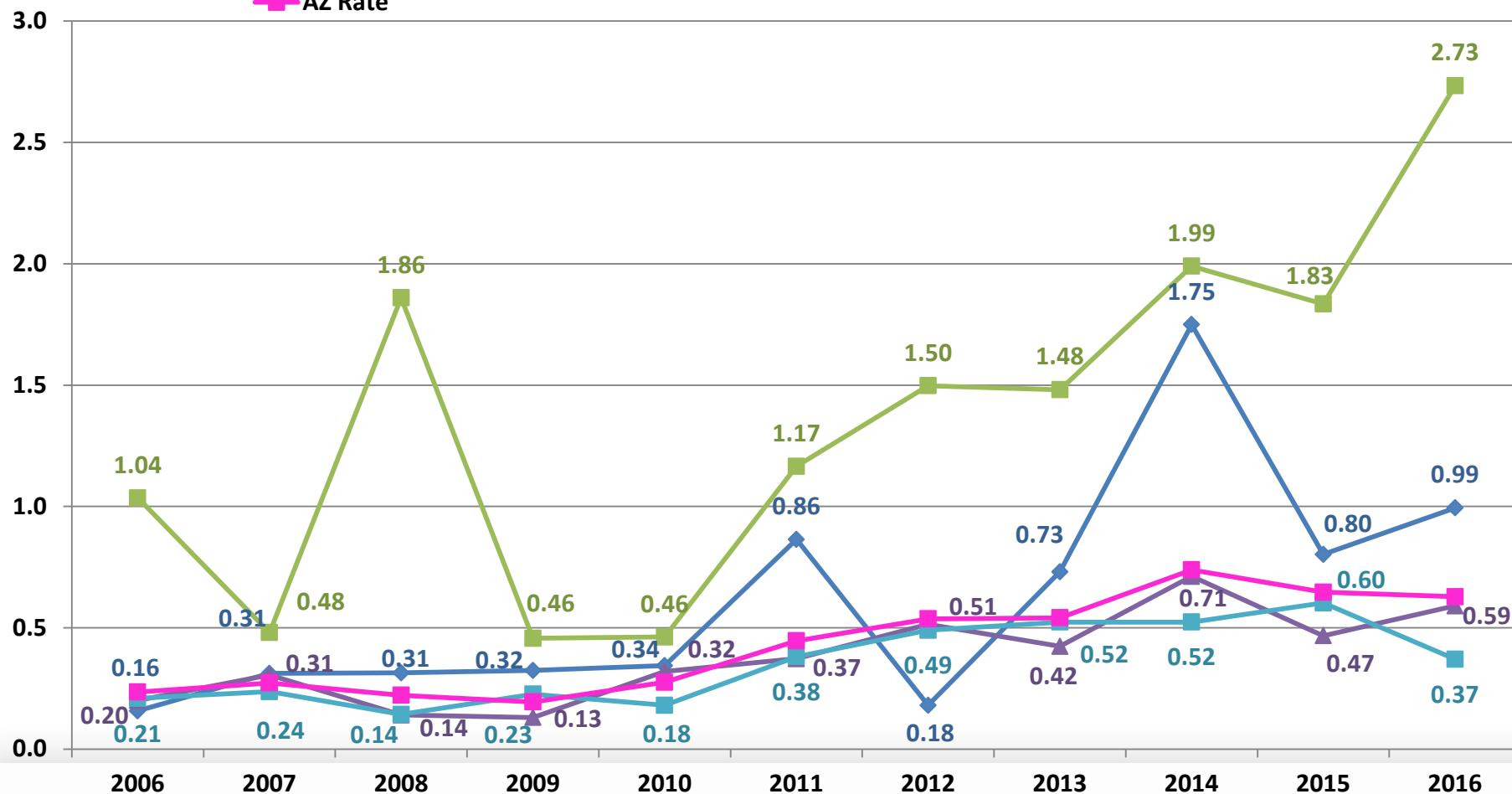


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Suffocation Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016

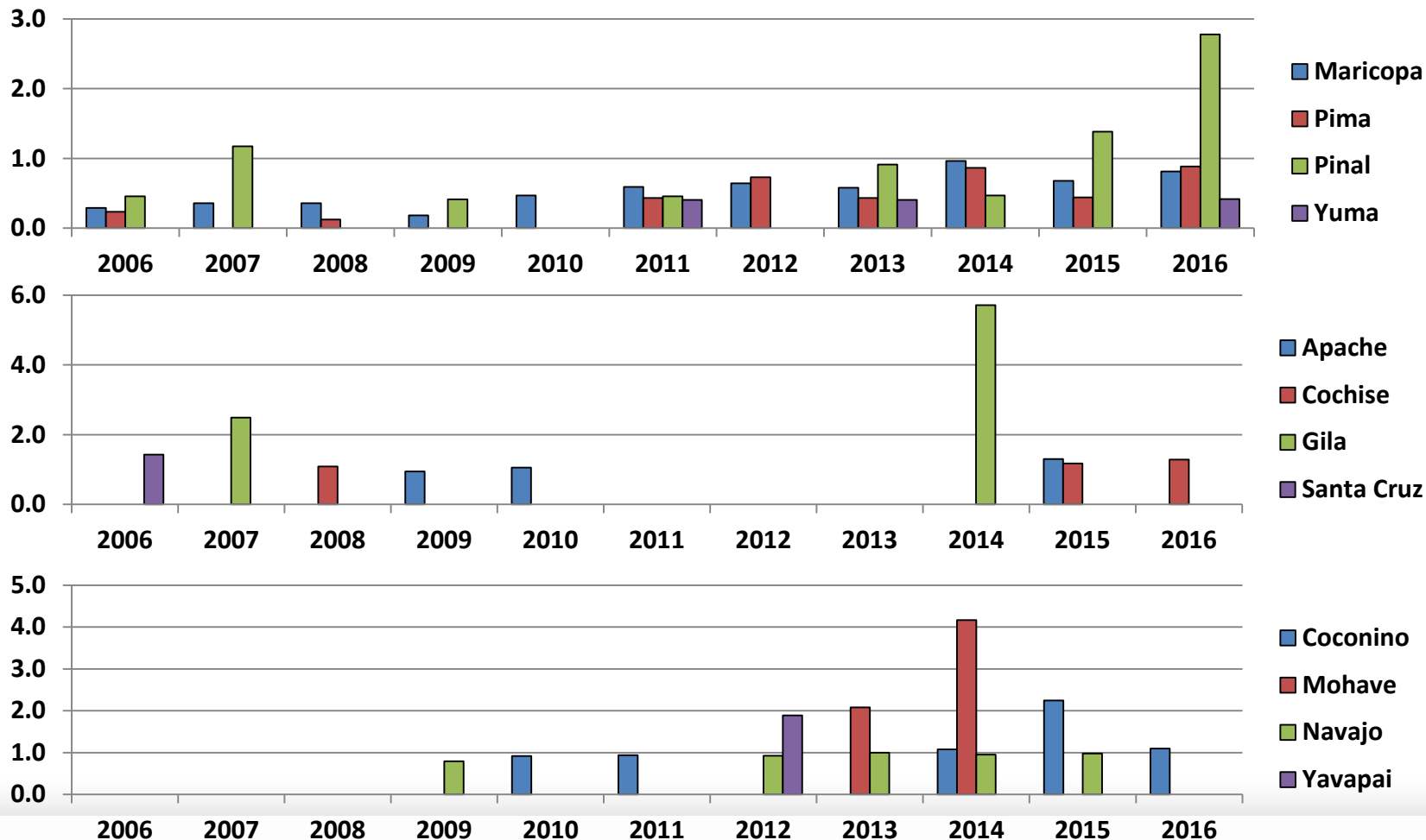
◆ American Indian or Alaska Native
◆ Hispanic or Latino
◆ AZ Rate
◆ Black or African American
◆ White Non-Hispanic



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Suffocation Mortality Rates per 1,000 Live Births, for Minorities < 1 Year Old, by County, AZ, 2006-2016



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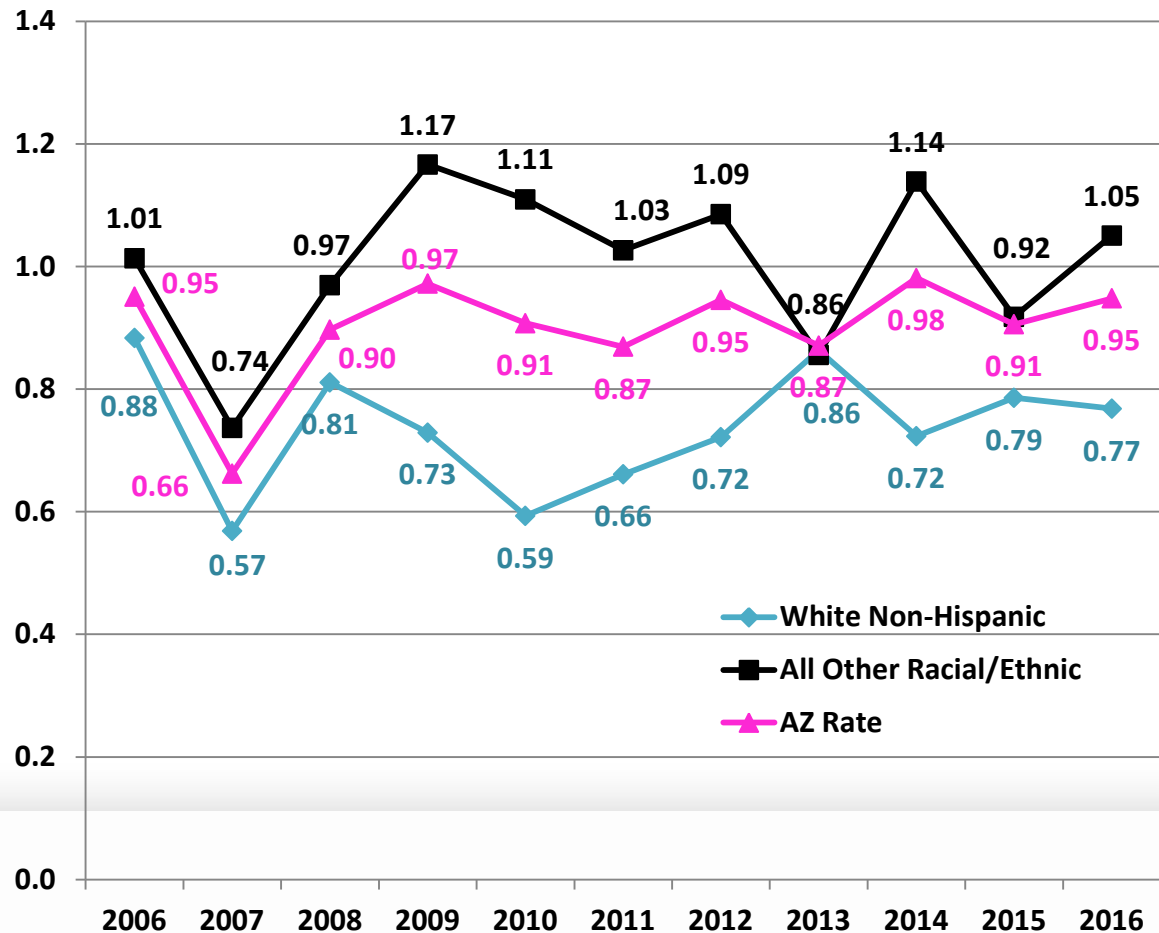
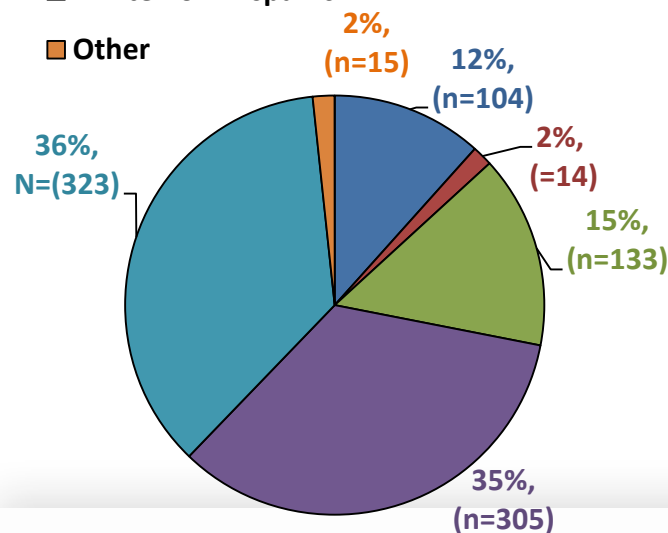
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Infant Mortality due to *SUID/SIDS: Race/Ethnicity Group

Percentage of Infant Deaths, by
Race/Ethnicity Group, AZ, 2006-2016
(n=894)

*SUID/SIDS Mortality Rates per 1,000 Live Births,
< 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016

- American Indian or Alaska Native
- Asian or Pacific Islander
- Black or African American
- Hispanic or Latino
- White non-Hispanic
- Other

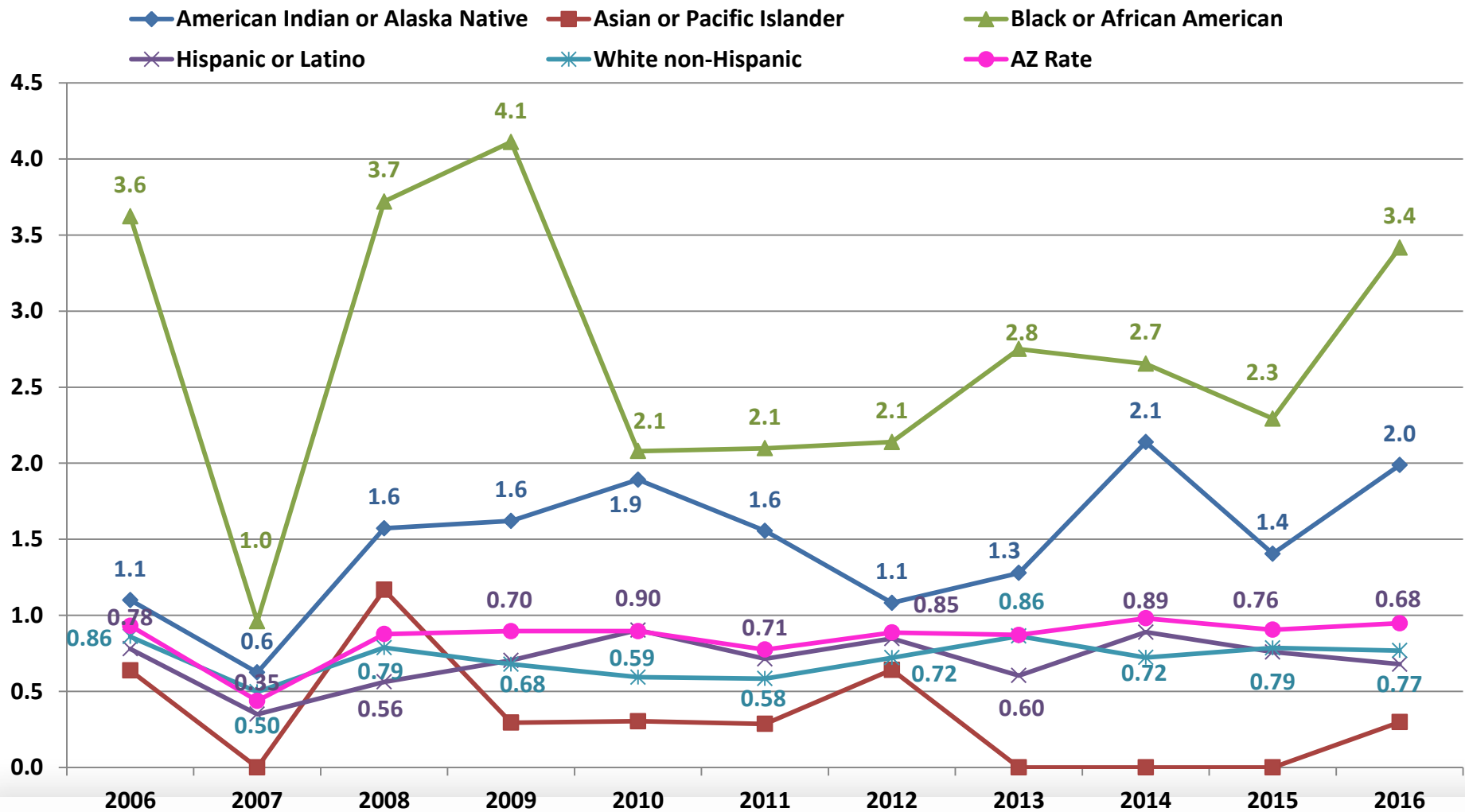


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*Represents 79.7% reported from CFR Reports

*SUID/SIDS Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016



*Represents 79.7% reported from CFR Reports



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Infant Mortality due to *SUID/SIDS: County

By County

*SUID/SIDS Mortality Rates per 1,000 Live Births, < 1 Year Old, by Race/Ethnicity Group, AZ, 2006-2016

County	N	%
Apache	14	1.6
Cochise	16	2.8
Coconino	27	3.0
Gila	8	0.9
Graham	7	0.8
Greenlee	< 6	< 0.6
La Paz	< 6	< 0.6
Maricopa	525	58.7
Mohave	27	3.0
Navajo	18	2.0
Pima	127	14.2
Pinal	59	6.6
Santa Cruz	< 6	< 0.6
Yavapai	28	3.1
Yuma	28	3.1
Total	894	100

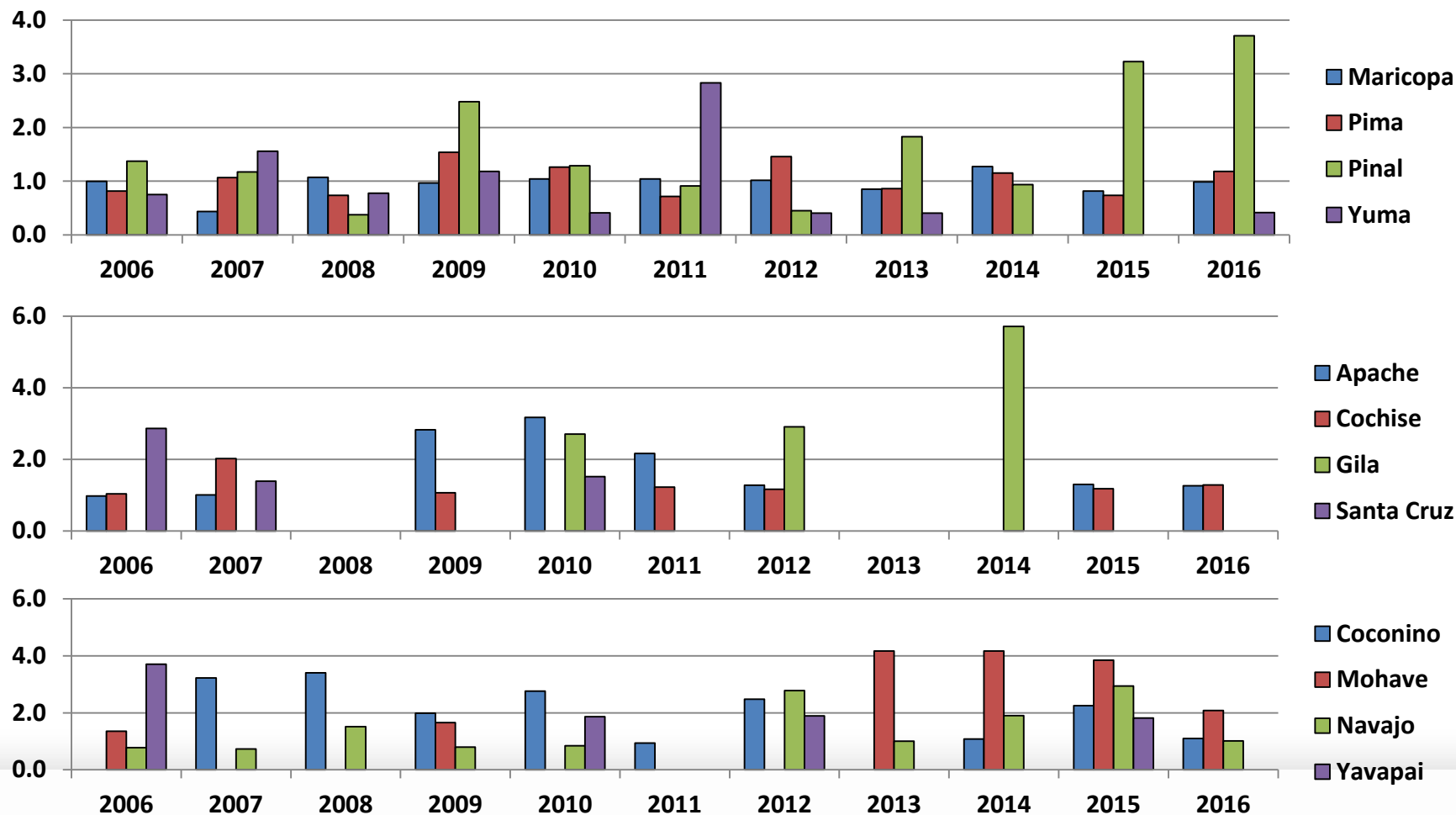
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Apache	0.8	0.9	0.0	2.4	3.6	1.9	1.1	0.0	0.0	1.0	1.0
Cochise	2.2	1.1	0.0	1.6	0.0	0.6	0.6	0.0	0.6	0.6	2.0
Coconino	0.5	1.9	2.5	2.1	1.7	0.6	1.2	0.6	1.2	1.3	1.2
Gila	1.5	1.4	0.0	0.0	3.0	0.0	1.6	0.0	4.6	0.0	0.0
Graham	0.0	3.4	1.6	0.0	0.0	0.0	1.9	3.3	1.7	0.0	0.0
Greenlee	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0	6.9	0.0	0.0
La Paz	0.0	0.0	0.0	0.0	5.0	0.0	4.9	4.9	0.0	5.0	0.0
Maricopa	0.8	0.4	1.0	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8
Mohave	1.2	0.8	0.4	1.8	0.0	1.5	0.6	1.7	1.1	2.7	1.7
Navajo	0.5	1.0	1.0	0.5	0.6	0.0	2.4	0.6	1.2	2.0	0.7
Pima	1.1	1.0	0.9	1.0	0.9	0.4	1.0	0.6	1.1	0.7	1.5
Pinal	1.1	0.8	0.3	1.7	0.8	0.7	0.6	1.3	1.3	1.8	2.0
Santa Cruz	2.7	1.3	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Yavapai	2.5	1.7	0.9	0.5	2.2	1.6	1.7	1.1	0.0	1.6	0.0
Yuma	0.6	1.2	0.6	1.2	0.3	2.5	0.3	0.6	0.7	0.0	0.7
Total	1.0	0.7	0.9	1.0	0.9	0.9	0.9	0.9	1.0	0.9	0.9



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*SUID/SIDS Mortality Rates per 1,000 Live Births, for Minorities < 1 Year Old, by County, AZ, 2006-2016



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