

Michigan Stillbirth Rate, 2015

Prepared by Yan Tian, Maternal Child Health (MCH) Epidemiology Section,
Michigan Department of Health and Human Services (MDHHS)
Data source: Michigan Resident Live Birth Files and Fetal Death Files,
Division for Vital Records and Health Statistics, MDHHS
June 2017

This presentation provides updated stillbirth statistics for the State of Michigan.

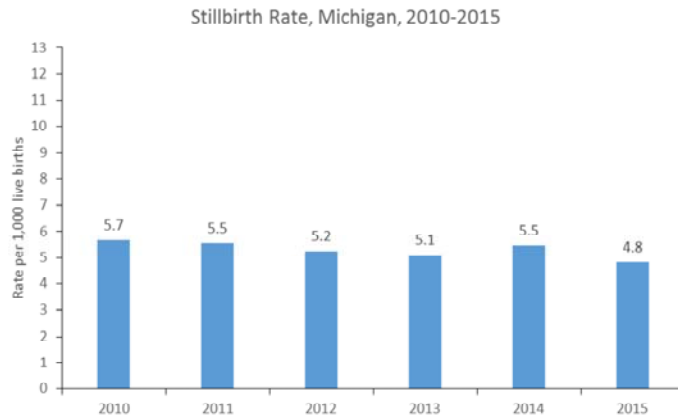
This presentation was prepared by Yan Tian, Maternal and Child Health Epidemiology Section, Michigan Department of Health and Human Services (MDHHS)

Data source: Michigan resident live birth files and fetal death files, Division for Vital Records and Health Statistics, MDHHS

Revised: June 2017

Stillbirth Rate: Michigan 2010-2015

(rate per 1,000 live births)



Year	# Live Births	# Stillbirth	SBR
2010	114,717	650	5.7
2011	114,159	633	5.5
2012	112,708	591	5.2
2013	113,732	580	5.1
2014	114,460	625	5.5
2015	113,211	546	4.8

SBR= Stillbirth rate per 1,000 live births.

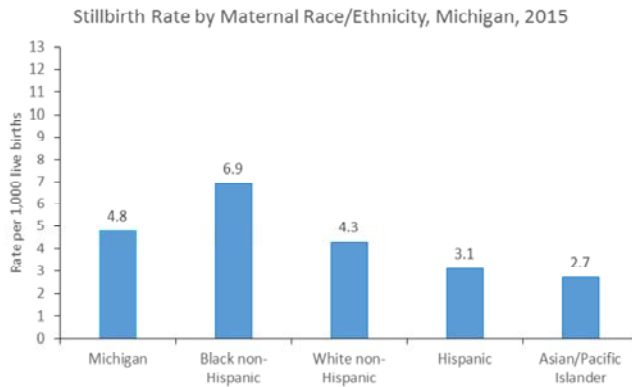
The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams.

Data source: Michigan resident live birth files and fetal death files, Division for Vital Records and Health Statistics, MDHHS

2

Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates within Michigan from 2010 to 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. In 2015, the stillbirth rate for Michigan was 4.8 per 1,000 live births.

Stillbirth Rate by Maternal Race/Ethnicity, Michigan, 2015 (rate per 1,000 live births)



Race/Ethnicity	# Live Births	# Stillbirth	SBR
Michigan	113,211	546	4.8
Black non-Hispanic	20,776	144	6.9
White non-Hispanic	77,464	336	4.3
Hispanic	7,768	24	3.1
Asian/Pacific Islander	3,748	10	2.7

SBR= Stillbirth rate per 1,000 live births.

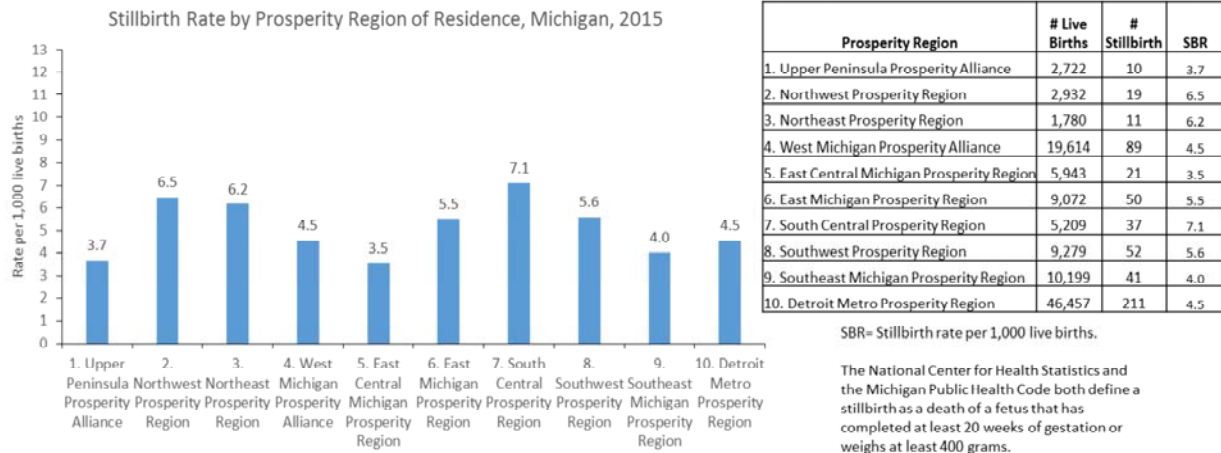
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Data source: Michigan resident live birth files and fetal death files, Division for Vital Records and Health Statistics, MDHHS

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Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates by maternal race/ethnicity within Michigan in 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. In 2015, there was a over two-fold difference in stillbirth rates by maternal race and ethnicity, from a high of 6.9 per 1,000 live births for Black non-Hispanic women to a low of 2.7 per 1,000 live births for Asian/Pacific Islander women.

Stillbirth Rate by Prosperity Region of Residence, Michigan, 2015 (rate per 1,000 live births)

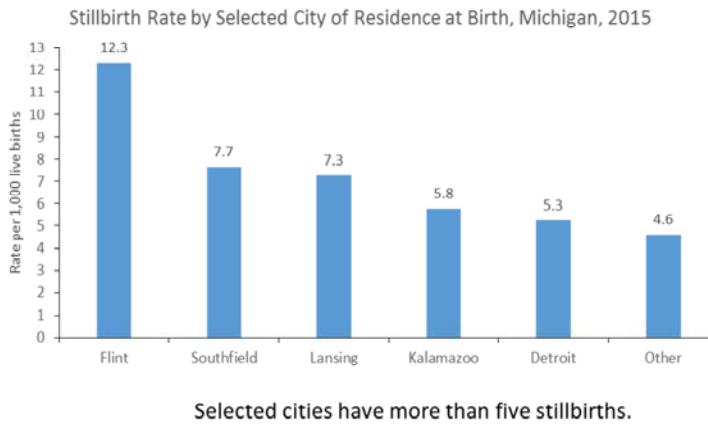


Data source: Michigan resident live birth files and fetal death files, Division for Vital Records and Health Statistics, MDHHS

4

Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates by prosperity region of residence at birth within Michigan in 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. In 2015, the stillbirth rate was the highest (7.1 per 1,000 live births) in the South Central prosperity region and was the lowest in the East Central Michigan prosperity region (3.5 per 1,000 live births).

Stillbirth Rate by City of Residence at Birth, Michigan, 2015 (rate per 1,000 live births)



City	# Live Births	# Stillbirth	SBR
Flint	1,458	18	12.3
Southfield	781	6	7.7
Lansing	1,784	13	7.3
Kalamazoo	1,039	6	5.8
Detroit	9,891	52	5.3
Other	88,938	409	4.6
Grand Rapids	3,150	14	4.4

SBR= Stillbirth rate per 1,000 live births.

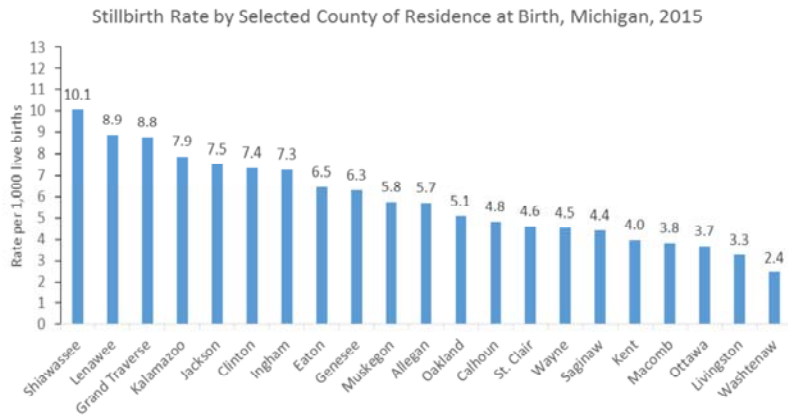
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Stillbirth Rate by County of Residence at Birth, Michigan, 2015 (rate per 1,000 live births)



Selected counties have more than five stillbirths.

Data source: Michigan resident live birth files and fetal death files, Division for Vital Records and Health Statistics, MDHHS

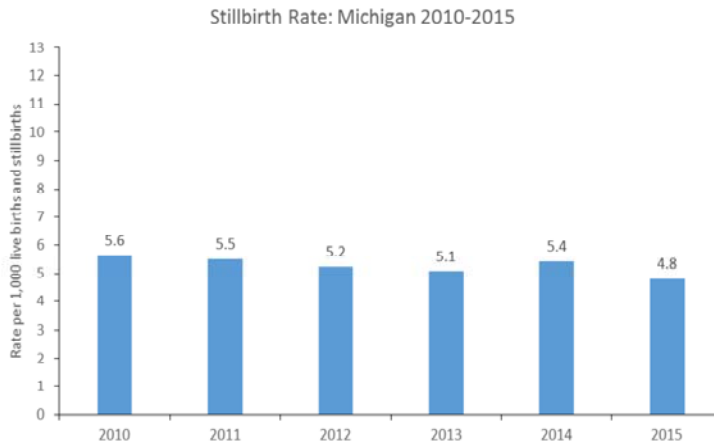
County	# Live Births	# Stillbirth	SBR
Shiawassee	695	7	10.1
Lenawee	1,014	9	8.9
Grand Traverse	913	8	8.8
Kalamazoo	3,179	25	7.9
Jackson	1,729	13	7.5
Clinton	815	6	7.4
Ingham	3,157	23	7.3
Eaton	1,237	8	6.5
Genesee	4,747	30	6.3
Muskegon	2,079	12	5.8
Allegan	1,397	8	5.7
Oakland	13,588	69	5.1
Calhoun	1,654	8	4.8
St. Clair	1,520	7	4.6
Wayne	23,472	106	4.5
Saginaw	2,256	10	4.4
Kent	8,831	35	4.0
Macomb	9,397	36	3.8
Ottawa	3,265	12	3.7
Livingston	1,830	6	3.3
Washtenaw	3,704	9	2.4

SBR= Stillbirth rate per 1,000 live births. 6

Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates by county of residence at birth within Michigan in 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. In 2015, the stillbirth rate was 10.1 per 1,000 live births in Shiawassee County, 7.9 per 1,000 live births in Kalamazoo County, 6.3 per 1,000 live births in Genesee County, and 4.5 per 1,000 live births in Wayne County.

Stillbirth Rate: Michigan 2010-2015

(rate per 1,000 live births + stillbirths)



Year	# Live Births	# Stillbirth	# Live Births + Stillbirths	SBR
2010	114,717	650	115,367	5.6
2011	114,159	633	114,792	5.5
2012	112,708	591	113,299	5.2
2013	113,732	580	114,312	5.1
2014	114,460	625	115,085	5.4
2015	113,211	546	113,757	4.8

SBR= Stillbirth rate per 1,000 live births.

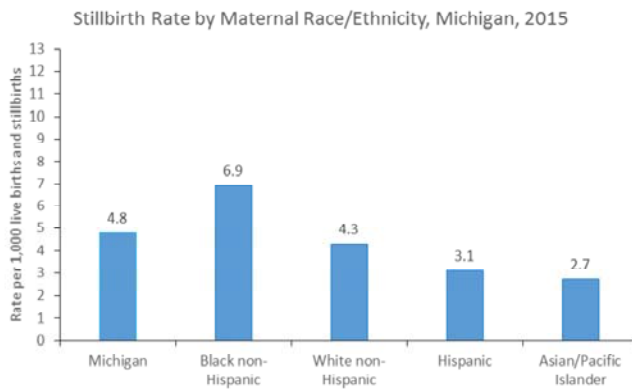
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Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates within Michigan from 2010 to 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. Within the remaining slides, stillbirths are still defined as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams, but the rate is now expressed per 1,000 live births and stillbirths. In 2015, the stillbirth rate was 4.8 per 1,000 live births and stillbirths.

Stillbirth Rate by Maternal Race/Ethnicity, Michigan, 2015 (rate per 1,000 live births + stillbirths)



Race/Ethnicity	# Live Births	# Stillbirth	# Live Births + Stillbirths	SBR
Michigan	113,211	546	113,757	4.8
Black non-Hispanic	20,776	144	20,920	6.9
White non-Hispanic	77,464	336	77,800	4.3
Hispanic	7,768	24	7,792	3.1
Asian/Pacific Islander	3,748	10	3,758	2.7

SBR= Stillbirth rate per 1,000 live births.

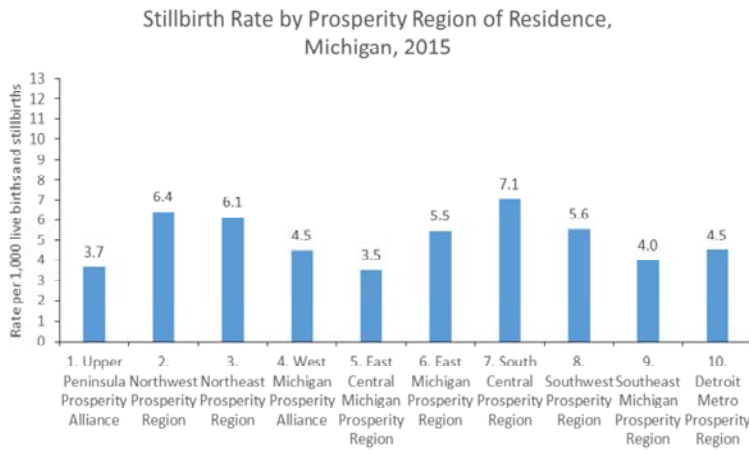
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Stillbirth Rate by Prosperity Region of Residence, Michigan, 2015 (rate per 1,000 live births + stillbirths)



Prosperity Region	# Live Births	# Stillbirth	# Live Births + Stillbirths	SBR
1. Upper Peninsula Prosperity Alliance	2,722	10	2,732	3.7
2. Northwest Prosperity Region	2,932	19	2,951	6.4
3. Northeast Prosperity Region	1,780	11	1,791	6.1
4. West Michigan Prosperity Alliance	19,614	89	19,703	4.5
5. East Central Michigan Prosperity Region	5,943	21	5,964	3.5
6. East Michigan Prosperity Region	9,072	50	9,122	5.5
7. South Central Prosperity Region	5,209	37	5,246	7.1
8. Southwest Prosperity Region	9,279	52	9,331	5.6
9. Southeast Michigan Prosperity Region	10,199	41	10,240	4.0
10. Detroit Metro Prosperity Region	46,457	211	46,668	4.5

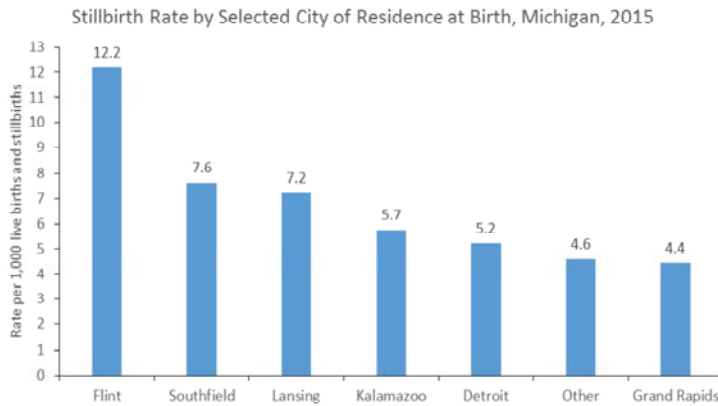
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Using data from the Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, this slide shows the stillbirth rates by prosperity region of residence at birth within Michigan in 2015. The National Center for Health Statistics and the Michigan Public Health Code both define a stillbirth as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams and is expressed as a rate per 1,000 live births. Within the remaining slides, stillbirths are still defined as a death of a fetus that has completed at least 20 weeks of gestation or weighs at least 400 grams, but the rate is now expressed per 1,000 live births and stillbirths. In 2015, the stillbirth rate was the highest (7.1 per 1,000 live births and stillbirths) in the South Central prosperity region and was the lowest in the East Central Michigan prosperity region (3.5 per 1,000 live births and stillbirths).

Stillbirth Rate by City of Residence at Birth, Michigan, 2015 (rate per 1,000 live births + stillbirths)



Selected cities have more than five stillbirths.

City	# Live Births	# Stillbirth	# Live Births + Stillbirths	SBR
Flint	1,458	18	1,476	12.2
Southfield	781	6	787	7.6
Lansing	1,784	13	1,797	7.2
Kalamazoo	1,039	6	1,045	5.7
Detroit	9,891	52	9,943	5.2
Other	88,938	409	89,347	4.6
Grand Rapids	3,150	14	3,164	4.4

SBR= Stillbirth rate per 1,000 live births.

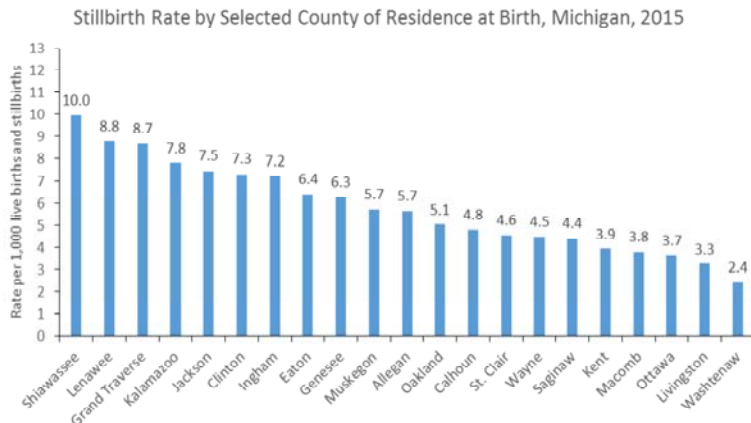
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Stillbirth Rate by County of Residence at Birth, Michigan, 2015 (rate per 1,000 live births + stillbirths)



Selected counties have more than five stillbirths.

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County	# Live Births	# Stillbirth	# Live Births + Stillbirths	SBR
Shiawassee	695	7	702	10.0
Lenawee	1,014	9	1,023	8.8
Grand Traverse	913	8	921	8.7
Kalamazoo	3,179	25	3,204	7.8
Jackson	1,729	13	1,742	7.5
Clinton	815	6	821	7.3
Ingham	3,157	23	3,180	7.2
Eaton	1,237	8	1,245	6.4
Genesee	4,747	30	4,777	6.3
Muskegon	2,079	12	2,091	5.7
Allegan	1,397	8	1,405	5.7
Oakland	13,588	69	13,657	5.1
Calhoun	1,654	8	1,662	4.8
St. Clair	1,520	7	1,527	4.6
Wayne	23,472	106	23,578	4.5
Saginaw	2,256	10	2,266	4.4
Kent	8,831	35	8,866	3.9
Macomb	9,397	36	9,433	3.8
Ottawa	3,265	12	3,277	3.7
Livingston	1,830	6	1,836	3.3
Washtenaw	3,704	9	3,713	2.4

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Limitations of Stillbirth Reporting

- It is suspected that stillbirths are under-reported by some Michigan hospitals. However, the records that are reported by the Division of Vital Records and Health Statistics do undergo a series of data checks.
- Another limitation is the lack of information on etiology. The causes of many stillbirths are unknown. Known causes of stillbirth generally fall into one of three broad categories: problems with the baby (birth defects or genetic problems); problems with the placenta or umbilical cord (this is where the mother and baby exchange oxygen and nutrients); and certain conditions in the mother (for example, uncontrolled diabetes, high blood pressure, or obesity). However, we are unable to confirm the causes for all stillbirths.

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