

CONSEQUENCES OF PRETERM BIRTH: DISPARITIES AMONG HISPANIC SUBGROUPS

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BACKGROUND

Disparities in perinatal health outcomes are well documented for Hispanics compared to other racial/ethnic groups. However, there is much variation within the Hispanic population by specific subgroups.

We sought to examine differences in risk of infant death and prematurity by specific Hispanic origin.

METHODS

National Center for Health Statistics (NCHS) 2010-2013 linked live birth/infant death files were analyzed to examine infant mortality rates (IMR) by maternal race/ethnicity, mother's specific Hispanic origin (subgroup), gestational age, and cause of death.

If a mother indicates she is Hispanic on the birth certificate, she is asked to further classify her origin by selecting 1 of 5 specific Hispanic origins: Mexican, Puerto Rican, Cuban, Central or South American, and Other and Unknown Hispanic. Other and Unknown Hispanic includes women that did not list their specific Hispanic origin, selected multiple specific origins, or listed a different specific origin than those above.

Cause of death¹ was examined using the two leading single causes (prematurity/low birthweight, and birth defects), as well as a grouping of preterm-related causes (an NCHS algorithm that identifies 44 causes determined to be a direct consequence of preterm birth).

Preterm birth rates by maternal race/ethnicity and Hispanic subgroup were calculated using the 2010-2013 NCHS natality data.

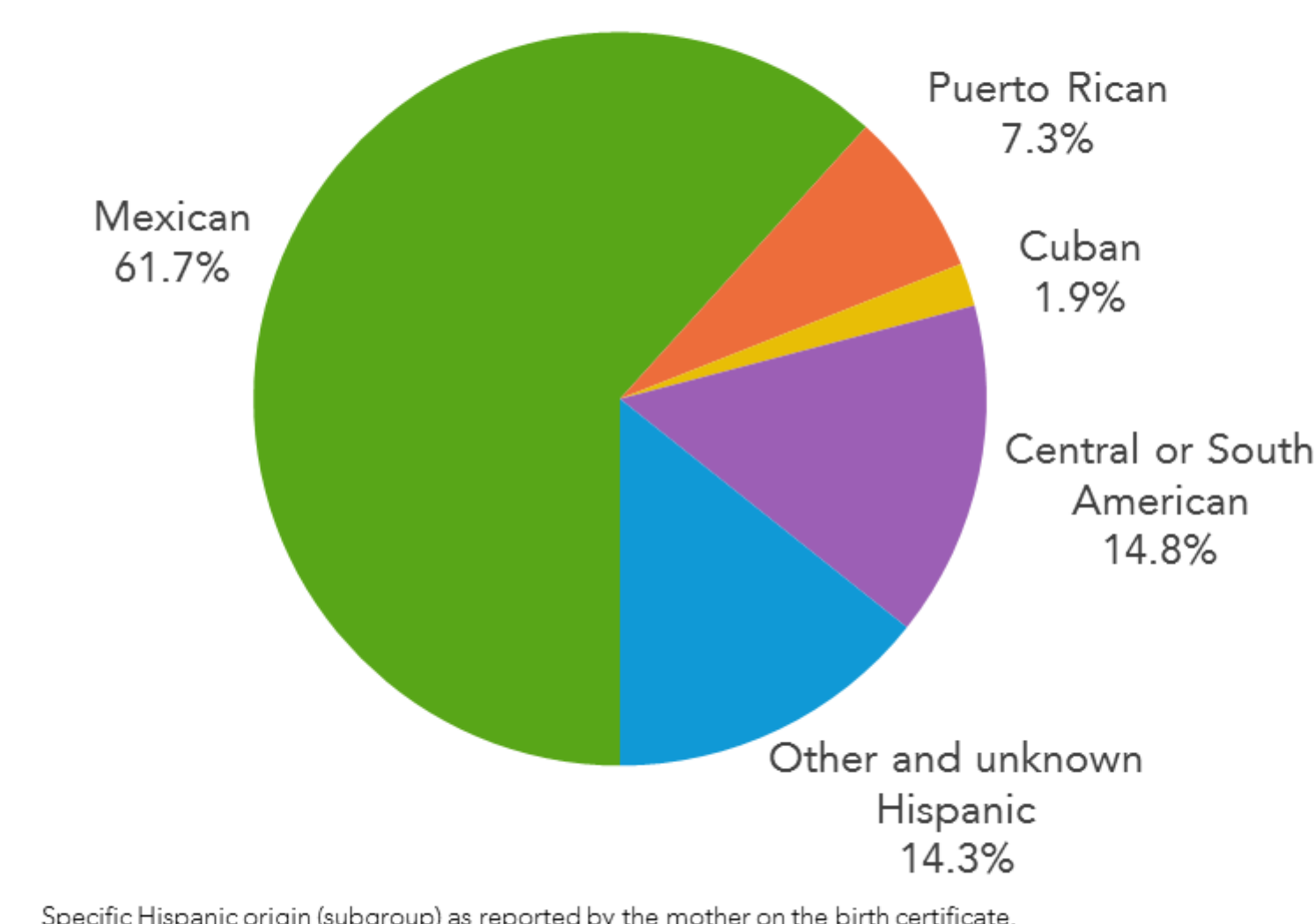
Gestational age was measured by obstetric estimate, reported on the birth certificate in completed weeks of pregnancy. Analyses were limited to gestational ages between 17 and 47 weeks. Preterm birth is defined as <37 weeks gestation.

1. Cause-of-death statistics are classified according to the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10)*.

RESULTS: Distribution of US births

In 2010-2013, Hispanic births comprised 23.2% of all live births in the US. Births among Mexicans comprised 61.7% of all Hispanic births.

Distribution of live births by Hispanic subgroup
United States, 2010-2013

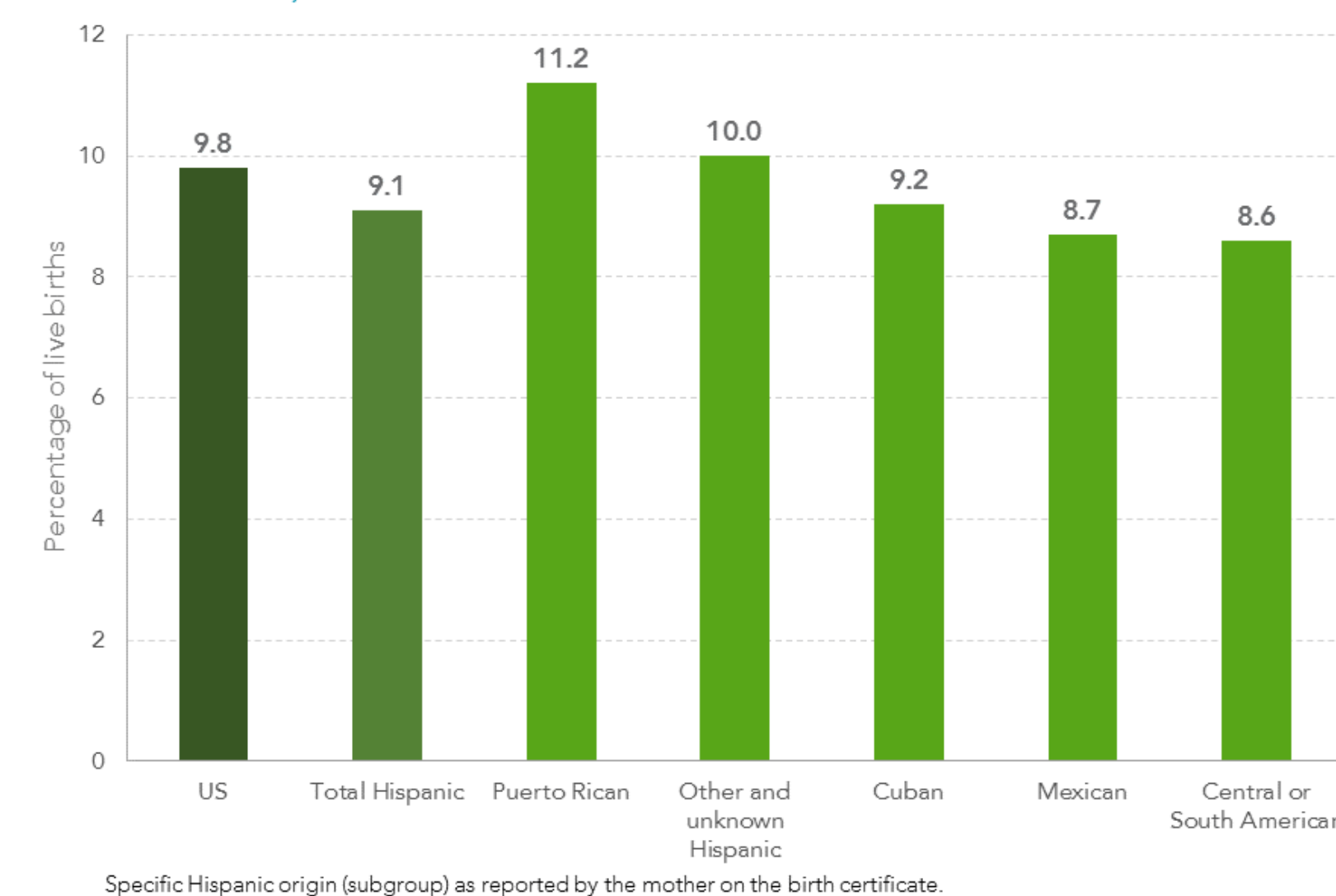


RESULTS: US Preterm birth rates

In the United States (US) in 2010-2013, the preterm birth rate among Hispanic women was 9.1%.

Within the US Hispanic population, the preterm birth rate was highest among Puerto Ricans and lowest among Central or South Americans.

Preterm birth rates by Hispanic subgroup
United States, 2010-2013



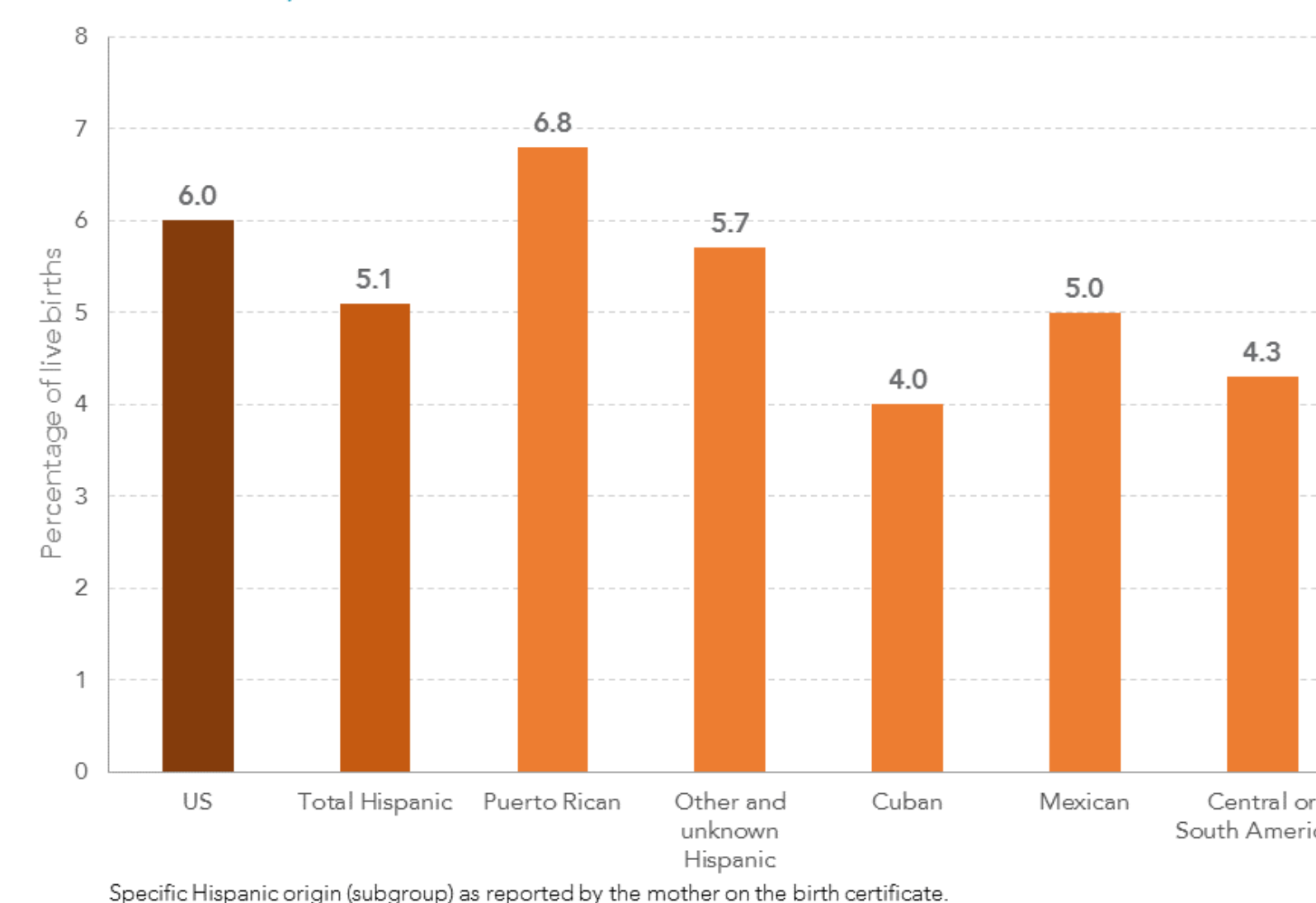
RESULTS: US Infant mortality rates

In the US in 2010-2013, the IMR among Hispanic women was 5.1 per 1,000 live births.

Among Hispanic subgroups, Puerto Ricans had the highest IMR and Cubans had the lowest.

The ranking of IMR within Hispanic subgroups followed the same ordering as the ranking of preterm birth rates, with the exception of Cubans.

Infant mortality rates by Hispanic subgroup
United States, 2010-2013



RESULTS: Prematurity & Infant Death

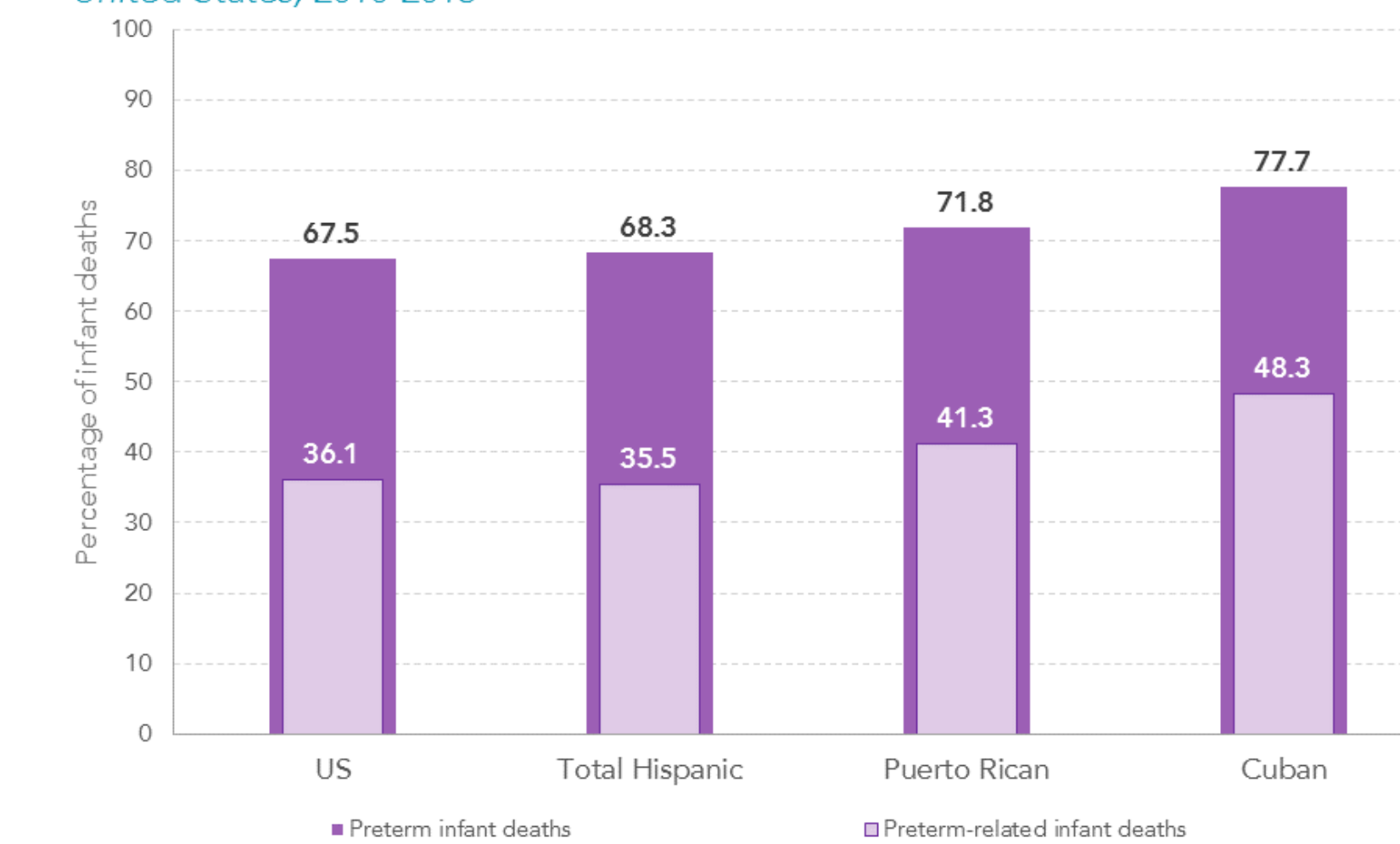
In the US in 2010-2013:

67.5% of all infant deaths were born preterm, and 68.3% were born preterm among all Hispanics.

Preterm-related causes accounted for more than one-third of infant deaths in the US.

Among Hispanic infants that died, Cubans had the highest proportion that were born preterm (77.7%) and that died of preterm-related causes (48.3%).

Preterm and preterm-related infant deaths by Hispanic subgroup
United States, 2010-2013

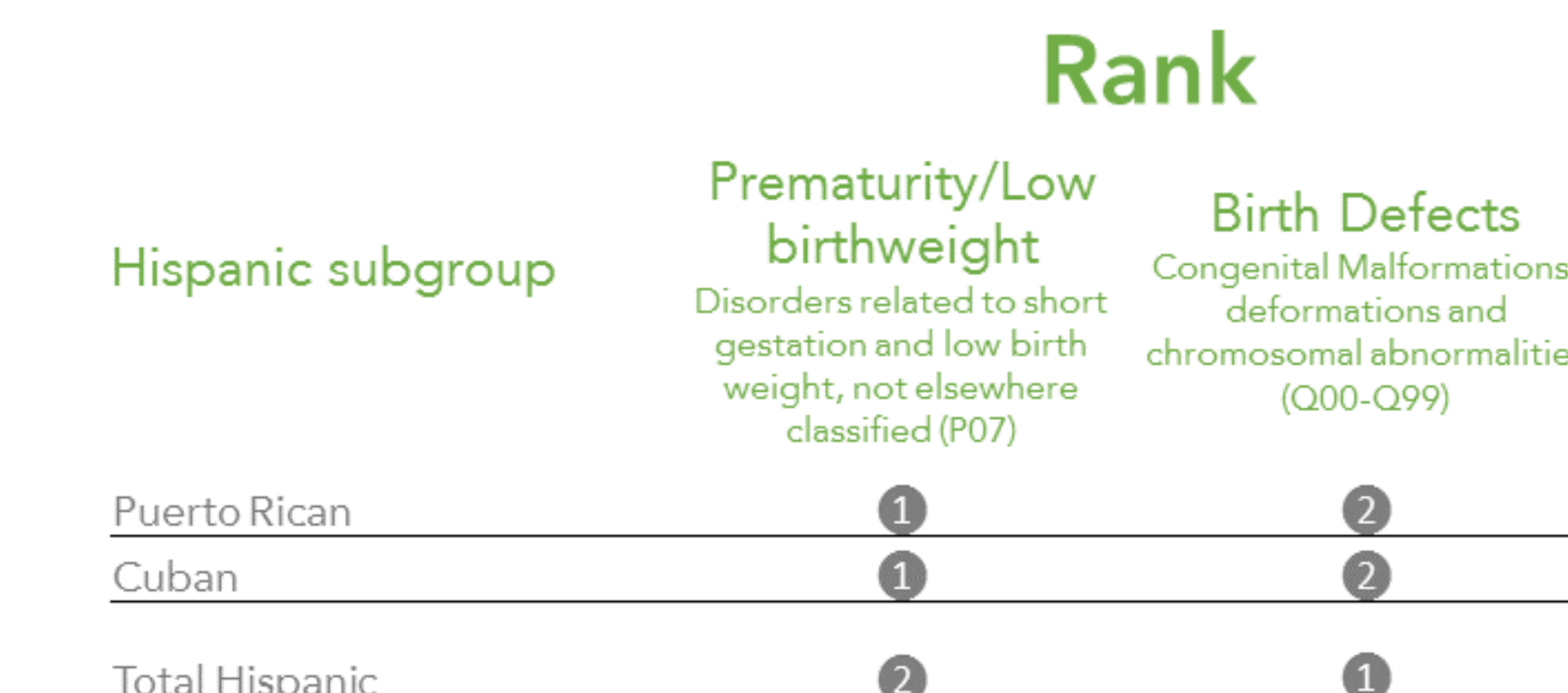


Preterm is defined as <37 weeks gestation. Preterm-related deaths are a grouping of causes developed by NCHS researchers that are determined to be a direct consequence of preterm birth (44 ICD-10 codes). Specific Hispanic origin (subgroup) as reported by the mother on the birth certificate.

RESULTS: Leading causes of infant death in US

Two Leading Causes of Infant Death, by Hispanic subgroup

United States, 2010-2013



Cause of death based on International Classification of Diseases 10th Revision, 1992. Specific Hispanic origin (subgroup) as reported by the mother on the birth certificate.

CONCLUSIONS

Prematurity and prematurity-related causes are substantial contributors to infant death among Hispanics, and the impact varies by Hispanic subgroup.

Puerto Ricans have the highest risk of preterm birth, and the highest risk of infant mortality among all Hispanic subgroups. Over 40% of infant deaths among Puerto Ricans are due to preterm-related causes.

Despite the fact that Cubans had a relatively low preterm birth rate, and the lowest risk of overall infant mortality among Hispanic subgroups, they had the highest percentage of infant deaths that were both born preterm and were due to preterm-related causes.

These results are substantiated by the leading causes of death. Among Puerto Ricans and Cubans, prematurity/low birthweight was the single leading cause of death, whereas for all other Hispanic subgroups, birth defects was the single leading cause.

These results highlight the differential consequences of prematurity, and potentially identify areas for concentrated efforts to reduce the burden of prematurity within Hispanic communities.

FOR ADDITIONAL INFORMATION CONTACT:

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