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Birth defect trends within Texas Public Health Region 11, 2000-2019: an analysis of Texas Department of State Health Services public data.

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South Texas is a predominantly Hispanic region with high rates of chronic illness, poor healthcare access, and a history of birth defect clusters. Between 1986 and 1991, 47 cases of anencephaly in Cameron County were linked to elevated fumonisins in the region's corn-based diet, prompting a series of ongoing public health efforts. This paper aims to identify changes in prevalence for CNS defects, in addition to cardiac, circulatory, gastrointestinal, and genitourinary defects in South Texas within the last two decades. Public data on 20 birth defects from the Texas Department of State Health Services were obtained for decades 2000-2010 and 2010-2019 in Texas Public Health Region 11 and the remaining regions of Texas. We report that Region 11 saw larger birth defect prevalences compared to the remainder of Texas in both decades studied. When looking at single regions between decades, there was an increase in the prevalences of microcephaly, ASD, pulmonary valve atresia or stenosis, PDA, and hypospadias within Region 11 in 2010-2019; the prevalences of these defects also increased in the remaining regions of Texas in 2010-2019, with the addition of 8 more: hydrocephaly, double outlet right ventricle, tetralogy of Fallot, VSD, tricuspid valve atresia or stenosis, coarctation of the aorta, stenosis or atresia of the small intestine, and renal agenesis/dysgenesis. Pyloric stenosis alone saw a significant decrease in prevalence in 2010-2019 for both regions in this study. Furthermore, it was found that the prevalences of anencephaly and spina bifida without anencephaly were unchanged in both regions.