

Disproportionate Representation Definitions and Calculation Methodology

What is disproportionate representation?

Disproportionate representation is part of the state Annual Performance Report (APR) calculations (Indicators 9 and 10). At its core, disproportionate representation addresses the risk for students to be identified with disabilities (overall and six high-incidence disability categories) predicated on race/ethnicity. Being identified with disproportionate representation does not inherently mean that a district is inappropriately identifying students with a disability based on their race/ethnicity. Instead, it is used as a flag to further investigate policies and practices within the district to ensure appropriate identification procedures are in place. Calculations and thresholds for districts to be flagged with disproportionate representation are state-determined.

Indicator 9 compares the risk of students in a particular racial/ethnic group being identified with a disability as compared to the risk of all other students in all other racial/ethnic groups being identified with a disability. This comparison is called a risk ratio. Risk ratios are effective ways to determine whether all students of all racial/ethnic groups are experiencing the same outcome at the same rate, or whether there are certain racial/ethnic groups at greater risk to experience a particular outcome. In the case of this indicator, that outcome is having a disability.

Indicator 10 compares the risk of students in a particular racial/ethnic group being identified with a disability as compared to the risk of all other students in all other racial/ethnic groups being identified with one of six high-incidence disabilities: autism, emotional disturbance, intellectual disability, other health impairment, specific learning disability, and speech/language impairment. This comparison generates the same type of risk ratio outlined for Indicator 9.

How is disproportionate representation defined in Tennessee?

To qualify for disproportionate representation, the following criteria must be met for Indicators 9 and 10:

- Indicator 9
 - Minimum of 50 students in a particular racial/ethnic group must be enrolled in the district.
 - Minimum of 45 students with disabilities (SWDs) must be enrolled in the district.
 - Minimum of five SWDs in a particular racial/ethnic group must be enrolled in the district.
 - Relative risk ratio and weighted risk ratio must be 3.0 or greater.
 - Relative risk ratios are generated by dividing the risk of students in a particular racial/ethnic group having a disability by the risk of students in all the other

racial/ethnic groups having a disability.

- Example: there are 200 Hispanic students in District A, and 40 of these students are identified with a disability. There are 2,500 students in all other six racial/ethnic groups in District A, and 200 of these students are identified with a disability. The risk for a Hispanic student being identified with a disability in District A is $40/200$, or 0.20 (20 percent). The risk of all other students in all other racial/ethnic groups being identified with a disability is $200/2,500$, or 0.08 (8 percent). The relative risk ratio is 2.5 ($0.20/0.08$).
- Weighted risk ratios are generated by comparing district-level data to the racial/ethnic compositions of the state to control for statewide race/ethnicity makeups.
 - To calculate the weighted risk ratio, the risk for a particular racial/ethnic group in a district is first multiplied by that racial/ethnic group's composition in the state subtracted from 1 (i.e., risk for xxx racial/ethnic group multiplied by [1 minus xxx racial/ethnic group state composition]). This product is then divided by the same calculation completed for every other racial/ethnic group, with the products of those calculations added together.
- Indicator 10
 - Minimum of 50 students in a particular racial/ethnic group must be enrolled in the district.
 - Minimum of 20 students in the specified disability category must be enrolled in the district.
 - Minimum of five SWDs in a particular racial/ethnic group within a specified disability category must be enrolled in the district.
 - Relative risk ratio and weighted risk ratio must be 3.0 or greater for the specified disability category.
 - See ratio calculations outlined for Indicator 9. The only difference for Indicator 10 is these calculations will be carried out for specified disability categories, not all students with disabilities.

Is disproportionate representation the same as significant disproportionality?

No. The calculation methodology and areas evaluated for significant disproportionality are different than those employed for identifying disproportionate representation. While some aspects of disproportionate representation are similar to significant disproportionality (both address identification of SWDs actions and similar data elements), the two are not the same. For more information on significant disproportionality, see the [document](#) outlining calculations and definitions.