

Using Discipline Data to Identify and Address Disproportionality

Webinar - April 6, 2017

Objectives

- Summarize list of data files shared with LEAs.
- Review disproportionality calculations, business rules & file layout.

Data Dissemination

- Local Accountability Coordinators (LACs) received data via the MSDE Secure Web Client on March 31, 2017.
- MSDE Secure Web Client
 - The URL for the MSDE Secure Web Client is:
<https://sst.msde.maryland.gov>
 - All LACs were granted access to folder “SF-DISRPO-LEA#”
 - If you are locked out/need a password reset, please email Jim Tucker, at james.tucker@maryland.gov. In your email, specify that you need to gain access to the disproportionality folder for your LEA.

Data Files

- The following files were shared with LACs
 - School-level disproportionality data for 3 years*
 - Excel file name: YEAR_LEA Name_Disproportionality.xls
 - LEA-level data for 3 years*
 - Excel file name: YEAR__LEA_LEA Name_Disproportionality.xls
 - LEA-level data provided for reference
 - Data Manual

**School years 2013-2014, 2014-2015, 2015-2016*

Maryland Model: Two Disproportionality Measures

Risk Ratio

Degree of disproportionality within a school between a student group and all other students.

State Comparison

Degree of disproportionality between a student group at a school compared to “All Students” at the State level.

Student Groups Included in Model

- Race
 - American Indian/Alaska Native
 - Asian
 - African American
 - Hispanic
 - Hawaiian/Pacific Islander
 - White
 - Two or more race
- Students with disabilities

Definitions

- Removal
 - Refers to out-of-school suspensions and expulsions.
- Unduplicated Student
 - Student who received one or more suspensions or expulsions at a given school

Risk Ratio Method

- Risk Ratio is one method for examining the equity of outcomes between different groups.
- Risk Ratio is the probability of an event happening to one group in comparison to another group.
- For the Maryland Model:
 - The Risk Ratio compares the removal rate for each student group at a school to the removal rate for all other students at the school.

Risk Ratio: Student Group Comparisons

Student Group	All Other Students (comparison group)
American Indian/Alaska Native	Non- American Indian/Alaska Native
Asian	Non-Asian
African American	Non-African American
Hispanic	Non-Hispanic
Hawaiian/Pacific Islander	Non- Hawaiian/Pacific Islander
White	Non-White
Two or more races	Non-Two or more races
Students with disabilities	Students without disabilities

Risk Ratio Method

Step 1. Calculate removal rates (Student Group & All Other Students)

$$\text{Removal Rate} = \frac{\text{Unduplicated Count of Students in Group Removed}}{\text{Total Count of Students in the Group}} \times 100$$

Step 2. Calculate Risk Ratio

$$\text{Risk Ratio} = \frac{\text{Student Group Removal Rate}}{\text{All Other Students Removal Rate}}$$

Risk Ratio Example...

The removal rate for Black/African American students at ABC Elementary School is 20%.

The removal rate for all other students (non-Black) is 6.67%. The risk ratio is $20 \div 6.67 = 3.00$.

Therefore, the risk of removal for African American students is 3 times higher than the risk of removal for all other students at the school.

Risk Ratio Value	Level of disproportionality
1.00	Equal
2.00	Two times higher risk
3.00	Three times higher risk

State Comparison Measure

- Tells us if a school is applying exclusionary discipline to a student group more frequently than the statewide removal rate.
- Compares the removal rate of each student group in a school to a statewide removal rate.
- State-wide removal rates, by grade band (elementary and middle/high), based on the prior three years of Maryland's data.

Statewide Removal Rate ¹	School Type
1.53%	Elementary (E)
6.75%	Middle/High (M/H)

¹ School years 2013-2014, 2014-2015 & 2015-2016

State Comparison Measure

Step 1. Calculate Student Group removal rate

$$\text{Removal Rate} = \frac{\text{Unduplicated Count of Students in Group Removed}}{\text{Total Count of Students in the Group}} \times 100$$

Step 2. Calculate State Comparison Measure

$$\text{State Comparison Measure} = \frac{\text{Student Group Removal Rate}}{\text{Statewide Removal Rate (E or MH)}}$$

State Comparison Example...

The removal rate for students with disabilities at XYZ Middle School is 18%.

The statewide removal rate for all students in Maryland middle/high schools is 6.75%.

The risk of removal for students with disabilities at XYZ Middle School is 2.7 times higher than the risk of removal for middle/high school students statewide (18% ÷ 6.75%).

Statewide Removal Rate ¹	School Type
1.53%	Elementary
6.75%	Middle/High

¹ School years 2013-2014, 2014-2015 & 2015-2016

Maryland Model: Identification of Schools

- A school will be identified as disproportionate if...
 - The Risk Ratio and State Comparison measures for one or more student groups within a school meet or exceed a value of 3.0.

BUSINESS RULES

Data Sources

- Student counts
 - RACE: Based on September Enrollment data collection.
 - STUDENTS WITH DISABILITIES: Based on End-of-Year Attendance collection.
- Removals
 - *Student Discipline and Health Related Exclusions* data collection.

N-size

- N size = 10
- Refers to the Student Group and the All Other Students Total Counts
- Student Group
 - Disproportionality data will be reported for student groups where the Student Group Total Count is equal to or greater than 10.
- All Other Students
 - If there are fewer than 10 students in the All Other Students category (comparison group for Risk Ratio), then data from All Other Students at the LEA level will be used.

Cell Size

- Refers to the number of students removed in the Student Group and All Other Students categories.
- Student Group
 - Disproportionality data will be reported for student groups where the Student Group Removal Count is equal to or greater than 3.
- All Other Students
 - Cell size greater than or equal to 1.
 - If the All Other Students Removal Count (comparison group for the Risk Ratio) is equal to zero, then data from All Other Students at the LEA-level will be used.

Disproportionality analysis does not include the following:

- Non-public schools (e.g., Juvenile services education, School for the Deaf, School for the Blind, students attending school outside the State of Maryland)
- Alternative schools
- Prekindergarten students

Example Data

Student Group
All Other Students
(not part of student group)

School Year	LEA Number	LEA Name	School Number	School Name	School Type	Student Group	(A) Student Group Removal Count	(B) Student Group Total Count	Student Group Removal Rate (A ÷ B)	(X) All Other Students Removal Count	(Y) All Other Students Total Count	All Other Students Removal Rate (X ÷ Y)	Risk Ratio Measure (A ÷ B) ÷ (X ÷ Y)	Statewide Removal Rate	State Comparison Measure (A ÷ B) ÷ (Statewide Removal Rate)
2016	65	North	4501	Blue Elementary	Elem	Black	11	234	4.7	1	87	1.15	4.09	1.53	3.07
2016	65	North	2112	Sunny High	High	Hispanic	5	66	7.58	62	1333	4.65	2.93	6.75	2.02
2016	65	North	2112	Sunny High	High	SWD	41	95	43.16	42	1324	3.17	13.62	6.75	6.39
2016	65	North	3554	Sunset Middle	Middle	Two or more races	10	19	52.63	61	571	10.68	4.93	6.75	7.8
2016	65	North	3554	Sunset Middle	Middle	SWD	12	77	15.58	43	489	8.79	1.77	6.75	2.31