

SENATE BILL 164

F1, J1

8lr1376

By: **Senators Nathan–Pulliam, Benson, Guzzone, Kelley, McFadden, Robinson, and Young**

Introduced and read first time: January 15, 2018

Assigned to: Education, Health, and Environmental Affairs

A BILL ENTITLED

1 AN ACT concerning

2 **Education – Student Use of Backpacks – Assessment and Reduction of Health**
3 **Effects**

4 FOR the purpose of requiring that public school personnel, parents, and students receive
5 educational information concerning the health effects of student use of overweight
6 backpacks; authorizing a county board of education to allow Doctors of Chiropractic
7 Medicine to conduct a certain examination of students in the county schools;
8 requiring school personnel to engage parent–teacher associations and students to
9 assess matters concerning students’ use of backpacks and to promote certain
10 strategies relating to backpack usage; requiring school personnel to consider certain
11 matters when developing strategies and guidelines concerning student use of
12 backpacks; and generally relating to student backpack usage and the attendant
13 health effects.

14 BY adding to
15 Article – Education
16 Section 7–405
17 Annotated Code of Maryland
18 (2014 Replacement Volume and 2017 Supplement)

19 Preamble

20 WHEREAS, Overloaded school backpacks are causing an increasing problem of back
21 pain and spinal strain for students across the nation; and

22 WHEREAS, Because spinal ligaments and muscles are not fully developed until after
23 age 16, overweight backpacks are a source of repeated low–level stress that may result in
24 chronic neck, shoulder, or back pain in children; and

25 WHEREAS, According to the U.S. Consumer Product Safety Commission, more than

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 7,000 emergency room visits each year are due to backpack–related injuries and in 2010
2 alone, physicians’ offices, clinics, and hospital emergency rooms treated nearly 28,000
3 strains, sprains, dislocations, and fractures from backpacks; and

4 WHEREAS, Studies have shown heavy loads carried on the back have the potential
5 to damage the soft tissues of the shoulder, causing microstructural damage to the nerves
6 and damage to internal organs; and

7 WHEREAS, Studies have shown an increase in curvatures of the spine and
8 compressed intervertebral height when backpacks exceed 10% of a child’s body weight; and

9 WHEREAS, The Global Burden of Disease Study of 2010 showed back pain as the
10 number one cause of disability worldwide and musculoskeletal disorders as the second
11 cause; and

12 WHEREAS, Children’s textbooks are much heavier now than many years ago, and
13 in addition to textbooks, students often carry computers, cell phones, water bottles, running
14 shoes, band instruments, and other equipment considered essential to have readily
15 available; and

16 WHEREAS, More than 90% of students carry backpacks, which in studies have been
17 found to weigh as much as 25% of the child’s body weight; and

18 WHEREAS, Backpacks are often not worn correctly, often slung over one shoulder
19 or allowed to hang significantly below the waistline, increasing the weight on the shoulders
20 and making the child lean forward when walking or stoop forward when standing to
21 compensate for the weight; now, therefore,

22 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
23 That the Laws of Maryland read as follows:

24 **Article – Education**

25 **7–405.**

26 **(A) EACH COUNTY BOARD SHALL ENSURE THAT ALL PUBLIC SCHOOL**
27 **ADMINISTRATORS, TEACHERS, PARENTS, AND STUDENTS IN THE COUNTY RECEIVE**
28 **EDUCATIONAL INFORMATION ABOUT THE POTENTIAL HEALTH IMPACT OF HEAVY**
29 **BACKPACKS ON STUDENTS AND TAKE PROACTIVE MEASURES TO AVOID STUDENT**
30 **INJURY.**

31 **(B) THE COUNTY BOARD MAY IMPLEMENT POLICIES AND PROCEDURES TO**
32 **ALLOW DOCTORS OF CHIROPRACTIC MEDICINE TO CONDUCT SCOLIOSIS**
33 **EXAMINATIONS ON STUDENTS IN THE PUBLIC SCHOOLS IN THE COUNTY AT**
34 **INTERVALS DETERMINED BY THE COUNTY BOARD.**

1 **(C) EACH PUBLIC SCHOOL IN A COUNTY SHALL ENGAGE ITS**
2 **PARENT-TEACHER ASSOCIATION TO:**

3 **(1) ASSESS THE EXTENT TO WHICH ITS STUDENTS USE OVERWEIGHT**
4 **BACKPACKS; AND**

5 **(2) PROMOTE INNOVATIVE HOMEWORK STRATEGIES THAT WILL**
6 **LESSEN THE NEED TO TAKE ALL SCHOOL MATERIALS AND BOOKS BACK AND FORTH**
7 **EACH DAY.**

8 **(D) WHEN DEVELOPING GUIDELINES FOR PARENTS AND STUDENTS**
9 **REGARDING STUDENT BACKPACKS, A COUNTY BOARD SHALL:**

10 **(1) INCLUDE INFORMATION DEVELOPED BY TRAINED MEDICAL**
11 **PERSONNEL THAT ADVISES THAT BACKPACKS SHOULD WEIGH NO MORE THAN A**
12 **MAXIMUM OF 10% OF A CHILD'S BODY WEIGHT;**

13 **(2) ENCOURAGE USE OF ERGONOMIC BACKPACKS WITH**
14 **INDIVIDUALIZED COMPARTMENTS TO HOLD BOOKS AND EQUIPMENT EFFICIENTLY;**

15 **(3) ENCOURAGE CHILDREN TO WEAR BOTH SHOULDER STRAPS AND**
16 **NOT TO SLING THE BACKPACK OVER ONE SHOULDER;**

17 **(4) ENCOURAGE USE OF WIDE, PADDED ADJUSTABLE STRAPS TO FIT**
18 **A CHILD'S BODY;**

19 **(5) TO THE EXTENT FEASIBLE, ENCOURAGE SCHOOL PERSONNEL TO**
20 **HAVE STUDENTS LEAVE THE HEAVIEST BOOKS AT SCHOOL AND USE HANDOUTS OR**
21 **WORKBOOKS FOR HOMEWORK ASSIGNMENTS;**

22 **(6) TO THE EXTENT PRACTICABLE, ENCOURAGE SCHOOL PERSONNEL**
23 **TO USE E-TEXTBOOKS; AND**

24 **(7) ENCOURAGE SCHOOL PERSONNEL TO ENGAGE STUDENTS IN AN**
25 **INTEGRATED EDUCATION ACTIVITY ABOUT BACKPACKS BY USING A HANGING SCALE**
26 **IN THE CLASSROOM THAT WOULD ALLOW STUDENTS TO:**

27 **(I) WEIGH THEIR BACKPACKS AND ENTER THE RESULTS INTO**
28 **A GRAPH THAT WOULD TRACK THE WEIGHTS; AND**

29 **(II) EXAMINE THE DATA TO DETERMINE WHAT CAN BE DONE TO**
30 **LIGHTEN BACKPACK LOADS.**

1 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
2 October 1, 2018.