Missouri
School Health Profiles:
2012 Key Findings

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About the School Health Profiles

The School Health Profiles survey has been conducted every even-numbered year since 1994 by the Missouri Department of Elementary & Secondary Education (DESE) in collaboration with the U.S. Centers for Disease Control and Prevention (CDC). School buildings with any of the grades six through 12 in which grade six is not the highest grade in the building are randomly selected to participate. Two different questionnaires are sent to the building principal – one for the principal and another for the person designated as the lead health education teacher. The principal survey addresses school health policies and programs while the teacher survey focuses on health curriculum and instruction. Both surveys were developed by the CDC.

In 2012, 391 secondary schools were randomly selected to participate from which 303 principals (77 percent) and 306 lead health education teachers (78 percent) completed questionnaires. The response rates were sufficient to generalize results to regular and charter public secondary schools each year the survey was conducted in Missouri.

A special thank you is extended to the principals and teachers for completing the questionnaires, and to the staff at DESE that administer the survey.

About the 2012 School Health Profiles Key Findings Report

This report highlights changes in School Health Profiles (SHP) results over several years that the survey has been conducted in Missouri. Different years of data are reported due to questions being added throughout the years. Trends are identified in key indicators that provide important information about the state of school health programs in Missouri public secondary schools. The intent is to raise awareness about areas where school health programs may be improved to support the health and well-being of students.

In summary, the 2012 SHP found that over time, progress has been made in the following:

- ✓ More school environments are tobacco-free
- ✓ There is less access to snack foods and beverages high in fat and calories in schools
- ✓ More health education is being taught
- ✓ More schools have asthma action plans on file for students with known asthma
- ✓ More schools include mental health or social services staff on the school health advisory council, or other group that provides guidance on school health issues

Of concern, the 2012 SHP found that fewer secondary schools have:

- ➢ A designated coordinator of school health
- ➢ A school health advisory council or group
- ➢ Parent and community representation on the school health advisory group
- ➢ Conducted an assessment of selected programs and policies
- ➢ Health and physical education teachers receiving professional development
- ➢ HIV, other STDs and pregnancy prevention topics taught to students in grades 6-8

School Health Coordination and Leadership

The percentage of secondary schools with someone who **coordinates** school health programs declined from 98.5 percent in 2008 to 87.4 percent in 2012.* The percentage of schools that have a **school health advisory** council or other group that provides guidance on school health issues also declined from 78.2 percent in 2008 to 58.7 percent in 2012.* Representation on school health advisory councils declined among several groups, but increased among mental health or social services staff.

Percentage of secondary schools with representation on school health advisory groups from:

	2008	**2010**	**2012**
Health services staff	94.3	89.5	87.6*
School administrators	95.9	94.7	93.6
Health education teachers	92.6	86.9	89.1
Physical education teachers	89.5	86.9	88.3
Nutrition or food service staff	90.6	75.6	76.2*
Parents or families of students	80.8	71.4	68.3*
Community members	77.6	65.9	63.5*
Local health departments or agencies	65.9	56.3	57.3
Student body	69.4	60.9	55.3*
Mental health or social services staff	50.9	50.3	74.3**

The percentage of secondary schools in which health education staff worked with mental health or social services staff, and nutrition or food service staff on health education activities during the current school year has increased significantly over time.

	2000	**2006**	**2012**
Physical education staff	80.7	83.8	84.2
Health services staff	80.5	80.6	76.3
Mental health or social services staff	57.5	59.3	63.3**
Nutrition or food service staff	24.9	41.2	43.7**
School health advisory group			46.0

Why these findings are important

"Impacting long-term health risks is not a simple task relegated exclusively to schools. Planning and implementing activities directed toward child and adolescent health needs, as well as school employees, requires that many people be involved. Collaborative efforts among family, community, and schools are the most effective approaches for both prevention and intervention." - Missouri Coordinated School Health Coalition

Key Resource

School Health Advisory Guide. Missouri Coordinated School Health Coalition publication. December 2008. Available at http://www.healthykidsmo.org/resources/SHAC/SHAC_Guide.pdf

*Statistically significant downward trend
**Statistically significant upward trend

School Health Program Assessment and Planning

There was a significant downward trend from 2008 to 2012 in the percentage of Missouri secondary schools that ever used the **School Health Index** or another self-assessment tool to assess school policies, activities, and programs for physical activity, nutrition and tobacco-use prevention.

	2008	**2010**	**2012**
Physical activity	59.2	50.3	43.9*
Nutrition	59.0	47.0	44.4 *
Tobacco-use prevention	54.3	45.4	42.8 *
Asthma	37.4	31.7	29.8
Injury and violence prevention		38.5	39.2

The percentage of Missouri secondary schools that have a **School Improvement Plan** that includes health-related objectives declined from 2010 to 2012 for all the following topics.

- Health education **declined significantly** from 49.9 to 41.4 percent
- Physical education and physical activity **declined significantly** from 51.1 to 42.8 percent
- Health services declined from 47.9 to 40.9 percent
- Mental health and social services declined from 38.8 to 38.1 percent
- Nutrition services and available foods/beverages declined from 44.7 to 42.4 percent
- Healthy and safe school environment declined from 74.2 to 67.9 percent
- Family and community involvement declined from 76.8 to 70.9 percent
- Faculty and staff health promotion declined from 42.9 to 36.7 percent

Why these findings are important

Conducting an assessment of school health programs and policies is essential for identifying areas to address in a school improvement plan. School improvement plans provide school staff and advisory groups with direction for improving activities and motivation when planned improvements are accomplished.

Key Resource

The *School Health Index (SHI): Self-Assessment & Planning Guide 2012.* U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at http://www.cdc.gov/healthyyouth/shi/index.htm

*Statistically significant downward trend

School Health Policy and Practices

Tobacco-use Prevention

The percentage of secondary schools that had adopted a policy prohibiting tobacco use did not change significantly from 2002 (99.7 percent) to 2012 (99.0 percent). Among schools that had adopted a policy, the percentage that prohibit tobacco use by students, staff and visitors on school property, in vehicles and at off-campus events increased significantly from 24.6 percent in 2002 to 42.4 percent in 2012.**

From 2000 to 2012, there were significant upward trends in some actions that secondary schools sometimes, almost always or always took when students were caught smoking cigarettes.

	2000	**2012**
Notified parents or guardians	98.5	98.4
Referred students to administrator	98.8	98.7
Referred students to school counselor	42.6	61.7**
Referred students to legal authorities	19.6	41.5**
Placed students in detention	59.4	66.9**
Gave students in-school suspension	76.9	84.8**
Suspended students from school	68.3	72.7
Did not allow participation in extra-curricular activities		80.3
Encouraged cessation assistance/education/program	29.4	34.1
Required cessation assistance/education/program	12.8	13.3

From 2008 to 2012, there was a significant downward trend in the percentage of secondary schools that provided cessation services for students, but no change for providing services to faculty and staff.

	2008	**2010**	**2012**
Faculty and staff	15.7	14.5	15.6
Students	19.3	16.7	11.4*

During the same period, there were no significant changes in the percentage of secondary schools that had arrangements with an organization or health care professionals not on school property to provide cessation services for faculty and staff or students.

	2008	**2010**	**2012**
Faculty and staff	20.2	22.8	23.2
Students	25.4	23.6	21.6

Why these findings are important

Eliminating tobacco use on school property and at off-campus events reduces exposure to secondhand smoke as well as decreasing role modeling of use for young people. Schools that provide for tobacco cessation services for students and faculty/staff produce an immediate health benefit and are among the most cost effective preventive services available.

Key Resources

A school tobacco policy index is available at https://cphss.wustl.edu/Products/Pages/Tools.aspx
Quit assistance resources available at http://www.cdc.gov/tobacco/quit_smoking/index.htm

*Statistically significant downward trend
**Statistically significant upward trend

Nutrition

The percentage of secondary schools in which students can purchase snack foods or beverages from one or more vending machines at the school or at a school store, canteen or snack bar declined from 89.6 percent in 2002 to 79.5 percent in 2012.*

Significant changes have occurred in the types of snack foods and beverages that students can purchase at secondary schools. These changes are likely the result of a 2006 federal requirement that schools develop wellness policies that included nutrition guidelines for all foods and beverages available on school campuses.

Percentage of schools allowing students to purchase:	**2002**	**2004**	**2006**	**2008**	**2010**	**2012**
Chocolate candy	62.6	61.8	50.8	31.3	33.2	38.3*
Other kinds of candy	62.4	64.1	54.9	36.4	37.5	39.9*
Salty snacks not low in fat (e.g., regular potato chips)	69.1	68.4	60.9	38.9	38.7	41.4*
2% or whole milk (plain or flavored)			50.2	47.3	37.2	33.3*
Soda pop or fruit drinks that are not 100% juice			74.2	54.9	43.8	46.0*
Sports drinks (e.g., Gatorade)			76.2	75.6	63.9	65.8*
Foods or beverages containing caffeine				47.9	38.4	39.8*
Fruits (not fruit juice)				33.9	31.0	34.9
Non-fried vegetables (not vegetable juice)				25.0	21.0	23.3
Crackers, pastries and other baked goods not low in fat				42.7	41.9	43.3
Ice cream or frozen yogurt not low in fat				26.3	18.3	20.5
Water ices or frozen slushes that do not contain juice				19.7	14.7	17.5

From 2008 to 2012, there was a significant downward trend in the percentage of secondary schools that always or almost always offer fruits or non-fried vegetables at school celebrations when foods or beverages are offered.

2008 - 29.0 2010 – 23.9 2012 - 19.0*

There was a significant downward trend in the percentage of secondary schools that prohibit advertisements for candy, fast food restaurants, or soft drinks in school publications, but not for allowing advertisements at other locations at school.

	2008	**2010**	**2012**
In school building	54.5	53.2	48.0
On school grounds	46.6	45.0	41.7
In school publications	55.7	50.7	46.5*
On school buses or other vehicles that transport students	64.5	61.4	58.4

There was no significant change in the percentage of secondary schools that promote candy, meals from fast food restaurants or soft drinks through distribution of products, such as t-shirts, hats and book covers to students from 2008 to 2012.

2008 – 2.7 2010 – 2.3 2012 – 3.8

*Significant downward trend

Nutrition, continued

From 2008 to 2012, there was a significant downward trend in the percentage of schools that collected suggestions from students, families and staff on nutritious foods preferences, but not for other practices that support good nutrition habits.

The percentage of secondary schools that had done any of the following in the current school year:

	2008	2010	2012
Priced nutritious foods and beverages at lower cost while increasing the price of less nutritious foods and beverages	11.4	7.2	8.9
Collected suggestions from students, families and school staff on nutritious food preferences and strategies to promote healthy eating	55.5	48.4	46.8*
Provided information to students or families on the nutrition and caloric content of foods available	47.6	44.1	52.3
Conducted taste tests to determine food preferences for nutritious items	20.5	17.2	24.2
Provided opportunities for student to visit the cafeteria to learn about food safety, food preparation or other nutrition-related topics	17.9	18.7	17.5

Why these findings are important

When providing foods and beverages for students, schools have an obligation to provide that which is nutritious. Good nutrition contributes to students' ability to learn. Additionally, foods and beverages high in calories and low in nutritional value contribute to obesity, which is a growing concern in Missouri.

Key Resources

Model local wellness policies from The National Alliance for Nutrition and Activity available at http://www.schoolwellnesspolicies.org/WellnessPolicies.html

Local wellness policy resources from Team Nutrition available at http://teamnutrition.usda.gov/healthy/wellnesspolicy.html

Policy, school meals, competitive foods and beverages and other school wellness topic resources available from the Alliance for a Healthier Generation Healthy Schools Program at https://schools.healthiergeneration.org/

Other resource for school health policy

State School Healthy Policy Database from the National Association of State Boards of Education located at http://nasbe.org/healthy_schools/hs/

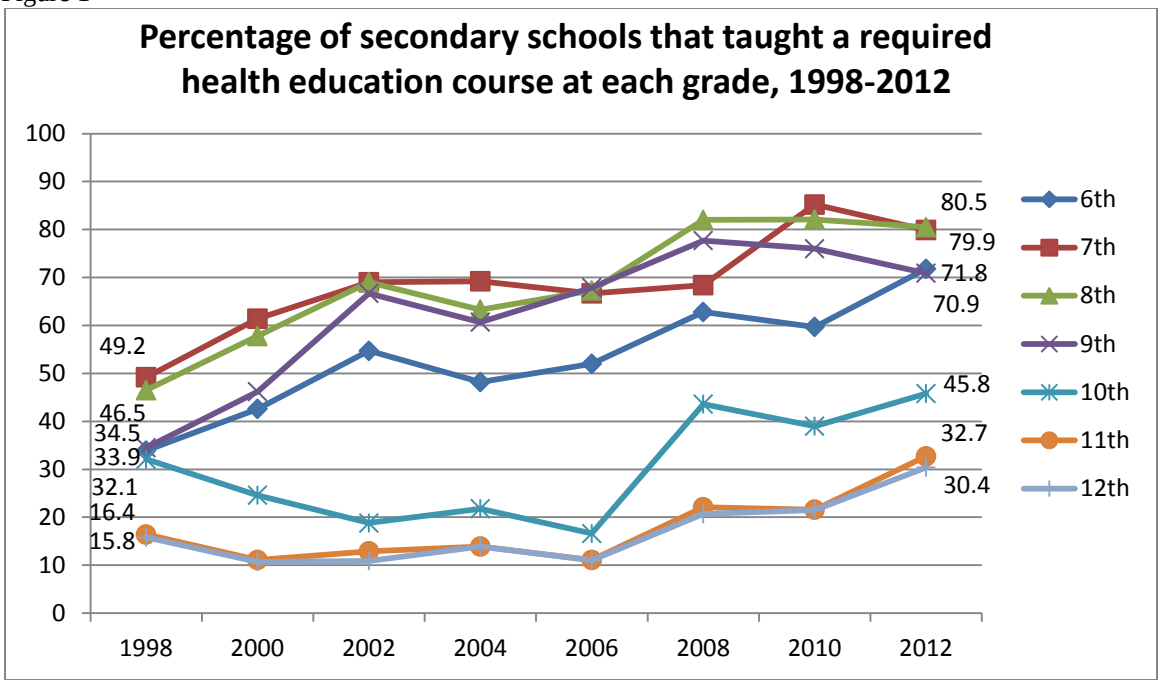
*Statistically significant downward trend

Curriculum and Instruction

Health Education

Health education instruction has increased in Missouri secondary schools since 1998. There was a significant upward trend in the percentage of secondary schools in which students take two or more required health education courses from 32.7 percent in 1998 to 59.5 percent in 2012. There were also significant upward trends in the percentage of secondary schools that taught a required health education course at each grade six through 12 (Figure 1).

Figure 1



The percentage of secondary schools in which those who teach health education were provided the following did not change significantly from 2008 to 2012.

	2008	2010	2012
Goals, objectives and expected outcomes for health education	94.1	94.3	90.9
Annual scope and sequence of instruction for health education	76.3	70.6	70.8
Plans for how to assess student performance in health education	81.7	76.6	76.0
A written health education curriculum	90.1	87.2	87.6

Why these findings are important

"A planned, sequential curriculum in health education from pre-primary through grade twelve is necessary to attain an educated populace whose health permits continued productivity throughout the lifespan." American Association for Health Education Position Statement. Accessed November 5, 2012 at http://www.aahperd.org/aahe/advocacy/positionStatements/upload/Comprehensive-School-Health-2003.pdf

Key Resource

Health Education Curriculum Analysis Tool. U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at http://www.cdc.gov/healthyyouth/cshp/publications.htm

*Statistically significant upward trend

Physical Education

From 2004 to 2012, there was no significant change in the percentage of secondary schools that taught required physical education at each grade six through 12. The percentage of secondary schools that taught required physical education, by year and grade:

	2004	**2006**	**2008**	**2010**	**2012**
6th	97.0	94.7	95.6	94.8	94.7
7th	98.4	96.8	96.9	96.4	97.0
8th	97.5	95.8	96.5	96.4	97.0
9th	92.8	92.2	90.1	89.6	89.8
10th	51.6	47.8	51.1	59.8	50.9
11th	34.6	28.4	37.1	47.7	40.1
12th	34.4	29.7	37.9	47.2	39.4

The percentage of secondary schools in which those who teach physical education were provided the following did not change significantly from 2008 to 2012:

	2008	**2010**	**2012**
Goals, objectives and expected outcomes for physical education	97.9	96.1	97.0
Annual scope and sequence of instruction for physical education	84.7	80.6	83.3
Plans for how to assess student performance in physical education	88.6	88.9	89.6
A written physical education curriculum	96.3	92.3	92.4

Why these findings are important

"The goal of physical education is to develop physically educated individuals who have the knowledge, skills and confidence to enjoy a lifetime of physical activity." National Association for Sport and Physical Education position statement. Accessed November 5, 2012 at http://www.aahperd.org/naspe/standards/upload/Physical-Education-Is-Critical-to-Educating-the-Whole-Child-Final-5-19-2011.pdf**.**

Key Resources

Physical Education Curriculum Analysis Tool. U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at http://www.cdc.gov/healthyyouth/cshp/publications.htm

Quality Physical Education resources. National Association for Sport and Physical Education website at *http://www.aahperd.org/naspe/publications/teachingTools/Resources.cfm*

*Statistically significant upward trend

HIV, other STDs and Pregnancy Prevention

There was a significant downward trend in the percentage of secondary schools in which teachers taught the several HIV, other STDs, or pregnancy prevention topics in a required course for students in any of **grades 6, 7, or 8** during the current school year.

	2008	2010	2012
How HIV and other STDs are diagnosed and treated	79.9	69.4	67.9*
Health consequences of HIV, other STDs and pregnancy	83.2	79.0	74.7*
The benefits of being sexually abstinent	81.1	79.3	80.9
How to prevent HIV, other STDs and pregnancy	79.5	77.8	75.9
How to access valid and reliable information, products and services related to HIV, other STDs and pregnancy	71.5	64.9	61.3*
Influences of media, family and social and cultural norms on sexual behavior	76.4	70.0	66.7*
Communication and negotiation skills related to eliminating or reducing risk for HIV, STDs & pregnancy	73.2	66.8	63.6*
Efficacy of condoms (how well they work and don't work)		40.4	41.9
Importance of using condoms consistently and correctly		32.1	31.0
How to obtain condoms		19.8	11.8**
How to correctly use a condom		16.0	7.3**

There were no significant changes from 2008 to 2012 in the percentage of secondary schools in which teachers taught the following HIV, other STD, or pregnancy prevention topics in a required course for students in any of **grades 9-12** during the current school year.

	2008	2010	2012
How HIV and other STDs are diagnosed and treated		93.1	93.1
Health consequences of HIV, other STDs and pregnancy		97.5	94.2
The benefits of being sexually abstinent	94.0	97.5	96.8
How to prevent HIV, other STDs and pregnancy	94.8	97.5	95.6
How to access valid and reliable information, products and services related to HIV, other STDs and pregnancy	87.4	92.5	89.1
Influences of media, family and social and cultural norms on sexual behavior	91.0	92.4	91.1
Communication and negotiation skills related to eliminating or reducing risk for HIV, STDs & pregnancy	91.8	89.2	87.8
Efficacy of condoms (how well they work and don't work)	72.0	73.5	76.7
Importance of using condoms consistently and correctly	61.6	64.1	65.4
How to obtain condoms	47.8	47.3	44.3
How to correctly use a condom		38.3	33.2

*Statistically significant downward trend
**Statistically significant decline

Why these findings are important

"Evaluations of comprehensive sexuality education programs show that many of these programs can help youth delay the onset of sexual activity, reduce the frequency of sexual activity, reduce the number of sexual partners, and increase condom and contraceptive use." National Sexuality Education Standards Core Content and Skills K-12, p. 7.

Key Resource

National Sexuality Education Standards Core Content and Skills K-12. January 2012. American Association for Health Education and other health organizations. Available at http://www.aahperd.org/aahe/proDevelopment/upload/Sex-Health-Education-Standards-Final-2012.pdf

Parent and Family Education and Engagement

There were significant downward trends in the percentage of secondary schools that during the current school year provided parents and families with health information designed to increase parent and family knowledge in HIV, STD or teen pregnancy prevention, tobacco-use prevention and nutrition and healthy eating.

	2008	**2010**	**2012**
HIV, STD, or teen pregnancy prevention	30.6	25.7	14.4*
Tobacco-use prevention	37.2	32.9	23.0*
Physical activity	44.1	46.8	38.0
Nutrition and healthy eating	45.6	46.7	35.5*
Asthma	21.1	24.5	22.8

Why these findings are important

"School efforts to promote health among students have been shown to be more successful when parents are involved." - Parent Engagement: Strategies for Involving Parents in School Health. CDC.

Key Resources

Parent Engagement: Strategies for Involving Parents in School Health. U.S. Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/healthyyouth/AdolescentHealth/pdf/parent_engagement_strategies.pdf

National Parent Teacher Association. Topics include Health and Wellness and Parent Involvement. Available at http://www.pta.org/topics.asp

*Statistically significant downward trend

Professional Development

There was a significant downward trend in the percentage of secondary schools that had **physical education teachers** receiving professional development on physical education during the two years before the survey from 90.1 percent in 2008 to 81.4 percent in 2012.

From 2000 to 2012, there were significant trends in the percentage of secondary schools in which the **lead health education teacher *received*** professional development on the health topics during the past two years.

	2000	**2012**
Alcohol or other drug-use prevention	60.6	33.8*
Emotional and mental health	32.9	36.8**
Injury prevention and safety	41.2	48.3**
Nutrition and dietary behavior	31.1	40.2**
Physical activity and fitness	45.0	52.9**
Suicide prevention	27.1	37.3**
Violence prevention (bullying, fighting)	55.0	66.7**
Tobacco-use prevention	36.2	24.6*
STD prevention	32.2	24.8*
Pregnancy prevention	24.2	19.3
HIV prevention	38.4	23.7*

From 2000 to 2012, there were significant upward trends in the percentage of secondary schools in which the lead **health education teacher *would like to receive*** professional development on some of the following topics:

	2000	**2012**
Alcohol or other drug-use prevention	66.5	69.5**
Emotional and mental health	57.7	61.6**
Injury prevention and safety	46.3	55.2**
Nutrition and dietary behavior	62.7	65.9**
Physical activity and fitness	56.5	64.1**
Suicide prevention	67.7	66.3
Violence prevention	77.4	71.8
Tobacco-use prevention	60.0	61.4
STD prevention	61.9	59.2
Pregnancy prevention	55.2	55.8
HIV prevention	65.0	59.2

*Statistically significant downward trend
**Statistically significant upward trend

Significantly more lead health education teachers would like to receive professional development in all the health topics than received it during the past two years. The percentage of secondary schools in which the **lead health education teacher *received*** professional development on the following topics during past two years and percentage of schools in which lead teachers ***would like*** to receive it in 2012:

	Received	**Would like to receive**
Alcohol or other drug-use prevention	33.8	69.5
Emotional and mental health	36.8	61.6
Injury prevention and safety	48.3	55.2
Nutrition and dietary behavior	40.2	65.9
Physical activity and fitness	52.9	64.1
Suicide prevention	37.3	66.3
Violence prevention	66.7	71.8
Tobacco-use prevention	24.6	61.4
STD prevention	24.8	59.2
Pregnancy prevention	19.3	55.8
HIV prevention	23.7	59.2

Also in 2012, a greater percentage of schools in which the **lead health education teachers *would like to receive*** professional development than the percentage of schools in which the lead teacher did ***receive*** it in the following topics during the past two years:

	Received	**Would like to receive**
Teaching students with disabilities	43.7	56.7
Teaching students of various cultural backgrounds	31.6	42.2
Teaching students with limited English proficiency	15.9	42.4
Teaching students of different sexual orientations or gender identities	7.9	36.2
Encouraging family or community involvement	37.9	66.2
Using interactive teaching methods	60.0	58.9
Teaching skills for behavior change	49.7	65.8
Classroom management techniques	69.9	59.6
Assessing or evaluating students in health education	31.3	66.6

Why these findings are important

Professional development is essential for teachers to remain current in effective teaching methods and course content.

Key Resources

Missouri Coordinated School Health Coalition annual conference. http://www.healthykidsmo.org/

Missouri Association for Health, Physical Education, Recreation and Dance annual convention and Quality Physical Education workshops. http://www.moahperd.org/index.php

Resources for health education professionals. American Association for Health Education website at http://www.aahperd.org/aahe/proDevelopment/resources.cfm

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