

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet												Decreased, 1997-2013	No quadratic change	No change
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else												Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol												Decreased, 1997-2013	No quadratic change	No change
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days												No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN14: Percentage of students who carried a gun on one or more of the past 30 days												No linear change	No quadratic change	No change
	7.0	5.6	4.5	4.4	5.9	5.6	5.8	5.1	4.9					
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
	8.2	7.5	4.9	5.1	4.7	5.0	5.4	3.5	3.8					
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school												No linear change	No quadratic change	No change
	5.1	5.4	7.2	5.5	7.0	6.5	7.4	5.3	6.8					
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months												Decreased, 1997-2013	No change, 1997-2009 Decreased, 2009-2013	No change
	9.2	9.2	9.0	9.7	8.6	8.1	9.4	6.8	6.7					
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months												Decreased, 1997-2013	No quadratic change	Decreased
	36.4	35.1	33.8	30.8	30.1	30.7	31.6	27.4	21.6					

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse														
			3.9	3.3	3.8	3.1	3.7	3.1	4.5	2.5	2.9	No linear change	No quadratic change	No change
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months														
			15.2	13.5	11.4	12.2	11.4	11.4	11.3	9.1	6.9	Decreased, 1997-2013	No quadratic change	Decreased
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to														
					9.5	9.9	9.0	10.3	10.4	7.9	8.7	Decreased, 2001-2013	No quadratic change	No change
QN24: Percentage of students who had ever been bullied on school property during the past 12 months														
									24.0	22.7	25.3	No linear change	Not available [§]	No change
QN25: Percentage of students who had ever been electronically bullied during the past 12 months														
									18.0	18.8		No linear change	Not available	No change

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§Not enough years of data to calculate.

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months														
			27.4	27.3	30.2	26.3	26.9	27.4	26.0	27.0		No linear change	No quadratic change	No change
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months														
	23.8	20.1	18.1	18.1	15.8	15.3	16.0	15.7	16.0		Decreased, 1997-2013	Decreased, 1997-2005 No change, 2005-2013	No change	
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months														
	18.6	15.2	14.8	14.2	12.2	12.0	14.6	12.8	14.7		Decreased, 1997-2013	Decreased, 1997-2005 No change, 2005-2013	Increased	
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months														
	10.4	7.9	10.2	10.5	9.3	9.1	9.3	8.1	8.9		No linear change	No quadratic change	No change	
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse														
	3.1	2.9	3.5	3.2	3.3	2.6	3.0	2.7	3.0		No linear change	No quadratic change	No change	

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Trend Analysis Report

Total Tobacco Use	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011				2013
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs				75.0	72.2	63.5	60.2	52.4	51.2	46.0	40.1	35.8	Decreased, 1997-2013	No quadratic change	No change
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years				27.2	26.7	23.2	21.3	16.1	13.8	11.1	8.2	7.9	Decreased, 1997-2013	Decreased, 1997-2003 Decreased, 2003-2013	No change
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days				38.2	34.1	25.7	22.6	17.0	18.0	18.8	14.0	11.8	Decreased, 1997-2013	Decreased, 1997-2003 Decreased, 2003-2013	No change
QNFRCIG: Percentage of students who smoked cigarettes on 20 or more of the past 30 days				19.8	17.4	12.7	11.3	7.8	8.1	7.8	5.4	4.3	Decreased, 1997-2013	No quadratic change	No change
QN34: Among students who reported current cigarette use, the percentage who smoked more than 10 cigarettes per day on the days they smoked during the past 30 days				18.1	14.9	12.4	17.3	13.6	8.7	9.7	7.8	8.7	Decreased, 1997-2013	No quadratic change	No change

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN35: Among students who were less than 18 years of age and who reported current cigarette use, the percentage who usually got their own cigarettes by buying them in a store or gas station during the past 30 days														
					25.0	18.1	16.0	15.0	15.2	15.7	15.4	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days														
			17.3	12.8	9.1	9.3	4.9	6.0	5.9	3.2	2.8	Decreased, 1997-2013	No quadratic change	No change
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days														
					20.4	18.4	12.2	12.7	12.5	9.1	7.1	Decreased, 2001-2013	No quadratic change	No change
QN38: Among students who reported current cigarette use, the percentage who ever tried to quit smoking cigarettes during the past 12 months														
					64.0	58.4	57.1	57.6	53.6	55.9	51.9	Decreased, 2001-2013	No quadratic change	No change
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days														
			8.4	8.2	7.7	6.5	6.9	8.9	10.6	7.6	6.9	No linear change	No quadratic change	No change

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Total Tobacco Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days														
				19.6	14.9	13.6	13.3	14.7	14.7	12.1	10.7	Decreased, 1999-2013	No quadratic change	No change
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days														
				39.2	29.9	27.4	23.2	24.8	25.2	19.6	17.9	Decreased, 1999-2013	No quadratic change	No change

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Total Alcohol and Other Drug Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †	
Health Risk Behavior and Percentages															
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life												Decreased, 1997-2013	No quadratic change	No change	
			81.9	81.7	77.4	75.9	72.6	72.2	68.8	63.8	60.2				
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years												Decreased, 1997-2013	No quadratic change	No change	
			34.9	32.2	26.9	26.9	22.6	21.4	18.8	15.6	14.0				
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days												Decreased, 1997-2013	Decreased, 1997-2007 Decreased, 2007-2013	No change	
			50.5	48.5	46.2	44.0	38.1	42.8	37.0	30.5	28.3				
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change	
			32.4	29.9	29.3	27.4	22.5	24.6	23.2	17.8	16.7				
QN46: Among students who reported current alcohol use, the percentage who usually got the alcohol they drank from someone who gave it to them during the past 30 days												No linear change	Not available [§]	No change	
															35.0

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN47: Percentage of students who used marijuana one or more times during their life														
			48.1	46.4	44.0	44.1	37.4	35.4	36.5	34.5	33.0	Decreased, 1997-2013	No quadratic change	No change
QN48: Percentage of students who tried marijuana for the first time before age 13 years														
			12.2	12.3	11.6	11.5	8.7	9.0	7.9	6.8	6.1	Decreased, 1997-2013	No quadratic change	No change
QN49: Percentage of students who used marijuana one or more times during the past 30 days														
			28.2	25.9	24.3	24.0	18.8	18.0	20.7	18.6	18.2	Decreased, 1997-2013	No quadratic change	No change
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life														
			7.4	8.1	7.8	8.7	7.0	6.8	6.5	4.2	4.0	Decreased, 1997-2013	No change, 1997-2007 Decreased, 2007-2013	No change
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life														
			21.6	15.6	12.8	13.4	12.2	12.0	14.4	9.8	7.4	Decreased, 1997-2013	No quadratic change	Decreased

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN52: Percentage of students who used heroin one or more times during their life												No linear change	No quadratic change	No change
			3.6	3.3	3.5	3.5	2.2	5.0	2.5	2.8				
QN53: Percentage of students who used methamphetamines one or more times during their life												Decreased, 1999-2013	No quadratic change	No change
			9.0	8.2	7.8	4.3	4.0	6.2	2.9	2.7				
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life												Decreased, 1997-2013	No quadratic change	No change
			5.4	4.0	4.3	3.7	3.2	2.8	4.1	2.1	2.9			
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life												No linear change	No quadratic change	No change
			2.9	2.3	2.4	2.4	2.5	2.6	3.8	2.6	2.1			
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months												Decreased, 1997-2013	No quadratic change	No change
			36.2	33.7	35.6	31.3	28.8	29.1	29.5	25.4	23.8			

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Total Sexual Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse														
			48.9	44.6	40.3	43.5	42.2	42.4	45.6	41.2	38.1	Decreased, 1997-2013	No quadratic change	No change
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years														
			8.3	6.9	4.9	6.9	6.2	5.3	5.1	4.4	3.2	Decreased, 1997-2013	No quadratic change	No change
QN61: Percentage of students who had sexual intercourse with four or more people during their life														
			16.4	13.7	10.5	13.5	11.8	12.2	13.6	10.7	8.3	Decreased, 1997-2013	No quadratic change	No change
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months														
			34.4	31.4	29.9	31.1	29.4	30.0	34.1	29.1	26.9	Decreased, 1997-2013	No quadratic change	No change
QN63: Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse														
			32.8	24.2	23.7	24.2	22.3	23.2	24.7	20.4	21.3	Decreased, 1997-2013	No quadratic change	No change

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Health Risk Behavior and Percentages															
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QN64: Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse															
			58.2	58.9	61.0	62.5	61.7	65.0	61.4	61.2	61.0		No linear change	No quadratic change	No change
QN65: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse															
			22.3	20.4	21.7	17.1	18.5	19.3	21.4	21.2	21.7		No linear change	Decreased, 1997-2003 Increased, 2003-2013	No change
QNOTHH: Among students who had sexual intercourse during the past three months, the percentage who used an IUD or implant or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse															
										5.0	7.8		Increased, 2011-2013	Not available [§]	Increased
QNOTHHPL: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse															
										26.2	29.5		No linear change	Not available	No change

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Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNDUALBC: Among students who had sexual intercourse during the past three months, the percentage who used both a condom during last sexual intercourse and birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										9.3	10.3	No linear change	Not available [§]	No change
QNBCNONE: Among students who had sexual intercourse during the past three months, the percentage who used no method of birth control to prevent pregnancy before last sexual intercourse														
			14.0	14.1	10.3	12.5	13.7	9.6	11.5	14.0	8.9	No linear change	No quadratic change	Decreased
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection														
			87.9	86.1	88.6	88.6	89.7	89.6	88.9	88.5	86.7	No linear change	No change, 1997-2007 No change, 2007-2013	No change

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Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [§]														
			12.7	13.1	14.8	13.3	16.4	14.1	15.3	15.5		Increased, 1999-2013	No quadratic change	No change
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [§]														
			10.8	10.6	12.3	12.0	12.4	11.9	12.1	13.0		No linear change	No quadratic change	No change
QN66: Percentage of students who described themselves as slightly or very overweight														
			30.4	31.7	30.7	31.4	29.3	28.9	27.9	28.2	28.7	Decreased, 1997-2013	No quadratic change	No change
QN67: Percentage of students who were trying to lose weight														
			44.8	44.5	45.8	46.4	44.8	44.6	44.8	45.2	45.0	No linear change	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days														
			13.1	14.3	12.6	11.2	14.0	13.1	11.9	12.8		No linear change	No quadratic change	No change

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§Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

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Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days														
			8.1	9.7	9.0	4.8	7.1	7.3	5.1	5.7		Decreased, 1999-2013	No quadratic change	No change
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days														
		6.1	5.7	7.6	6.6	4.7	6.0	7.2	4.6	4.9		Decreased, 1997-2013	No change, 1997-2009 Decreased, 2009-2013	No change
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days														
			83.4	84.8	81.0	79.4	80.6	78.5	79.8	76.9		Decreased, 1999-2013	No quadratic change	Decreased
QN72: Percentage of students who ate fruit one or more times during the past seven days														
		83.4	85.1	85.1	84.5	84.3	86.5	87.4	88.6		Increased, 1999-2013	No quadratic change	No change	
QN73: Percentage of students who ate green salad one or more times during the past seven days														
		64.5	70.4	68.0	64.1	64.7	63.5	63.8	64.3		Decreased, 1999-2013	No quadratic change	No change	

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1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days														
				75.2	76.1	72.1	71.6	71.4	72.3	73.0	70.0	Decreased, 1999-2013	No quadratic change	Decreased
QN75: Percentage of students who ate carrots one or more times during the past seven days														
				49.5	54.2	49.5	48.9	48.3	50.5	48.9	49.5	No linear change	No quadratic change	No change
QN76: Percentage of students who ate other vegetables one or more times during the past seven days														
				82.5	82.7	82.0	80.6	82.2	81.7	83.3	82.7	No linear change	No quadratic change	No change
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days														
				19.0	20.6	18.4	16.7	17.0	19.6	18.7	17.6	No linear change	No quadratic change	No change
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days														
				29.3	32.9	30.3	28.0	29.7	31.6	31.2	29.2	No linear change	No quadratic change	No change

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Total												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days												No linear change	No quadratic change	No change
				7.0	5.2	5.9	5.9	6.3	6.4	5.5	5.7			
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days												No linear change	No quadratic change	No change
				57.9	63.8	58.4	58.0	59.0	61.5	62.2	60.3			
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days												Decreased, 1999-2013	No quadratic change	No change
				20.6	21.4	19.1	17.1	17.9	19.0	19.2	17.2			
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days												No linear change	Decreased, 1999-2005 Increased, 2005-2013	No change
				11.6	12.9	10.8	9.9	10.3	11.6	12.6	11.9			
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days												No linear change	No quadratic change	No change
				5.4	4.7	5.2	5.0	5.1	5.3	5.6	5.6			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days												No linear change	No quadratic change	No change
				60.3	65.6	61.4	59.4	61.0	62.2	63.2	62.4			
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days												No linear change	Decreased, 1999-2005 Increased, 2005-2013	No change
				27.0	28.3	25.4	23.6	24.5	26.1	26.6	26.0			
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days												No linear change	No quadratic change	No change
				7.8	8.9	7.1	6.4	7.4	8.3	8.3	8.0			
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days												Decreased, 2007-2013	Not available [§]	Decreased
								28.9	27.6	23.6	19.6			
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days												Increased, 2007-2013	Not available	Increased
								19.3	20.4	22.4	28.0			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total												Linear Change*	Quadratic Change*	Change from 2011-2013 †								
Weight Management and Dietary Behaviors																						
Health Risk Behavior and Percentages																						
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013											
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days												20.4	17.6	15.1	12.5	Decreased, 2007-2013	Not available [§]	No change				
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days												11.6	10.3	8.8	6.8	Decreased, 2007-2013	Not available	Decreased				
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days												20.8	20.4	15.5	16.7	14.5	13.3	12.9	11.9	Decreased, 1999-2013	No quadratic change	No change
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days												14.1	13.6	16.3	15.8	18.5	19.1	19.5	19.3	Increased, 1999-2013	No quadratic change	No change
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days												52.4	50.4	43.9	45.5	43.6	43.3	43.1	39.2	Decreased, 1999-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Total Weight Management and Dietary Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
				38.7	37.6	31.7	32.2	28.7	28.4	27.0	24.2	Decreased, 1999-2013	No quadratic change	No change
QN79: Percentage of students who ate breakfast on all of the past seven days														
									35.3	37.2	37.1	No linear change	Not available [§]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									13.4	13.5	13.1	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †								
Health Risk Behavior and Percentages																						
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013											
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days												44.0	46.8	49.4	49.7	Increased, 2007-2013	Not available [§]	No change				
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days												15.0	14.2	14.8	15.2	No linear change	Not available	No change				
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days												21.9	25.3	27.0	26.7	Increased, 2007-2013	Not available	No change				
QN81: Percentage of students who watched three or more hours per day of TV on an average school day												36.6	30.5	34.8	35.8	32.6	29.6	29.5	27.0	Decreased, 1999-2013	No quadratic change	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day												22.9	23.3	27.0	34.1	Increased, 2007-2013	Not available	Increased				

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Total Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school												No linear change	Increased, 1997-2007 Decreased, 2007-2013	No change
			37.2	34.5	44.1	39.4	38.4	44.8	42.3	33.9	35.9			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school												No linear change	No quadratic change	No change
			29.2	26.9	29.4	27.5	29.8	29.8	31.0	26.7	26.8			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Total Other	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
	QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma													
						21.1	19.6	23.5	23.3	24.6	22.3	Increased, 2003-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total Site-Added	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
						68.1	63.5	68.1	72.3	73.3	Increased, 2005-2013	Not available [§]	No change	
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
			3.5	3.4	3.6	3.9	3.6	2.5	2.9	1.9	2.4	Decreased, 1997-2013	No quadratic change	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
					16.9	17.2	12.5	9.6	10.4	6.5	7.0	Decreased, 2001-2013	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
					2.2	2.6	2.3	1.9	3.4	1.7	2.4	No linear change	No quadratic change	No change
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
					15.0	10.8	8.4	6.7	9.4	7.4	6.4	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days														
					8.2	5.1	3.4	3.3	4.4	3.3	2.6	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days														
					2.5	2.5	2.4	2.3	3.2	1.8	2.4	No linear change	No quadratic change	No change
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day														
										12.6	14.8	Increased, 2011-2013	Not available [§]	Increased
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse														
										15.1	13.6	No linear change	Not available	No change
QN96: Percentage of students who have had sexual contact with males and females during their life														
										4.0	4.1	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Total Site-Added	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex														
					69.4	71.7	70.9	72.1	70.9	71.8	69.2	No linear change	No change, 2001-2007 No change, 2007-2013	No change
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma														
								11.4	11.6	12.6	10.7	No linear change	Not available [§]	Decreased
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured														
								62.5	61.8	67.6	69.8	Increased, 2007-2013	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Male
Injury and Violence

Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet												Decreased, 1997-2013	No quadratic change	No change
			94.6	92.9	89.8	92.4	90.6	91.9	89.4	89.8	89.0			
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else												Decreased, 1997-2013	Decreased, 1997-2003 No change, 2003-2013	No change
			22.7	17.6	10.8	9.0	8.7	7.7	9.9	7.9	8.1			
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol												Decreased, 1997-2013	No quadratic change	Decreased
			37.4	36.3	31.2	29.8	24.4	26.7	26.7	22.7	19.0			
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days												No linear change	No quadratic change	No change
			31.3	26.0	19.3	22.1	25.1	27.4	25.5	24.8	24.6			
QN14: Percentage of students who carried a gun on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			12.3	9.7	7.7	7.3	10.5	8.9	9.5	8.3	7.8			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Injury and Violence

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days														
			12.8	11.9	7.3	6.8	7.0	5.9	7.3	5.2	5.5	Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school														
			6.3	6.1	6.7	5.8	6.6	6.0	7.4	4.4	6.3	No linear change	No quadratic change	Increased
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months														
			12.7	11.9	10.9	12.6	11.1	8.8	11.5	8.3	8.4	Decreased, 1997-2013	No quadratic change	No change
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months														
			47.7	45.2	41.8	37.0	37.3	38.6	40.0	33.8	28.1	Decreased, 1997-2013	No quadratic change	Decreased
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse														
			5.2	4.5	5.0	3.5	4.8	3.8	5.4	3.1	3.7	Decreased, 1997-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †	
Health Risk Behavior and Percentages															
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months															
			22.3	19.0	15.7	15.7	15.6	16.1	14.9	11.7	9.7		Decreased, 1997-2013	No quadratic change	No change
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to															
					7.0	7.4	6.1	6.9	8.0	5.1	6.3		No linear change	No quadratic change	No change
QN24: Percentage of students who had ever been bullied on school property during the past 12 months															
									21.3	20.8	21.9		No linear change	Not available [§]	No change
QN25: Percentage of students who had ever been electronically bullied during the past 12 months															
										13.4	12.5		No linear change	Not available	No change
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months															
				20.5	21.8	24.1	19.7	19.7	20.3	20.5	20.8		No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months														
			19.4	16.3	13.1	14.1	12.0	10.8	12.8	12.8	11.4	Decreased, 1997-2013	Decreased, 1997-2001 No change, 2001-2013	No change
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months														
			17.3	13.3	11.4	12.3	10.3	8.3	12.7	11.0	11.9	Decreased, 1997-2013	Decreased, 1997-2001 No change, 2001-2013	No change
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months														
			9.0	5.5	8.4	7.8	7.3	6.5	7.2	7.0	7.3	No linear change	No quadratic change	No change
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse														
			3.1	2.2	3.5	2.4	3.1	1.9	2.6	2.1	2.8	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Tobacco Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs												Decreased, 1997-2013	No quadratic change	Decreased
			76.0	73.0	62.5	60.6	54.4	50.6	45.2	43.8	37.2			
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years												Decreased, 1997-2013	No quadratic change	No change
			28.3	30.2	23.0	22.0	17.8	12.8	11.6	10.2	8.8			
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days												Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
			38.2	34.9	24.0	21.4	17.8	18.4	18.4	16.9	13.0			
QNFRCIG: Percentage of students who smoked cigarettes on 20 or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			19.5	19.2	12.0	11.7	8.4	8.7	7.1	7.0	5.8			
QN34: Among students who reported current cigarette use, the percentage who smoked more than 10 cigarettes per day on the days they smoked during the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			20.7	17.2	16.7	20.9	15.8	8.2	12.7	9.3	12.3			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Tobacco Use

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN35: Among students who were less than 18 years of age and who reported current cigarette use, the percentage who usually got their own cigarettes by buying them in a store or gas station during the past 30 days											Decreased, 2001-2013	No quadratic change	No change	
				31.0	23.5	23.8	22.4	21.2	18.6	19.9				
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days											Decreased, 1997-2013	No quadratic change	No change	
	17.4	14.2	8.8	9.4	5.2	6.3	6.0	4.4	3.8					
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days											Decreased, 2001-2013	No quadratic change	No change	
				19.3	18.2	12.7	13.3	12.7	11.0	8.6				
QN38: Among students who reported current cigarette use, the percentage who ever tried to quit smoking cigarettes during the past 12 months											No linear change	No quadratic change	No change	
				58.8	54.7	56.0	54.8	51.5	54.0	49.3				
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days											No linear change	No quadratic change	No change	
	14.8	12.9	11.9	10.0	11.1	14.6	15.3	13.2	11.5					

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Tobacco Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days														
				27.6	20.9	18.5	19.0	20.6	19.9	16.8	14.5	Decreased, 1999-2013	No quadratic change	No change
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days														
				42.6	30.6	28.5	27.5	29.3	27.6	25.3	22.7	Decreased, 1999-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life														
			82.3	80.6	75.3	74.2	69.5	70.3	67.0	63.8	58.8	Decreased, 1997-2013	No quadratic change	No change
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years														
			38.8	36.4	29.1	31.0	24.5	23.8	21.0	18.9	15.2	Decreased, 1997-2013	No quadratic change	Decreased
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days														
			52.2	49.8	45.0	42.3	35.8	41.4	36.0	32.2	28.0	Decreased, 1997-2013	No quadratic change	No change
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days														
			35.7	33.7	30.5	27.9	22.7	26.1	23.8	20.0	18.1	Decreased, 1997-2013	No quadratic change	No change
QN46: Among students who reported current alcohol use, the percentage who usually got the alcohol they drank from someone who gave it to them during the past 30 days														
								29.8	26.2	28.7	28.0	No linear change	Not available [§]	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male														
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN47: Percentage of students who used marijuana one or more times during their life														
			51.4	49.7	45.5	46.7	39.5	37.7	38.4	38.2	34.4	Decreased, 1997-2013	No quadratic change	No change
QN48: Percentage of students who tried marijuana for the first time before age 13 years														
			16.1	16.1	13.8	15.0	11.2	10.4	9.9	9.0	7.6	Decreased, 1997-2013	No quadratic change	No change
QN49: Percentage of students who used marijuana one or more times during the past 30 days														
			32.2	29.1	24.9	25.5	19.9	19.4	22.1	21.6	19.6	Decreased, 1997-2013	Decreased, 1997-2005 No change, 2005-2013	No change
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life														
			9.1	10.0	8.8	9.3	7.4	7.0	7.9	5.4	5.6	Decreased, 1997-2013	No quadratic change	No change
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life														
			23.4	16.5	11.4	12.9	11.6	10.8	14.1	9.4	7.3	Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Male												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN52: Percentage of students who used heroin one or more times during their life												No linear change	No quadratic change	No change
			4.7	4.5	4.3	4.1	2.4	6.5	3.8	3.8				
QN53: Percentage of students who used methamphetamines one or more times during their life												Decreased, 1999-2013	No quadratic change	No change
			8.8	8.7	8.4	4.9	4.4	7.7	4.3	3.7				
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life												Decreased, 1997-2013	No quadratic change	No change
			6.7	5.6	5.4	4.7	4.3	3.3	5.7	3.1	3.7			
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life												No linear change	No quadratic change	No change
			3.8	3.1	3.3	2.4	2.6	2.7	4.6	3.0	2.6			
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months												Decreased, 1997-2013	No quadratic change	No change
			42.6	39.5	38.2	34.6	32.1	32.2	31.3	29.9	26.9			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Sexual Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse												Decreased, 1997-2013	No quadratic change	No change
50.7	45.1	38.0	45.1	43.2	43.8	46.9	42.1	40.5						
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years												Decreased, 1997-2013	No quadratic change	No change
11.8	9.5	6.3	9.7	8.5	7.1	7.2	5.9	5.2						
QN61: Percentage of students who had sexual intercourse with four or more people during their life												Decreased, 1997-2013	No quadratic change	No change
18.5	15.2	11.1	15.5	14.1	13.0	15.7	12.2	9.6						
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months												Decreased, 1997-2013	No quadratic change	No change
32.7	31.4	26.0	29.5	27.7	28.9	32.6	27.2	27.0						
QN63: Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse												Decreased, 1997-2013	No quadratic change	No change
40.1	28.3	28.3	27.9	26.1	25.2	29.2	24.7	22.1						

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Sexual Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN64: Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse														
			62.0	67.6	67.3	69.0	64.0	72.8	68.2	66.3	66.6	No linear change	No quadratic change	No change
QN65: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse														
			18.4	17.2	16.8	13.5	13.8	13.0	22.6	16.9	16.7	No linear change	No quadratic change	No change
QNOTHH: Among students who had sexual intercourse during the past three months, the percentage who used an IUD or implant or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										2.8	6.1	No linear change	Not available [§]	No change
QNOTHHPL: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										19.7	22.8	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

**Male
Sexual Behaviors**

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †							
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013									
QNDUALBC: Among students who had sexual intercourse during the past three months, the percentage who used both a condom during last sexual intercourse and birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse											No linear change	Not available [§]	No change							
										8.3	8.0									
QNBCNONE: Among students who had sexual intercourse during the past three months, the percentage who used no method of birth control to prevent pregnancy before last sexual intercourse											No linear change	No quadratic change	Decreased							
										13.3	14.1	8.8	11.0	18.1	8.0	9.2	14.5	8.1		
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection											No linear change	No quadratic change	No change							
										88.9	85.9	88.7	87.7	89.9	89.2	87.2	88.7	85.8		

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male															
Weight Management and Dietary Behaviors															
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [§]															
				13.0	14.6	15.2	14.3	17.3	15.2	15.2	15.7	No linear change	No quadratic change	No change	
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [§]															
				14.3	13.9	15.7	15.8	14.9	15.7	15.8	17.3	No linear change	No quadratic change	No change	
QN66: Percentage of students who described themselves as slightly or very overweight															
				22.0	24.4	25.1	25.8	24.0	23.2	24.3	25.2	24.1	No linear change	No quadratic change	No change
QN67: Percentage of students who were trying to lose weight															
				26.6	26.8	30.2	30.5	30.7	29.4	31.1	32.0	31.5	Increased, 1997-2013	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days															
				7.7	9.6	8.5	7.6	9.3	9.9	8.9	9.0	No linear change	No quadratic change	No change	

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days														
			5.5	7.0	6.6	4.9	5.9	7.1	5.0	6.0		No linear change	No quadratic change	No change
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days														
		3.3	3.6	5.6	5.3	3.8	3.7	6.3	3.4	3.8		No linear change	Increased, 1997-2001 Decreased, 2001-2013	No change
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days														
		83.8	83.3	80.7	79.5	79.7	78.3	80.3	78.5			Decreased, 1999-2013	No quadratic change	No change
QN72: Percentage of students who ate fruit one or more times during the past seven days														
		81.0	83.0	83.2	81.3	84.3	84.5	85.1	85.7			Increased, 1999-2013	No quadratic change	No change
QN73: Percentage of students who ate green salad one or more times during the past seven days														
		58.3	66.4	63.0	58.5	60.6	58.8	58.7	59.9			No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days														
				76.1	75.8	72.2	69.6	70.9	72.4	74.1	71.6	No linear change	Decreased, 1999-2005 No change, 2005-2013	No change
QN75: Percentage of students who ate carrots one or more times during the past seven days														
				48.4	54.4	50.2	47.5	48.8	49.0	50.3	51.3	No linear change	No quadratic change	No change
QN76: Percentage of students who ate other vegetables one or more times during the past seven days														
				80.9	81.3	78.8	77.5	80.5	77.7	80.5	80.7	No linear change	No quadratic change	No change
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days														
				20.1	22.0	18.7	16.3	17.7	20.0	18.5	18.7	No linear change	No quadratic change	No change
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days														
				30.0	34.1	31.3	27.2	30.1	32.3	31.9	30.2	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days												No linear change	No quadratic change	No change
				8.2	6.4	7.2	7.1	7.1	7.7	6.6	7.8			
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days												No linear change	No quadratic change	No change
				57.8	64.2	58.1	56.1	57.1	61.4	62.9	59.7			
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days												Decreased, 1999-2013	No quadratic change	No change
				22.0	22.6	20.8	17.0	19.4	20.8	19.0	18.1			
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days												No linear change	No change, 1999-2005 Increased, 2005-2013	No change
				12.0	13.2	10.2	9.7	10.2	11.4	13.3	12.9			
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days												No linear change	No quadratic change	No change
				6.3	6.0	6.9	6.4	5.8	6.7	6.9	7.0			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days												No linear change	No quadratic change	No change
				57.8	65.0	59.1	55.5	59.9	59.3	62.1	61.5			
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days												No linear change	Decreased, 1999-2005 Increased, 2005-2013	No change
				25.3	29.4	24.2	21.3	22.9	25.4	26.6	26.5			
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days												No linear change	Decreased, 1999-2005 Increased, 2005-2013	No change
				7.9	8.9	6.4	6.1	7.7	8.2	8.7	8.7			
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days												Decreased, 2007-2013	Not available [§]	Decreased
								34.6	32.4	28.1	23.5			
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days												Increased, 2007-2013	Not available	Increased
								15.6	18.7	18.4	23.6			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male																						
Weight Management and Dietary Behaviors																						
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †								
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013											
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days												24.2	21.8	18.2	15.6	Decreased, 2007-2013	Not available [§]	No change				
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days												13.8	12.7	10.9	8.9	Decreased, 2007-2013	Not available	No change				
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days												25.5	26.5	19.0	20.3	18.5	15.9	17.7	16.0	Decreased, 1999-2013	No quadratic change	No change
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days												11.4	10.4	14.4	14.1	13.6	15.7	15.3	14.2	Increased, 1999-2013	No quadratic change	No change
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days												59.1	59.3	50.3	50.7	48.4	48.5	50.9	47.2	Decreased, 1999-2013	Decreased, 1999-2003 No change, 2003-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Male												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
				44.8	46.2	37.6	37.6	34.1	32.8	34.2	31.1	Decreased, 1999-2013	No quadratic change	No change
QN79: Percentage of students who ate breakfast on all of the past seven days														
									37.1	40.6	38.7	No linear change	Not available [§]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									13.8	14.5	13.8	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days												No linear change	Not available [§]	No change
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days												No linear change	Not available	No change
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days												Increased, 2007-2013	Not available	No change
QN81: Percentage of students who watched three or more hours per day of TV on an average school day												Decreased, 1999-2013	No change, 1999-2005 Decreased, 2005-2013	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day												Increased, 2007-2013	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Male Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school												No linear change	Increased, 1997-2007 Decreased, 2007-2013	No change
			44.6	41.1	50.0	48.2	47.6	52.1	48.2	42.8	43.0			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school												No linear change	No quadratic change	No change
			35.2	31.3	32.7	33.6	36.5	33.5	36.0	34.5	32.4			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Male Other	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
	QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma													
						23.0	21.3	24.8	23.4	24.7	22.2	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
						60.3	57.3	61.9	67.5	67.6		Increased, 2005-2013	Not available [§]	No change
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
			5.0	4.7	4.5	4.5	4.5	2.1	3.9	2.6	3.4	Decreased, 1997-2013	No quadratic change	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
					16.5	15.3	12.6	9.2	10.5	6.8	7.9	Decreased, 2001-2013	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
					2.9	3.0	3.2	2.5	4.7	2.7	3.5	No linear change	No quadratic change	No change
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
					15.5	11.4	9.5	8.1	10.8	8.9	8.3	Decreased, 2001-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Male Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days														
					9.1	5.9	4.3	4.1	6.1	4.5	3.6	Decreased, 2001-2013	No quadratic change	No change
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days														
					3.4	3.0	3.4	2.8	4.8	2.7	3.3	No linear change	No quadratic change	No change
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day														
										12.2	12.9	No linear change	Not available [§]	No change
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse														
										9.5	10.2	No linear change	Not available	No change
QN96: Percentage of students who have had sexual contact with males and females during their life														
										2.3	2.3	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

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Male Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex												No linear change	No change, 2001-2005 No change, 2005-2013	No change
				64.5	68.2	67.9	68.7	67.8	67.8	66.2				
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma												No linear change	Not available [§]	No change
						11.5	9.6	11.1	9.5					
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured												Increased, 2007-2013	Not available	No change
						61.2	60.9	67.8	68.9					

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Injury and Violence														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet												Decreased, 1997-2013	No quadratic change	No change
95.3	93.6	88.9	91.1	88.9	93.0	86.8	89.0	85.7						
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else												Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
13.8	9.6	5.7	6.4	3.7	4.6	5.4	3.7	4.8						
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol												Decreased, 1997-2013	No quadratic change	No change
36.7	30.8	32.6	29.3	25.3	28.3	28.1	20.7	21.4						
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days												No linear change	No quadratic change	No change
6.5	6.1	5.2	8.1	6.2	8.0	7.5	6.2	6.3						
QN14: Percentage of students who carried a gun on one or more of the past 30 days												No linear change	No quadratic change	No change
1.5	1.2	1.1	1.2	1.3	1.9	1.9	1.6	2.0						

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Injury and Violence														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days														
			3.6	3.1	2.4	3.4	2.3	3.7	3.2	1.7	2.1	Decreased, 1997-2013	No quadratic change	No change
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school														
			3.7	4.7	7.5	4.7	7.3	6.9	7.0	6.1	7.2	Increased, 1997-2013	No quadratic change	No change
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months														
			5.4	6.5	6.8	6.5	6.0	7.1	7.0	5.1	4.9	No linear change	No change, 1997-2009 Decreased, 2009-2013	No change
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months														
			25.1	24.9	25.2	24.0	22.6	22.5	22.9	20.6	15.0	Decreased, 1997-2013	No change, 1997-2009 Decreased, 2009-2013	Decreased
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse														
			2.4	2.0	2.2	2.5	2.5	2.4	3.3	1.7	1.9	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months												Decreased, 1997-2013	No quadratic change	No change
			8.1	8.1	6.9	8.1	7.2	6.4	7.4	6.3	3.8			
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to												No linear change	No quadratic change	No change
					12.0	12.4	11.7	13.7	12.8	10.8	11.0			
QN24: Percentage of students who had ever been bullied on school property during the past 12 months												No linear change	Not available [§]	No change
									26.6	24.7	28.8			
QN25: Percentage of students who had ever been electronically bullied during the past 12 months												No linear change	Not available	No change
									22.8	25.2				
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months												No linear change	No quadratic change	No change
				34.3	32.9	36.5	32.9	34.2	34.7	31.6	33.2			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Injury and Violence														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months														
			28.0	23.9	23.1	21.8	19.6	19.7	19.2	18.7	20.6	Decreased, 1997-2013	Decreased, 1997-2007 No change, 2007-2013	No change
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months														
			19.9	17.2	18.2	15.9	14.1	15.5	16.4	14.7	17.5	Decreased, 1997-2013	Decreased, 1997-2005 No change, 2005-2013	Increased
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months														
			11.7	10.0	11.7	12.9	11.0	11.6	11.1	9.2	10.5	No linear change	No quadratic change	No change
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse														
			3.2	3.5	3.3	3.9	3.5	3.2	3.3	3.3	3.3	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Tobacco Use														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs														
			74.1	71.2	64.4	59.6	50.3	51.7	46.8	36.4	34.5	Decreased, 1997-2013	No quadratic change	No change
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years														
			25.8	23.3	23.3	20.3	14.1	14.7	10.3	6.1	6.9	Decreased, 1997-2013	No change, 1997-2001 Decreased, 2001-2013	No change
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days														
			38.2	33.3	27.2	23.7	16.1	17.5	19.1	11.1	10.6	Decreased, 1997-2013	No quadratic change	No change
QN34: Percentage of students who smoked cigarettes on 20 or more of the past 30 days														
			20.1	15.6	13.3	11.0	7.1	7.6	8.5	3.9	2.9	Decreased, 1997-2013	No quadratic change	No change
QN34: Among students who reported current cigarette use, the percentage who smoked more than 10 cigarettes per day on the days they smoked during the past 30 days														
			15.7	12.5	8.5	14.0	10.8	8.8	6.6	5.4	4.1	Decreased, 1997-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Tobacco Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN35: Among students who were less than 18 years of age and who reported current cigarette use, the percentage who usually got their own cigarettes by buying them in a store or gas station during the past 30 days														
					19.6	13.8	7.8	7.5	9.7	11.6	10.1	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days														
			17.3	11.5	9.4	9.1	4.6	5.5	5.7	1.9	1.9	Decreased, 1997-2013	No quadratic change	No change
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days														
					21.4	18.5	11.5	12.0	12.2	7.2	5.6	Decreased, 2001-2013	No quadratic change	No change
QN38: Among students who reported current cigarette use, the percentage who ever tried to quit smoking cigarettes during the past 12 months														
					68.3	61.8	58.6	60.9	55.7	59.0	55.2	Decreased, 2001-2013	No quadratic change	No change
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days														
			2.0	3.2	3.3	2.9	2.5	3.0	5.6	1.6	2.0	No linear change	Increased, 1997-2009 Decreased, 2009-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Tobacco Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days														
				11.4	8.4	8.3	7.2	8.6	9.0	6.9	6.6	Decreased, 1999-2013	No quadratic change	No change
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days														
				35.9	29.1	26.3	18.7	20.3	22.9	13.7	13.3	Decreased, 1999-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life														
			81.4	82.9	79.4	77.5	75.9	73.9	70.5	63.9	61.6	Decreased, 1997-2013	No quadratic change	No change
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years														
			31.1	28.1	24.1	22.4	20.4	18.7	16.4	12.1	12.6	Decreased, 1997-2013	No quadratic change	No change
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days														
			48.7	47.4	47.3	45.6	40.3	44.2	37.9	28.8	28.6	Decreased, 1997-2013	Decreased, 1997-2007 Decreased, 2007-2013	No change
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days														
			29.2	26.0	27.9	26.8	22.1	23.1	22.4	15.5	15.4	Decreased, 1997-2013	No quadratic change	No change
QN46: Among students who reported current alcohol use, the percentage who usually got the alcohol they drank from someone who gave it to them during the past 30 days														
								40.2	37.8	43.6	38.3	No linear change	Not available [§]	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female														
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN47: Percentage of students who used marijuana one or more times during their life												Decreased, 1997-2013	No quadratic change	No change
			44.8	43.3	42.3	41.2	35.0	32.9	34.7	30.7	31.4			
QN48: Percentage of students who tried marijuana for the first time before age 13 years												Decreased, 1997-2013	No quadratic change	No change
			8.2	8.6	8.8	7.8	6.2	7.4	5.8	4.4	4.4			
QN49: Percentage of students who used marijuana one or more times during the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			24.1	22.7	23.4	22.5	17.5	16.5	19.3	15.5	16.8			
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life												Decreased, 1997-2013	No change, 1997-2007 Decreased, 2007-2013	No change
			5.6	6.2	6.8	7.8	6.5	6.2	4.9	2.9	2.4			
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life												Decreased, 1997-2013	No quadratic change	Decreased
			19.5	14.8	14.1	13.6	12.8	13.3	14.4	10.1	7.4			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Female												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN52: Percentage of students who used heroin one or more times during their life												No linear change	No quadratic change	No change
			2.6	1.8	2.5	2.8	1.9	3.2	1.0	1.7				
QN53: Percentage of students who used methamphetamines one or more times during their life												Decreased, 1999-2013	No quadratic change	No change
			9.3	7.6	7.0	3.4	3.5	4.1	1.5	1.6				
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life												Decreased, 1997-2013	No quadratic change	No change
			3.6	2.5	2.8	2.6	2.0	2.2	2.0	1.0	2.0			
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life												No linear change	No quadratic change	No change
			1.9	1.6	1.4	2.3	2.2	2.1	2.6	2.1	1.5			
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months												Decreased, 1997-2013	Decreased, 1997-2009 Decreased, 2009-2013	No change
			29.6	28.0	32.6	28.0	25.3	26.0	27.7	20.6	20.7			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Sexual Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse														
			47.2	44.2	42.2	41.9	41.2	41.0	44.3	40.4	35.8	Decreased, 1997-2013	No quadratic change	No change
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years														
			5.0	4.2	3.3	4.0	3.9	3.3	3.0	2.9	1.3	Decreased, 1997-2013	No quadratic change	Decreased
QN61: Percentage of students who had sexual intercourse with four or more people during their life														
			14.2	12.3	9.7	11.3	9.6	11.4	11.5	9.0	7.1	Decreased, 1997-2013	No quadratic change	No change
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months														
			36.0	31.4	33.4	32.8	31.1	31.0	35.6	30.9	26.8	Decreased, 1997-2013	No quadratic change	No change
QN63: Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse														
			26.3	20.6	19.9	20.6	18.8	21.3	20.9	16.2	20.3	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Sexual Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN64: Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse														
			54.7	50.7	56.2	56.9	59.7	58.1	55.2	56.6	55.6	No linear change	No quadratic change	No change
QN65: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse														
			26.0	23.7	25.6	20.0	22.6	24.9	20.6	25.0	26.7	No linear change	No quadratic change	No change
QNOTHH: Among students who had sexual intercourse during the past three months, the percentage who used an IUD or implant or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										7.0	9.2	No linear change	Not available [§]	No change
QNOTHHPL: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										32.0	35.9	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Sexual Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNDUALBC: Among students who had sexual intercourse during the past three months, the percentage who used both a condom during last sexual intercourse and birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										10.3	12.7	No linear change	Not available [§]	No change
QNBCNONE: Among students who had sexual intercourse during the past three months, the percentage who used no method of birth control to prevent pregnancy before last sexual intercourse														
			14.8	13.9	11.2	13.8	9.9	11.1	13.3	13.6	9.8	No linear change	No quadratic change	No change
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection														
			87.0	86.3	88.9	89.7	89.6	90.2	91.0	88.3	87.5	No linear change	Increased, 1997-2009 Decreased, 2009-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [§]														
			12.2	11.6	14.5	12.4	15.5	13.0	15.4	15.3		Increased, 1999-2013	No quadratic change	No change
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [§]														
			7.2	7.2	8.7	7.9	9.7	7.9	8.1	8.7		No linear change	No quadratic change	No change
QN66: Percentage of students who described themselves as slightly or very overweight														
			39.1	39.1	36.6	37.3	34.9	34.8	31.6	31.3	33.4	Decreased, 1997-2013	No quadratic change	No change
QN67: Percentage of students who were trying to lose weight														
			63.1	62.5	61.6	62.7	59.4	60.2	58.7	59.0	58.6	Decreased, 1997-2013	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days														
			18.5	19.0	16.8	14.9	18.8	16.0	14.9	16.5		Decreased, 1999-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days														
			10.9	12.3	11.4	4.6	8.3	7.4	5.1	5.3		Decreased, 1999-2013	No quadratic change	No change
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days														
		8.8	7.7	9.4	7.9	5.6	8.1	8.0	5.7	5.9		Decreased, 1997-2013	No quadratic change	No change
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days														
		83.1	86.3	81.4	79.3	81.6	78.9	79.5	75.4		Decreased, 1999-2013	No quadratic change	Decreased	
QN72: Percentage of students who ate fruit one or more times during the past seven days														
		85.9	87.2	87.2	87.9	84.5	88.6	90.0	91.7		Increased, 1999-2013	No change, 1999-2007 Increased, 2007-2013	No change	
QN73: Percentage of students who ate green salad one or more times during the past seven days														
		70.8	74.4	73.2	69.8	69.0	68.3	69.2	68.9		Decreased, 1999-2013	No quadratic change	No change	

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

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Female												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days												Decreased, 1999-2013	No quadratic change	Decreased
				74.2	76.4	72.0	73.6	71.7	72.1	71.9	68.4			
QN75: Percentage of students who ate carrots one or more times during the past seven days												No linear change	No quadratic change	No change
				50.7	54.0	48.6	50.4	47.7	51.9	47.6	47.7			
QN76: Percentage of students who ate other vegetables one or more times during the past seven days												No linear change	No quadratic change	No change
				84.2	83.9	85.2	83.6	84.2	85.9	86.4	84.7			
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days												No linear change	No quadratic change	No change
				17.9	19.3	17.8	17.1	16.4	18.9	19.0	16.4			
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days												No linear change	No quadratic change	No change
				28.7	31.7	29.2	28.8	29.3	30.9	30.6	28.3			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

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Female															
Weight Management and Dietary Behaviors															
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days												Decreased, 1999-2013	No quadratic change	No change	
5.8	4.1	4.4	4.6	5.4	5.1	4.2	3.5								
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days												No linear change	No quadratic change	No change	
58.1	63.5	58.8	59.9	61.0	61.6	61.6	61.2								
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days												No linear change	No quadratic change	No change	
19.3	20.3	17.3	17.3	16.4	17.2	19.5	16.3								
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days												No linear change	No quadratic change	No change	
11.1	12.6	11.2	10.1	10.3	11.6	11.8	10.9								
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days												No linear change	No quadratic change	No change	
4.6	3.4	3.5	3.6	4.4	3.8	4.2	4.2								

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days												No linear change	No quadratic change	No change
				62.7	66.2	63.6	63.3	62.2	64.9	64.3	63.2			
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days												No linear change	No quadratic change	No change
				28.8	27.2	26.3	26.0	26.0	26.7	26.6	25.3			
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days												No linear change	No quadratic change	No change
				7.6	9.0	7.8	6.6	7.0	8.5	8.0	7.4			
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days												Decreased, 2007-2013	Not available [§]	Decreased
								23.1	22.6	18.9	15.4			
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days												Increased, 2007-2013	Not available	Increased
								23.2	22.2	26.6	32.6			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female																						
Weight Management and Dietary Behaviors																						
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †								
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013											
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days												16.5	13.3	11.9	9.2	Decreased, 2007-2013	Not available [§]	No change				
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days												9.4	8.0	6.7	4.6	Decreased, 2007-2013	Not available	No change				
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days												16.0	14.4	11.8	12.9	10.6	10.7	7.8	7.8	Decreased, 1999-2013	No quadratic change	No change
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days												16.8	16.9	18.3	17.5	23.3	22.7	24.0	24.6	Increased, 1999-2013	No quadratic change	No change
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days												45.5	41.8	37.5	40.2	38.9	38.2	35.1	31.2	Decreased, 1999-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

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Female												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
				32.5	29.2	25.8	26.7	23.4	24.1	19.4	17.2	Decreased, 1999-2013	No quadratic change	No change
QN79: Percentage of students who ate breakfast on all of the past seven days														
									33.7	33.8	35.6	No linear change	Not available [§]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									13.1	12.3	12.4	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

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Female Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days												Increased, 2007-2013	Not available [§]	No change
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days												No linear change	Not available	No change
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days												Increased, 2007-2013	Not available	No change
QN81: Percentage of students who watched three or more hours per day of TV on an average school day												Decreased, 1999-2013	No quadratic change	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day												Increased, 2007-2013	Not available	Increased

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

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Female Physical Activity												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school												No linear change	Increased, 1997-2001 Decreased, 2001-2013	No change
			29.3	28.1	38.0	30.2	29.2	37.3	35.9	24.5	28.6			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school												No linear change	No quadratic change	No change
			23.3	22.6	25.9	21.4	23.1	26.1	26.1	18.7	21.2			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

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Female Other	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
	QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma													
						19.1	18.0	22.3	23.2	24.4	22.4	Increased, 2003-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Female Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
						76.1	70.0	74.5	77.5	79.2		Increased, 2005-2013	Not available [§]	No change
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
	1.9	2.0	2.7	3.2	2.7	2.7	1.7	1.1	1.2			Decreased, 1997-2013	No change, 1997-2003 Decreased, 2003-2013	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
				17.1	19.0	12.3	9.7	9.9	6.0	6.0		Decreased, 2001-2013	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
				1.2	1.9	1.3	1.0	1.8	0.5	1.2		No linear change	No quadratic change	Increased
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
				14.5	10.2	7.1	5.0	7.8	5.6	4.5		Decreased, 2001-2013	Decreased, 2001-2005 Decreased, 2005-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

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Trend Analysis Report

Female Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days														
					7.1	4.2	2.5	2.2	2.5	1.9	1.5	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days														
					1.3	1.9	1.1	1.5	1.2	0.8	1.5	No linear change	No quadratic change	No change
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day														
										12.9	16.7	Increased, 2011-2013	Not available [§]	Increased
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse														
										21.5	17.7	No linear change	Not available	No change
QN96: Percentage of students who have had sexual contact with males and females during their life														
										5.7	6.0	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

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Female Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex												No linear change	No quadratic change	Decreased
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma												No linear change	Not available [§]	No change
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured												Increased, 2007-2013	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Injury and Violence														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet														
			94.5	92.8	89.0	91.6	88.3	92.2	87.4	88.6	85.7	Decreased, 1997-2013	No quadratic change	No change
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else														
			15.4	11.7	7.2	6.9	4.9	5.5	6.2	4.6	5.0	Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol														
			37.0	32.5	31.6	28.2	22.9	27.0	23.8	20.7	18.6	Decreased, 1997-2013	No quadratic change	No change
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days														
			17.9	14.1	11.8	14.4	14.5	16.5	15.7	16.2	16.3	No linear change	Decreased, 1997-2001 Increased, 2001-2013	No change
QN14: Percentage of students who carried a gun on one or more of the past 30 days														
			6.3	4.4	3.8	3.6	4.8	4.5	4.9	4.9	4.4	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Injury and Violence														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days														
			7.3	6.5	4.4	4.1	3.8	3.9	4.2	3.4	3.3	Decreased, 1997-2013	Decreased, 1997-2001 No change, 2001-2013	No change
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school														
			4.2	4.0	5.0	4.1	5.6	4.8	4.3	3.6	5.9	No linear change	No quadratic change	Increased
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months														
			8.0	8.4	8.0	9.0	7.8	7.2	8.2	5.7	5.3	Decreased, 1997-2013	No change, 1997-2009 Decreased, 2009-2013	No change
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months														
			34.9	32.9	31.1	28.3	24.9	26.5	27.5	23.5	18.5	Decreased, 1997-2013	No quadratic change	Decreased
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse														
			3.3	2.8	3.2	2.6	3.1	2.2	3.5	1.9	1.9	Decreased, 1997-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]	
Injury and Violence															
Health Risk Behavior and Percentages															
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months															
			14.6	11.9	9.7	9.9	8.9	9.4	9.0	6.9	5.1	Decreased, 1997-2013	No quadratic change	Decreased	
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to															
					8.8	8.7	8.0	9.6	9.0	6.2	7.1	Decreased, 2001-2013	No quadratic change	No change	
QN24: Percentage of students who had ever been bullied on school property during the past 12 months															
									25.0	24.8	26.3	No linear change	Not available [¶]	No change	
QN25: Percentage of students who had ever been electronically bullied during the past 12 months															
										19.6	19.1	No linear change	Not available	No change	
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months															
					25.6	26.2	29.7	26.1	26.4	26.5	24.3	26.1	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Injury and Violence														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months														
			24.7	19.6	18.2	18.3	15.9	16.0	15.0	14.6	15.9	Decreased, 1997-2013	Decreased, 1997-2001 Decreased, 2001-2013	No change
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months														
			19.4	14.8	14.3	14.2	11.8	11.8	13.5	11.8	14.0	Decreased, 1997-2013	Decreased, 1997-2005 No change, 2005-2013	Increased
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months														
			9.7	7.0	8.9	10.1	8.9	8.6	7.2	6.6	7.5	Decreased, 1997-2013	No quadratic change	No change
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse														
			2.8	2.2	3.3	3.0	3.2	2.7	2.2	2.0	2.0	Decreased, 1997-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*														
Tobacco Use														
Health Risk Behavior and Percentages											Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs														
			75.3	71.4	63.3	58.9	49.9	51.5	45.4	40.1	36.6	Decreased, 1997-2013	Decreased, 1997-2009 Decreased, 2009-2013	No change
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years														
			28.1	26.7	23.2	21.8	14.0	13.9	9.7	7.2	7.4	Decreased, 1997-2013	No quadratic change	No change
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days														
			41.1	36.3	27.6	24.8	18.1	20.6	19.9	16.1	13.2	Decreased, 1997-2013	Decreased, 1997-2005 Decreased, 2005-2013	No change
QNFRDIG: Percentage of students who smoked cigarettes on 20 or more of the past 30 days														
			22.0	19.3	13.9	12.8	8.7	9.5	8.3	6.4	4.8	Decreased, 1997-2013	No quadratic change	No change
QN34: Among students who reported current cigarette use, the percentage who smoked more than 10 cigarettes per day on the days they smoked during the past 30 days														
			19.4	15.7	12.9	17.6	13.4	7.1	9.4	6.9	6.7	Decreased, 1997-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]										
Tobacco Use																								
Health Risk Behavior and Percentages																								
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013													
QN35: Among students who were less than 18 years of age and who reported current cigarette use, the percentage who usually got their own cigarettes by buying them in a store or gas station during the past 30 days												23.9	16.8	14.5	15.2	14.5	14.5	14.7	Decreased, 2001-2013		No quadratic change	No change		
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days												18.6	12.9	9.9	10.3	5.0	6.8	5.6	3.5	2.8	Decreased, 1997-2013		No quadratic change	No change
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days												22.1	20.6	13.2	14.3	13.4	10.1	8.0	Decreased, 2001-2013		No quadratic change	No change		
QN38: Among students who reported current cigarette use, the percentage who ever tried to quit smoking cigarettes during the past 12 months												65.2	58.3	57.7	60.4	52.8	54.9	52.3	Decreased, 2001-2013		No quadratic change	No change		
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days												9.1	8.6	7.7	7.1	7.2	9.5	10.1	8.5	7.0	No linear change		No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White* Tobacco Use												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days														
				19.0	14.8	13.6	13.0	14.5	14.0	12.0	10.9	Decreased, 1999-2013	No quadratic change	No change
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days														
				41.0	32.1	29.8	24.4	27.1	26.5	21.6	19.6	Decreased, 1999-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life														
			83.7	83.8	79.1	76.7	73.1	74.4	70.3	64.4	61.7	Decreased, 1997-2013	No quadratic change	No change
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years														
			33.8	32.2	25.5	26.0	19.7	20.6	18.0	13.6	12.2	Decreased, 1997-2013	No quadratic change	No change
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days														
			53.6	50.7	47.9	46.2	38.7	45.6	38.6	32.5	29.7	Decreased, 1997-2013	No quadratic change	No change
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days														
			36.0	32.4	32.0	30.3	24.3	28.0	24.9	20.4	17.8	Decreased, 1997-2013	No quadratic change	No change
QN46: Among students who reported current alcohol use, the percentage who usually got the alcohol they drank from someone who gave it to them during the past 30 days														
								34.9	32.8	35.5	34.7	No linear change	Not available [¶]	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[‡]Based on t-test analysis, p < 0.05.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN47: Percentage of students who used marijuana one or more times during their life														
		46.5	45.4	44.2	42.5	34.3	34.5	35.6	32.3	31.4		Decreased, 1997-2013	No quadratic change	No change
QN48: Percentage of students who tried marijuana for the first time before age 13 years														
		10.3	10.8	10.7	10.5	6.4	7.1	5.8	5.0	5.0		Decreased, 1997-2013	No quadratic change	No change
QN49: Percentage of students who used marijuana one or more times during the past 30 days														
		27.1	25.2	24.7	23.0	17.6	17.3	20.1	18.6	17.6		Decreased, 1997-2013	No quadratic change	No change
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life														
		7.7	8.4	8.1	9.4	7.1	7.1	5.9	3.6	3.5		Decreased, 1997-2013	No change, 1997-2007 Decreased, 2007-2013	No change
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life														
		24.5	16.4	13.5	14.5	12.4	12.2	14.0	9.3	6.5		Decreased, 1997-2013	No quadratic change	Decreased

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [†]	Change from 2011-2013 [§]
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN52: Percentage of students who used heroin one or more times during their life														
				3.0	2.5	3.4	2.8	1.7	2.9	1.6	2.1	Decreased, 1999-2013	No quadratic change	No change
QN53: Percentage of students who used methamphetamines one or more times during their life														
				9.2	8.1	8.4	4.2	3.7	4.2	2.3	2.2	Decreased, 1999-2013	No quadratic change	No change
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life														
			5.0	3.5	3.6	3.5	2.8	2.4	2.7	1.5	2.5	Decreased, 1997-2013	No quadratic change	Increased
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life														
			2.6	1.8	1.9	2.0	1.9	1.8	2.4	1.8	1.5	No linear change	No quadratic change	No change
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months														
			35.8	32.4	35.4	30.5	26.8	29.1	29.4	24.7	22.3	Decreased, 1997-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Sexual Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse												No linear change	No quadratic change	No change
			45.4	39.9	37.3	38.9	37.0	40.0	41.2	37.8	37.5			
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years												Decreased, 1997-2013	No quadratic change	No change
			5.1	4.5	3.2	3.9	3.4	3.5	3.3	2.1	1.8			
QN61: Percentage of students who had sexual intercourse with four or more people during their life												Decreased, 1997-2013	No quadratic change	No change
			13.5	10.4	8.5	9.9	8.5	10.1	10.2	8.8	6.9			
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months												No linear change	No quadratic change	No change
			32.2	27.9	27.7	28.5	25.6	28.9	30.9	27.6	26.6			
QN63: Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse												Decreased, 1997-2013	No quadratic change	No change
			35.4	25.6	25.4	24.6	24.7	23.8	25.7	21.3	20.4			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Sexual Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN64: Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse												No linear change	No quadratic change	No change
			56.0	57.3	60.9	60.6	60.7	63.5	59.0	61.6	59.4			
QN65: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse												No linear change	No quadratic change	No change
			26.0	24.2	25.0	20.4	23.0	22.8	25.8	25.5	25.4			
QNOTHH: Among students who had sexual intercourse during the past three months, the percentage who used an IUD or implant or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse												Increased, 2011-2013	Not available [¶]	Increased
										4.9	8.7			
QNOTHHPL: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse												No linear change	Not available	No change
										30.4	34.0			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Sexual Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNDUALBC: Among students who had sexual intercourse during the past three months, the percentage who used both a condom during last sexual intercourse and birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse														
										11.5	11.3	No linear change	Not available [¶]	No change
QNBCNONE: Among students who had sexual intercourse during the past three months, the percentage who used no method of birth control to prevent pregnancy before last sexual intercourse														
			12.9	12.6	8.9	10.8	10.8	9.8	9.8	10.6	7.4	Decreased, 1997-2013	No quadratic change	No change
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection														
			88.8	87.8	90.2	90.1	90.1	90.9	90.3	90.4	88.0	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [¶]														
				10.9	12.3	13.6	12.6	15.3	13.0	12.8	15.0	Increased, 1999-2013	No quadratic change	Increased
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [¶]														
				9.8	9.5	11.3	9.6	11.1	10.3	11.5	11.5	No linear change	No quadratic change	No change
QN66: Percentage of students who described themselves as slightly or very overweight														
			30.7	32.3	31.2	32.1	29.2	29.3	28.3	28.1	29.8	Decreased, 1997-2013	No quadratic change	No change
QN67: Percentage of students who were trying to lose weight														
			46.4	45.1	46.8	47.8	44.9	46.1	46.0	45.3	46.1	No linear change	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days														
				12.0	13.2	11.9	10.9	13.8	12.1	11.0	12.0	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days														
				8.2	9.3	9.0	4.9	6.7	6.4	4.3	5.0	Decreased, 1999-2013	No quadratic change	No change
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days														
			6.3	5.1	6.6	6.3	4.2	6.0	6.6	3.7	4.1	Decreased, 1997-2013	No quadratic change	No change
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days														
				85.0	85.8	81.4	79.7	79.9	78.3	79.4	75.4	Decreased, 1999-2013	No quadratic change	Decreased
QN72: Percentage of students who ate fruit one or more times during the past seven days														
				85.5	87.4	86.5	87.8	86.5	88.7	89.4	89.8	Increased, 1999-2013	No quadratic change	No change
QN73: Percentage of students who ate green salad one or more times during the past seven days														
				68.7	73.4	71.3	67.0	66.9	65.8	65.6	66.5	Decreased, 1999-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days														
				78.6	78.6	74.8	73.9	74.5	74.1	75.1	72.4	Decreased, 1999-2013	No quadratic change	No change
QN75: Percentage of students who ate carrots one or more times during the past seven days														
				53.8	58.7	54.3	53.6	52.5	53.3	53.4	53.8	No linear change	No quadratic change	No change
QN76: Percentage of students who ate other vegetables one or more times during the past seven days														
				86.0	85.1	84.4	83.3	84.1	84.4	84.8	84.5	No linear change	No quadratic change	No change
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days														
				20.1	20.8	18.2	16.7	16.1	17.5	17.6	17.4	Decreased, 1999-2013	Decreased, 1999-2005 No change, 2005-2013	No change
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days														
				30.7	33.2	30.6	27.9	28.8	30.4	30.0	29.5	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days												No linear change	No quadratic change	No change
				5.7	4.1	6.0	4.6	5.9	5.8	4.9	5.2			
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days												No linear change	No quadratic change	No change
				59.9	65.3	60.7	59.5	59.6	62.9	63.4	61.2			
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days												Decreased, 1999-2013	Decreased, 1999-2005 No change, 2005-2013	No change
				21.2	20.9	18.5	16.1	16.1	16.6	17.4	16.5			
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days												No linear change	Decreased, 1999-2007 Increased, 2007-2013	No change
				11.8	13.2	10.8	9.8	9.9	11.1	11.7	12.0			
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days												No linear change	No quadratic change	No change
				3.6	3.4	3.7	4.1	4.3	3.9	4.6	4.0			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days												No linear change	No quadratic change	No change
				63.9	68.7	65.2	62.3	63.2	64.3	64.6	65.3			
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days												No linear change	Decreased, 1999-2005 No change, 2005-2013	No change
				28.3	29.2	26.7	24.7	25.6	27.2	26.9	27.1			
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days												No linear change	Decreased, 1999-2005 Increased, 2005-2013	No change
				8.0	9.3	7.0	6.5	7.1	7.9	8.0	8.2			
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days												Decreased, 2007-2013	Not available [¶]	No change
								29.9	26.4	23.4	19.7			
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days												Increased, 2007-2013	Not available	Increased
								19.6	20.8	23.0	28.7			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[‡]Based on t-test analysis, p < 0.05.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days												Decreased, 2007-2013	Not available [¶]	No change
						20.3	16.9	14.7	11.8					
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days												Decreased, 2007-2013	Not available	No change
						10.3	9.2	8.1	6.2					
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days												Decreased, 1999-2013	No quadratic change	No change
				22.8	22.4	17.5	18.7	16.0	14.7	14.4	13.0			
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days												Increased, 1999-2013	No quadratic change	No change
				10.4	11.1	13.2	12.8	14.8	15.8	14.2	16.1			
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days												Decreased, 1999-2013	No quadratic change	Decreased
				58.7	55.1	49.2	51.2	48.5	47.9	49.7	44.3			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
				43.4	41.8	36.3	36.7	32.0	32.3	31.1	27.4	Decreased, 1999-2013	No quadratic change	Decreased
QN79: Percentage of students who ate breakfast on all of the past seven days														
									39.3	41.0	40.8	No linear change	Not available [¶]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									11.6	11.4	12.3	No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[‡]Based on t-test analysis, p < 0.05.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White*																						
Physical Activity																						
Health Risk Behavior and Percentages										Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]										
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013											
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days												45.8	49.7	53.7	53.7	Increased, 2007-2013	Not available [¶]	No change				
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days												13.2	12.0	12.0	13.5	No linear change	Not available	No change				
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days												22.3	26.4	29.1	28.6	Increased, 2007-2013	Not available	No change				
QN81: Percentage of students who watched three or more hours per day of TV on an average school day												31.6	25.5	29.6	29.6	26.6	25.2	25.3	23.3	Decreased, 1999-2013	No quadratic change	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day												21.3	21.9	25.6	33.7	Increased, 2007-2013	Not available	Increased				

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Physical Activity														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school												No linear change	Increased, 1997-2007 Decreased, 2007-2013	No change
			36.2	33.6	42.8	40.1	36.2	43.5	40.7	33.6	34.8			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school												No linear change	No quadratic change	No change
			29.3	26.9	28.4	28.1	27.7	28.5	31.1	28.5	28.4			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White* Other	Health Risk Behavior and Percentages											Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
	QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma													
						20.5	17.8	22.5	22.6	23.4	22.2	Increased, 2003-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White* Site-Added												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
							73.7	68.9	71.9	76.9	76.3	No linear change	Not available [¶]	No change
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
			3.1	2.9	3.4	3.9	3.3	2.4	2.3	1.4	1.7	Decreased, 1997-2013	No change, 1997-2003 Decreased, 2003-2013	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
					18.6	19.8	13.6	10.3	10.1	6.7	6.4	Decreased, 2001-2013	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
					1.7	2.2	1.6	1.1	2.2	1.0	1.7	No linear change	No quadratic change	No change
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
					16.1	11.7	9.0	6.9	9.0	7.1	6.5	Decreased, 2001-2013	Decreased, 2001-2005 Decreased, 2005-2013	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

White* Site-Added												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days														
					8.5	5.2	3.3	2.8	3.6	3.1	2.5	Decreased, 2001-2013	Decreased, 2001-2005 No change, 2005-2013	No change
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days														
					1.8	1.9	1.7	1.4	1.8	1.2	1.7	No linear change	No quadratic change	No change
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day														
										12.2	13.7	No linear change	Not available [¶]	No change
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse														
										14.1	12.7	No linear change	Not available	No change
QN96: Percentage of students who have had sexual contact with males and females during their life														
										3.3	3.5	No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

White* Site-Added												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex												No linear change	No change, 2001-2009 No change, 2009-2013	Decreased
				68.2	70.5	68.5	70.6	69.7	70.2	66.7				
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma												No linear change	Not available [¶]	No change
							11.2	11.6	12.2	10.7				
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured												Increased, 2007-2013	Not available	No change
							63.9	63.2	68.9	70.8				

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*														
Injury and Violence														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet												No linear change	No quadratic change	No change
			98.1	96.4	92.7	93.2	97.7	92.9	92.4	93.2	95.3			
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else												Decreased, 1997-2013	Decreased, 1997-2003 No change, 2003-2013	No change
			29.9	22.9	12.9	10.2	10.5	8.3	11.8	8.2	9.0			
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol												Decreased, 1997-2013	No quadratic change	No change
			36.9	40.5	32.3	34.8	30.4	28.6	38.5	24.8	23.5			
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			19.0	21.4	14.8	17.0	19.1	20.2	16.9	11.4	9.5			
QN14: Percentage of students who carried a gun on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
			8.4	8.8	6.9	6.1	10.5	8.2	6.7	3.3	5.3			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*														
Injury and Violence														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days														
		9.5	9.8	6.8	8.1	6.9	8.0	7.7	3.0	3.9		Decreased, 1997-2013	No quadratic change	No change
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school														
		8.6	9.8	16.7	9.7	11.8	13.2	17.1	9.5	6.0		No linear change	Increased, 1997-2001 No change, 2001-2013	Decreased
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months														
		11.5	10.2	12.6	11.0	10.5	9.1	10.7	8.1	8.9		No linear change	No quadratic change	No change
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months														
		38.8	40.2	48.7	40.7	50.4	43.5	44.5	38.2	28.9		No linear change	No change, 1997-2009 Decreased, 2009-2013	Decreased
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse														
		4.3	4.7	5.5	3.7	4.8	5.5	6.7	2.9	4.5		No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
Injury and Violence														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months														
			18.6	18.7	20.7	19.9	19.6	15.8	17.9	14.6	11.2	No linear change	No quadratic change	No change
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to														
					12.2	13.6	11.6	12.6	13.2	11.7	10.9	No linear change	No quadratic change	No change
QN24: Percentage of students who had ever been bullied on school property during the past 12 months														
									18.3	15.6	21.1	No linear change	Not available [¶]	No change
QN25: Percentage of students who had ever been electronically bullied during the past 12 months														
										11.2	16.7	No linear change	Not available	No change
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months														
				33.5	28.6	31.1	23.3	26.7	28.3	28.8	28.9	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Injury and Violence														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months												No linear change	No quadratic change	Decreased
			16.4	21.8	15.3	14.6	11.9	11.1	17.0	18.4	14.0			
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months												No linear change	No quadratic change	No change
			12.0	13.8	14.8	12.0	11.2	9.1	15.9	14.9	13.0			
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months												No linear change	No quadratic change	No change
			11.3	9.4	16.0	8.9	9.4	8.0	16.3	10.6	10.7			
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse												No linear change	No change, 1997-2005 No change, 2005-2013	No change
			3.9	5.3	3.8	3.3	2.5	0.5	4.9	3.8	5.0			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black* Tobacco Use														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs														
			70.9	73.4	64.4	66.2	58.4	48.5	45.4	35.8	29.1	Decreased, 1997-2013	Decreased, 1997-2005 Decreased, 2005-2013	No change
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years														
			16.5	19.0	20.1	16.4	21.8	9.3	14.5	8.3	7.0	Decreased, 1997-2013	No change, 1997-2005 Decreased, 2005-2013	No change
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days														
			18.7	19.8	12.1	9.9	7.6	6.6	11.0	5.2	3.8	Decreased, 1997-2013	No quadratic change	No change
QN34: Percentage of students who smoked cigarettes on 20 or more of the past 30 days														
			6.8	8.3	4.2	3.2	3.1	2.4	4.1	1.5	0.9	Decreased, 1997-2013	No quadratic change	No change
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days														
			9.0	9.5	4.2	3.4	2.1	2.5	5.3	0.9	1.3	Decreased, 1997-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black* Tobacco Use												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days														
				9.2	7.5	5.2	4.4	6.7	3.5	2.0		Decreased, 2001-2013	No quadratic change	No change
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days														
		3.4	5.3	5.9	2.6	4.4	7.0	8.7	2.8	3.3		No linear change	No quadratic change	No change
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days														
				21.1	14.8	10.7	11.3	15.9	14.1	10.6	7.2	Decreased, 1999-2013	No quadratic change	No change
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days														
				28.1	15.5	14.9	12.8	16.8	16.9	10.6	8.8	Decreased, 1999-2013	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life												Decreased, 1997-2013	No quadratic change	Decreased
		76.0	73.7	67.8	71.3	70.6	63.1	61.7	61.6	54.1				
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years												Decreased, 1997-2013	No quadratic change	No change
		36.6	28.1	32.9	28.7	32.2	21.5	18.8	20.3	18.2				
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
		36.9	38.0	35.3	32.5	31.6	32.4	27.5	22.4	20.6				
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days												Decreased, 1997-2013	No quadratic change	No change
		14.7	15.0	14.1	12.7	11.3	12.8	13.5	7.7	10.4				
QN47: Percentage of students who used marijuana one or more times during their life												Decreased, 1997-2013	No quadratic change	No change
		53.0	51.6	42.5	50.8	49.1	38.1	39.2	39.9	37.6				

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN48: Percentage of students who tried marijuana for the first time before age 13 years														
			17.6	14.7	14.9	14.9	17.5	14.0	14.9	11.2	7.6	Decreased, 1997-2013	No quadratic change	No change
QN49: Percentage of students who used marijuana one or more times during the past 30 days														
			28.1	29.4	22.2	27.8	22.1	19.1	21.1	17.7	18.5	Decreased, 1997-2013	No quadratic change	No change
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life														
			3.6	3.4	4.5	3.2	3.6	3.9	5.6	4.2	2.8	No linear change	No quadratic change	No change
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life														
			8.5	10.0	6.5	6.4	8.3	10.4	14.7	9.7	7.5	No linear change	No quadratic change	No change
QN52: Percentage of students who used heroin one or more times during their life														
			4.4	5.7	2.4	5.9	3.2	10.2	3.8	2.8		No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Alcohol and Other Drug Use														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN53: Percentage of students who used methamphetamines one or more times during their life												No linear change	No quadratic change	No change
			5.2	6.4	3.0	3.1	4.1	12.2	3.2	2.3				
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life												No linear change	No quadratic change	No change
			3.8	5.0	5.8	2.5	3.3	3.6	7.4	2.6	2.1			
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life												No linear change	No quadratic change	No change
			2.0	2.4	4.2	2.9	3.4	4.3	7.6	4.0	2.6			
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months												Decreased, 1997-2013	No quadratic change	No change
			32.6	35.7	35.6	32.8	35.1	27.5	26.8	24.1	25.3			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*														
Sexual Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse														
			66.7	67.4	57.9	66.7	67.3	55.6	65.9	53.5	40.0	Decreased, 1997-2013	Decreased, 1997-2009 Decreased, 2009-2013	No change
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years														
			22.3	18.6	15.0	21.1	18.6	12.3	12.4	11.6	8.9	Decreased, 1997-2013	No quadratic change	No change
QN61: Percentage of students who had sexual intercourse with four or more people during their life														
			28.7	27.7	21.0	31.8	27.6	22.1	27.6	16.1	14.4	Decreased, 1997-2013	No change, 1997-2009 Decreased, 2009-2013	No change
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months														
			46.3	47.9	42.2	44.3	48.1	36.9	49.1	34.3	28.2	Decreased, 1997-2013	No quadratic change	No change
QN63: Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse														
									18.9	12.1	24.1	No linear change	Not available [¶]	Increased

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*																	
Sexual Behaviors																	
Health Risk Behavior and Percentages																	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]			
QN64: Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse												68.5	58.4	70.9	No linear change	Not available [¶]	No change
QN65: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse												9.2	10.2	8.6	No linear change	Not available	No change
QNOTHH: Among students who had sexual intercourse during the past three months, the percentage who used an IUD or implant or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse												6.9	4.4		No linear change	Not available	No change
QNOTHHPL: Among students who had sexual intercourse during the past three months, the percentage who used birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse												17.1	13.0		No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black* Sexual Behaviors												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]	
Health Risk Behavior and Percentages															
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QNDUALBC: Among students who had sexual intercourse during the past three months, the percentage who used both a condom during last sexual intercourse and birth control pills, an IUD or implant, or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse															
										4.3	7.1	No linear change	Not available [¶]	No change	
QNBCNONE: Among students who had sexual intercourse during the past three months, the percentage who used no method of birth control to prevent pregnancy before last sexual intercourse															
										16.0	25.7	12.8	No linear change	Not available	Decreased
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection															
		83.1	81.0	82.2	84.0	89.2	86.6	85.7	83.7	82.8		No linear change	Increased, 1997-2005 Decreased, 2005-2013	No change	

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*															
Weight Management and Dietary Behaviors															
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013				
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [¶]															
				17.9	17.7	20.8	15.6	21.0	17.3	23.5	18.3	No linear change	No quadratic change	Decreased	
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [¶]															
				17.0	16.9	17.2	22.0	18.3	18.2	13.7	18.5	No linear change	No quadratic change	Increased	
QN66: Percentage of students who described themselves as slightly or very overweight															
				28.8	28.8	27.0	27.2	28.5	28.2	25.1	27.4	22.1	No linear change	No quadratic change	No change
QN67: Percentage of students who were trying to lose weight															
				37.8	40.8	40.4	39.7	42.3	39.8	38.2	43.6	36.6	No linear change	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days															
				15.2	18.4	15.3	11.2	15.0	15.6	12.9	13.2	No linear change	No quadratic change	No change	

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days												No linear change	No quadratic change	No change
			7.4	10.6	8.4	3.5	7.8	9.9	6.5	6.4				
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days												No linear change	No quadratic change	No change
			4.0	7.8	10.1	7.2	6.2	5.2	8.7	6.1	5.4			
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days												No linear change	No quadratic change	No change
			76.9	80.4	79.5	77.9	83.4	80.2	82.9	82.0				
QN72: Percentage of students who ate fruit one or more times during the past seven days												Increased, 1999-2013	No change, 1999-2007 Increased, 2007-2013	Increased
			72.2	72.8	79.0	68.1	74.4	77.5	80.8	84.3				
QN73: Percentage of students who ate green salad one or more times during the past seven days												Increased, 1999-2013	No quadratic change	No change
			41.4	55.7	52.4	50.2	55.9	55.5	59.0	57.8				

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days												No linear change	No quadratic change	No change
				59.4	62.6	61.2	63.2	57.9	67.2	66.7	60.8			
QN75: Percentage of students who ate carrots one or more times during the past seven days												Increased, 1999-2013	No quadratic change	No change
				25.9	28.7	25.2	27.0	30.0	36.1	32.4	30.1			
QN76: Percentage of students who ate other vegetables one or more times during the past seven days												Increased, 1999-2013	No quadratic change	No change
				66.3	69.7	72.0	68.7	75.4	70.7	80.5	76.7			
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days												No linear change	No quadratic change	No change
				16.0	16.9	17.8	17.1	21.7	24.3	21.6	16.5			
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days												No linear change	No quadratic change	No change
				25.5	28.6	28.9	27.5	34.1	34.0	33.8	27.1			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days												Decreased, 1999-2013	No quadratic change	No change
13.2	10.7	4.3	11.2	8.9	8.5	7.7	7.9							
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days												Increased, 1999-2013	No quadratic change	No change
48.7	53.7	48.2	49.9	55.9	55.1	58.0	53.7							
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days												No linear change	No quadratic change	No change
19.5	22.4	20.6	21.2	26.7	26.2	24.0	19.2							
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days												No linear change	No quadratic change	No change
11.0	10.2	9.0	9.2	10.0	10.4	14.6	8.6							
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days												No linear change	Decreased, 1999-2007 No change, 2007-2013	No change
15.6	10.8	11.7	9.2	9.1	10.6	8.8	11.3							

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[§]Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days														
				41.4	47.6	43.8	46.1	51.8	52.1	57.5	50.2	Increased, 1999-2013	No quadratic change	No change
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days														
				21.3	21.2	18.0	18.8	17.8	18.7	24.8	17.7	No linear change	No quadratic change	No change
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days														
				7.2	6.5	6.5	4.8	8.3	7.9	8.0	5.6	No linear change	No quadratic change	No change
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days														
								25.8	31.9	24.0	18.6	Decreased, 2007-2013	Not available [¶]	Decreased
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days														
								17.6	18.9	21.0	25.4	No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages											Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days												Decreased, 2007-2013	Not available [¶]	No change
								22.8	20.3	16.0	14.7			
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days												Decreased, 2007-2013	Not available	No change
								17.9	14.3	11.5	8.4			
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days												No linear change	No quadratic change	No change
			11.5	10.4	5.3	8.2	8.7	6.4	6.4	7.4				
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days												Increased, 1999-2013	No quadratic change	No change
			30.1	26.7	31.2	31.1	34.4	33.6	37.8	33.5				
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days												Decreased, 1999-2013	No quadratic change	No change
			26.0	26.2	19.1	20.8	23.9	22.9	18.7	17.3				

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[‡]Based on t-test analysis, p < 0.05.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
				18.0	17.4	10.6	12.5	16.6	12.2	11.3	11.1	Decreased, 1999-2013	No quadratic change	No change
QN79: Percentage of students who ate breakfast on all of the past seven days														
									19.9	24.4	23.8	No linear change	Not available [¶]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									20.6	19.8	16.3	Decreased, 2009-2013	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[‡]Based on t-test analysis, p < 0.05.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black*														
Physical Activity														
Health Risk Behavior and Percentages												Linear Change[†]	Quadratic Change[‡]	Change from 2011-2013[§]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days												No linear change	Not available [¶]	No change
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days												No linear change	Not available	No change
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days												No linear change	Not available	No change
QN81: Percentage of students who watched three or more hours per day of TV on an average school day												Decreased, 1999-2013	No change, 1999-2005 Decreased, 2005-2013	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day												No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black*												Linear Change [†]	Quadratic Change [†]	Change from 2011-2013 [§]
Physical Activity														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school												No linear change	No quadratic change	No change
			40.2	37.2	51.3	32.2	49.7	50.5	48.1	35.4	39.4			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school												No linear change	No change, 1997-2009 No change, 2009-2013	No change
			29.3	27.2	34.9	23.9	41.5	36.0	31.2	21.7	22.3			

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black* Other	Health Risk Behavior and Percentages											Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
	QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma													
						25.2	29.5	27.8	25.2	27.9	24.5	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

[§]Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black* Site-Added												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
							44.8	43.9	56.4	61.0	65.6	Increased, 2005-2013	Not available [¶]	No change
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
			3.8	2.8	3.4	2.3	3.3	2.2	3.6	2.3	2.2	No linear change	No quadratic change	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
					6.9	3.5	5.7	5.3	8.1	3.8	5.1	No linear change	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
					4.3	2.7	3.8	3.1	5.8	2.5	3.9	No linear change	No quadratic change	No change
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
					7.2	5.1	4.4	4.6	8.0	5.7	3.5	No linear change	No quadratic change	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Black* Site-Added												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days														
					5.1	2.3	2.9	3.2	5.1	2.4	1.4	No linear change	No quadratic change	No change
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days														
					3.9	3.9	4.1	4.2	6.9	2.3	3.5	No linear change	No quadratic change	No change
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day														
										11.2	16.0	Increased, 2011-2013	Not available [¶]	Increased
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse														
										16.4	16.2	No linear change	Not available	No change
QN96: Percentage of students who have had sexual contact with males and females during their life														
										5.2	4.8	No linear change	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Black* Site-Added												Linear Change [†]	Quadratic Change [‡]	Change from 2011-2013 [§]
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex														
				77.3	81.5	84.5	81.8	79.0	79.8	81.2		No linear change	No quadratic change	No change
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma														
							13.7	12.4	14.9	11.8		No linear change	Not available [¶]	No change
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured														
							59.4	58.7	66.1	70.3		Increased, 2007-2013	Not available	No change

*Non-Hispanic.

[†]Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

[‡]Based on t-test analysis, $p < 0.05$.

[¶]Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN8: Among students who rode a bicycle during the past 12 months, the percentage who never or rarely wore a bicycle helmet												No linear change	Not available [§]	No change
QN9: Percentage of students who never or rarely wore a seat belt when riding in a car driven by someone else												Increased, 2001-2013	No quadratic change	No change
QN10: Percentage of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol												Decreased, 2001-2013	No quadratic change	No change
QN13: Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days												No linear change	No quadratic change	No change
QN14: Percentage of students who carried a gun on one or more of the past 30 days												No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Injury and Violence

Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN15: Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days												No linear change	No quadratic change	No change
					4.4	13.1	8.9	9.2	9.5	6.0	8.3			
QN16: Percentage of students who did not go to school on one or more of the past 30 days because they felt they would be unsafe at school or on their way to or from school												No linear change	No quadratic change	No change
					18.1	10.5	18.0	9.4	15.5	12.4	12.9			
QN17: Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months												No linear change	No quadratic change	No change
					12.9	16.0	13.9	15.0	15.6	13.7	13.9			
QN18: Percentage of students who were in a physical fight one or more times during the past 12 months												Decreased, 2001-2013	No change, 2001-2009 Decreased, 2009-2013	No change
					37.0	44.1	38.3	43.0	42.4	38.6	29.6			
QN19: Percentage of students who were in a physical fight one or more times during the past 12 months in which they were injured and had to be treated by a doctor or nurse												No linear change	No quadratic change	No change
					10.1	7.3	9.2	6.2	7.7	5.9	6.3			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Injury and Violence

Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN20: Percentage of students who were in a physical fight on school property one or more times during the past 12 months												Decreased, 2001-2013	No quadratic change	No change
				17.1	25.0	20.8	21.8	21.0	14.6	13.3				
QN21: Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to												No linear change	No quadratic change	No change
				11.7	13.9	12.9	16.0	17.3	9.5	16.7				
QN24: Percentage of students who had ever been bullied on school property during the past 12 months												No linear change	Not available [§]	No change
								30.2	22.0	25.0				
QN25: Percentage of students who had ever been electronically bullied during the past 12 months												No linear change	Not available	No change
								18.7	21.3					
QN26: Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months												No linear change	No change, 2001-2009 Decreased, 2009-2013	No change
				36.4	37.3	35.1	37.7	36.1	34.5	29.2				

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Injury and Violence												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN27: Percentage of students who seriously considered attempting suicide during the past 12 months														
					27.1	24.4	20.0	20.4	22.5	18.7	19.5	No linear change	No quadratic change	No change
QN28: Percentage of students who made a plan about how they would attempt suicide during the past 12 months														
					19.3	21.0	15.8	19.6	20.9	14.1	20.4	No linear change	No quadratic change	Increased
QN29: Percentage of students who actually attempted suicide one or more times during the past 12 months														
					17.5	17.6	11.4	16.8	13.4	17.3	14.2	No linear change	No quadratic change	No change
QN30: Percentage of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse														
					8.3	7.0	1.9	6.2	5.8	6.7	7.3	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Tobacco Use

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN31: Percentage of students who ever tried cigarette smoking, even one or two puffs											Decreased, 2001-2013	No quadratic change	No change	
					72.8	69.8	75.1	64.5	58.4	51.7	44.5			
QN32: Percentage of students who smoked a whole cigarette for the first time before age 13 years											Decreased, 2001-2013	No quadratic change	No change	
					36.4	26.2	27.8	28.0	18.0	15.5	12.9			
QN33: Percentage of students who smoked cigarettes on one or more of the past 30 days											Decreased, 2001-2013	No quadratic change	No change	
					28.3	31.8	27.3	29.3	26.2	18.2	15.9			
QN34: Percentage of students who smoked cigarettes on 20 or more of the past 30 days											Decreased, 2001-2013	No quadratic change	No change	
					13.9	13.7	7.9	15.7	11.4	7.3	6.2			
QN36: Percentage of students who smoked cigarettes on school property on one or more of the past 30 days											Decreased, 2001-2013	No quadratic change	No change	
					9.2	16.5	12.2	10.5	11.3	6.6	5.5			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Tobacco Use

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN37: Percentage of students who ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days											Decreased, 2001-2013	No quadratic change	Decreased	
					27.7	16.2	12.7	21.0	15.2	15.9	8.9			
QN39: Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days											No linear change	No quadratic change	No change	
					11.3	8.7	8.5	11.6	18.9	9.6	11.0			
QN40: Percentage of students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days											Decreased, 2001-2013	No change, 2001-2009 Decreased, 2009-2013	No change	
					17.3	21.4	22.0	21.7	24.0	14.7	14.5			
QNANYTOB: Percentage of students who smoked cigarettes or cigars or used chewing tobacco, snuff, or dip on one or more of the past 30 days											Decreased, 2001-2013	No change, 2001-2009 Decreased, 2009-2013	No change	
					29.7	33.7	32.9	34.0	35.3	23.0	20.1			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Alcohol and Other Drug Use

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN41: Percentage of students who had at least one drink of alcohol on one or more days during their life														
					86.3	82.9	79.9	82.3	76.9	66.0	65.1	Decreased, 2001-2013	No quadratic change	No change
QN42: Percentage of students who had their first drink of alcohol other than a few sips before age 13 years														
					33.3	34.6	28.1	31.5	22.5	25.8	20.5	Decreased, 2001-2013	No quadratic change	No change
QN43: Percentage of students who had at least one drink of alcohol on one or more of the past 30 days														
					58.8	48.3	53.6	48.8	45.0	32.0	31.2	Decreased, 2001-2013	No quadratic change	No change
QN44: Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days														
					31.3	33.8	34.9	29.1	35.9	22.0	20.1	Decreased, 2001-2013	No quadratic change	No change
QN47: Percentage of students who used marijuana one or more times during their life														
					49.8	54.2	53.7	48.7	44.0	46.4	41.1	Decreased, 2001-2013	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino
Alcohol and Other Drug Use

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN48: Percentage of students who tried marijuana for the first time before age 13 years											No linear change	No quadratic change	No change	
					12.5	17.0	21.5	19.0	12.7	14.7	13.8			
QN49: Percentage of students who used marijuana one or more times during the past 30 days											No linear change	No quadratic change	No change	
					20.3	33.5	28.6	25.0	30.8	22.7	26.1			
QN50: Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life											No linear change	No quadratic change	No change	
					10.1	14.4	14.9	15.9	11.2	10.7	11.4			
QN51: Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life											No linear change	No quadratic change	No change	
					14.4	18.6	21.9	17.8	14.2	14.4	12.3			
QN52: Percentage of students who used heroin one or more times during their life											No linear change	No quadratic change	No change	
					5.9	8.4	7.0	9.2	11.0	9.1	8.9			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino Alcohol and Other Drug Use												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN53: Percentage of students who used methamphetamines one or more times during their life												No linear change	No quadratic change	No change
					10.4	13.1	8.2	10.9	11.4	9.0	8.2			
QN55: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life												Increased, 2001-2013	No quadratic change	No change
					3.5	7.6	6.8	6.9	8.4	8.1	8.6			
QN57: Percentage of students who used a needle to inject any illegal drug into their body one or more times during their life												No linear change	No quadratic change	No change
					4.2	7.0	5.2	6.5	6.6	6.6	5.6			
QN58: Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months												Decreased, 2001-2013	No quadratic change	No change
					40.2	43.5	40.8	39.0	38.4	32.1	31.9			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Sexual Behaviors

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN59: Percentage of students who ever had sexual intercourse											No linear change	No quadratic change	No change	
					46.6	53.4	56.2	50.6	48.5	47.2	47.0			
QN60: Percentage of students who had sexual intercourse for the first time before age 13 years											No linear change	No quadratic change	No change	
					7.4	15.0	15.7	10.1	5.2	11.9	6.8			
QN61: Percentage of students who had sexual intercourse with four or more people during their life											No linear change	Increased, 2001-2005 Decreased, 2005-2013	No change	
					14.9	17.2	23.8	20.2	15.5	18.1	12.6			
QN62: Percentage of students who had sexual intercourse with one or more people during the past three months											No linear change	No quadratic change	No change	
					31.8	37.8	41.3	37.6	36.6	33.9	33.1			
QN85: Percentage of students who had ever been taught in school about AIDS or HIV infection											No linear change	No quadratic change	No change	
					82.0	80.9	88.4	84.8	83.4	82.8	84.4			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino														
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNOWT: Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) [§]														
				15.7	16.1	23.1	15.9	15.6	16.2	12.8		Decreased, 2001-2013	No quadratic change	No change
QNOBESE: Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex) [§]														
				17.0	16.6	13.5	14.2	10.8	17.2	17.1		No linear change	No quadratic change	No change
QN66: Percentage of students who described themselves as slightly or very overweight														
				45.1	33.5	32.6	32.1	27.8	32.1	33.7		No linear change	Decreased, 2001-2009 No change, 2009-2013	No change
QN67: Percentage of students who were trying to lose weight														
				54.6	43.3	51.1	46.3	47.8	50.0	52.9		No linear change	No quadratic change	No change
QN68: Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days														
				13.8	16.9	14.0	16.4	17.2	18.2	14.4		No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Weight Management and Dietary Behaviors														
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN69: Percentage of students who took any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days												No linear change	No quadratic change	No change
				10.6	7.0	7.9	13.8	14.4	9.2	11.1				
QN70: Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days												No linear change	No quadratic change	No change
				11.7	13.2	6.5	9.8	10.7	8.7	10.3				
QN71: Percentage of students who drank 100% fruit juices one or more times during the past seven days												No linear change	No quadratic change	No change
				79.5	73.1	78.9	78.9	74.7	76.1	78.4				
QN72: Percentage of students who ate fruit one or more times during the past seven days												No linear change	No quadratic change	No change
				85.9	75.4	84.7	79.9	86.1	83.8	88.0				
QN73: Percentage of students who ate green salad one or more times during the past seven days												No linear change	No quadratic change	No change
				69.2	57.8	66.8	62.4	58.3	58.1	61.5				

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino

Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN74: Percentage of students who ate potatoes one or more times during the past seven days											No linear change	No quadratic change	No change	
					74.6	66.2	71.9	64.2	62.4	70.5	68.6			
QN75: Percentage of students who ate carrots one or more times during the past seven days											No linear change	No quadratic change	Increased	
					54.0	42.1	44.0	47.0	52.7	41.8	51.3			
QN76: Percentage of students who ate other vegetables one or more times during the past seven days											No linear change	No quadratic change	No change	
					86.1	75.0	75.3	77.2	78.5	72.5	76.4			
QNFRVG: Percentage of students who ate fruits and vegetables five or more times per day during the past seven days											No linear change	No quadratic change	No change	
					23.6	19.9	15.4	17.9	25.0	17.7	17.6			
QNFRUIT: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day during the past seven days											No linear change	No quadratic change	No change	
					39.3	26.9	33.2	28.2	38.2	32.6	29.7			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino

Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNFR0: Percentage of students who ate fruits or drank 100% fruit juices 0 times per day during the past seven days											No linear change	No quadratic change	No change	
					9.3	15.1	9.2	8.4	7.3	7.6	5.0			
QNFR1: Percentage of students who ate fruits or drank 100% fruit juices one or more times per day during the past seven days											No linear change	No quadratic change	No change	
					64.4	49.3	60.4	58.1	62.2	56.8	63.7			
QNFR3: Percentage of students who ate fruits or drank 100% fruit juices three or more times per day during the past seven days											No linear change	No quadratic change	No change	
					27.1	20.5	17.8	19.6	26.3	24.4	19.6			
QNVEG: Percentage of students who ate vegetables three or more times per day during the past seven days											No linear change	No quadratic change	No change	
					12.9	12.8	13.6	13.7	14.8	12.6	12.9			
QNVEG0: Percentage of students who ate vegetables 0 times per day during the past seven days											Increased, 2001-2013	No quadratic change	No change	
					0.7	9.2	4.5	7.7	8.5	8.9	8.1			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino

Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNVEG1: Percentage of students who ate vegetables one or more times per day during the past seven days												No linear change	No quadratic change	No change
					65.9	47.7	53.9	52.8	61.2	58.8	56.9			
QNVEG2: Percentage of students who ate vegetables two or more times per day during the past seven days												No linear change	No quadratic change	No change
					31.1	18.7	26.0	23.8	28.9	24.6	25.5			
QNFRVG2: Percentage of students who ate fruits or drank 100% fruit juices two or more times per day and ate vegetables three or more times per day during the past seven days												No linear change	No quadratic change	No change
					9.8	10.6	9.8	8.3	11.0	8.8	9.7			
QN77: Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days												Decreased, 2007-2013	Not available [§]	No change
								27.2	33.1	24.0	20.0			
QNSODA0: Percentage of students who drank a can, bottle, or glass of soda or pop 0 times per day during the past seven days												No linear change	Not available	No change
								16.7	19.4	18.6	24.2			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino

Weight Management and Dietary Behaviors

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNSODA2: Percentage of students who drank a can, bottle, or glass of soda or pop two or more times per day during the past seven days											Decreased, 2007-2013	Not available [§]	No change	
						18.8	20.9	18.4	13.0					
QNSODA3: Percentage of students who drank a can, bottle, or glass of soda or pop three or more times per day during the past seven days											Decreased, 2007-2013	Not available	No change	
						15.4	15.0	9.9	8.7					
QN78: Percentage of students who drank three or more glasses per day of milk during the past seven days											No linear change	No quadratic change	No change	
				15.6	14.4	12.4	14.7	9.3	14.4	9.4				
QNMILK0: Percentage of students who drank 0 glasses per day of milk during the past seven days											No linear change	No quadratic change	No change	
				16.4	20.9	14.5	17.2	20.7	25.5	20.1				
QNMILK1: Percentage of students who drank one or more glasses per day of milk during the past seven days											No linear change	No quadratic change	No change	
				48.2	34.7	39.2	43.3	38.1	37.5	35.5				

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino Weight Management and Dietary Behaviors												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QNMILK2: Percentage of students who drank two or more glasses per day of milk during the past seven days														
					31.8	25.3	28.8	23.8	21.9	24.8	21.5	No linear change	No quadratic change	No change
QN79: Percentage of students who ate breakfast on all of the past seven days														
									27.3	29.7	33.7	No linear change	Not available [§]	No change
QNNOBKFT: Percentage of students who ate breakfast on none of the past seven days														
									19.4	15.1	14.5	No linear change	Not available	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey Trend Analysis Report

Hispanic/Latino Physical Activity

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †							
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013									
QN80: Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days											39.1	40.5	45.5	45.2	No linear change	Not available [§]	No change			
QNPA0DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 0 of the past seven days											19.2	14.8	20.2	18.7	No linear change	Not available	No change			
QNPA7DAY: Percentage of students who were physically active for a total of at least 60 minutes per day on 7 of the past seven days											19.8	23.6	27.0	26.9	No linear change	Not available	No change			
QN81: Percentage of students who watched three or more hours per day of TV on an average school day											47.4	51.2	35.4	39.6	32.9	30.1	36.2	Decreased, 2001-2013	Decreased, 2001-2009 No change, 2009-2013	No change
QN82: Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day											24.8	24.2	31.1	34.3	Increased, 2007-2013	Not available	No change			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, $p < 0.05$.

†Based on t-test analysis, $p < 0.05$.

§Not enough years of data to calculate.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino
Physical Activity

Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †	
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN83: Percentage of students who attended physical education (PE) classes on one or more days in an average week when they were in school											No linear change	No quadratic change	No change	
					45.9	39.1	36.7	47.0	45.5	36.6	39.4			
QNDLYPE: Percentage of students who attended physical education (PE) classes daily in an average week when they were in school											No linear change	No quadratic change	No change	
					32.2	27.9	26.4	27.6	31.5	25.5	24.5			

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino Other	Health Risk Behavior and Percentages											Linear Change*	Quadratic Change*	Change from 2011-2013 †
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011			
QN86: Percentage of students who had ever been told by a doctor or nurse that they had asthma														
						17.0	15.8	26.2	30.5	21.4	17.9	No linear change	Increased, 2003-2009 Decreased, 2009-2013	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

2013 YOUTH RISK BEHAVIOR SURVEY RESULTS

Michigan High School Survey
Trend Analysis Report

Hispanic/Latino Site-Added												Linear Change*	Quadratic Change*	Change from 2011-2013 †
Health Risk Behavior and Percentages														
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN87: Percentage of students who would describe their grades in school as mostly A's or B's during the past 12 months														
						53.6	51.6	60.4	52.2	60.9		No linear change	Not available [§]	No change
QN88: Percentage of students who used any form of cocaine, including powder, crack, or freebase, one or more times during the past 30 days														
				6.1	7.4	9.6	7.3	5.4	5.9	8.2		No linear change	No quadratic change	No change
QN89: Percentage of students who have used barbiturates without a doctor's prescription one or more times during their life														
					13.2	19.3	14.5	19.1	16.0	11.6	14.8	No linear change	No quadratic change	No change
QN90: Percentage of students who used heroin one or more times during the past 30 days														
					4.4	7.2	6.5	10.5	8.1	7.1	7.5	No linear change	No quadratic change	No change
QN91: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during their life														
					16.4	15.5	13.9	13.2	16.4	16.7	10.5	No linear change	No quadratic change	No change

*Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.

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Health Risk Behavior and Percentages												Linear Change*	Quadratic Change*	Change from 2011-2013 †
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN92: Percentage of students who have used club (rave) drugs such as ecstasy (E, adam, XTX, Roll), GHB (G, liquid ecstasy, grievous bodily harm), ketamine (K, special K), rohypnol (roofies), nitrous oxide (laughing gas, whippets), or LSD (acid, microdot, boomers) one or more times during the past 30 days												No linear change	No quadratic change	No change
				9.4		12.1	10.0	11.0	9.7	8.8	7.0			
QN93: Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during the past 30 days												No linear change	No quadratic change	No change
				3.5		9.5	5.1	7.1	5.9	6.3	8.2			
QN94: Percentage of students who have taken painkillers, such as OxyContin, Codeine, Percocet, or Tylenol III, without a doctor's prescription one or more times during the past 30 day												No linear change	Not available [§]	No change
										18.3	19.0			
QN95: Among students who have had sexual intercourse, the percentage whose partners were three or more years older than themselves the first time they had sexual intercourse												No linear change	Not available	No change
										18.9	15.4			
QN96: Percentage of students who have had sexual contact with males and females during their life												No linear change	Not available	No change
										6.7	7.9			

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1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013			
QN98: Percentage of students whose parents or other adults in their family talked with them about what they expect them to do or not to do when it comes to sex											No linear change	No quadratic change	No change	
					71.6	59.0	74.9	70.1	71.0	68.2	74.4			
QN100: Percentage of students who had been told by a doctor or nurse that they had asthma and who still have asthma											Decreased, 2007-2013	Not available [§]	No change	
								14.2	12.1	9.1	8.2			
QN101: Percentage of students who last saw a doctor or nurse for a check-up or physical exam during the past 12 months when they were not sick or injured											No linear change	Not available	No change	
								59.8	64.9	57.1	61.3			

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†Based on t-test analysis, p < 0.05.

§Not enough years of data to calculate.