

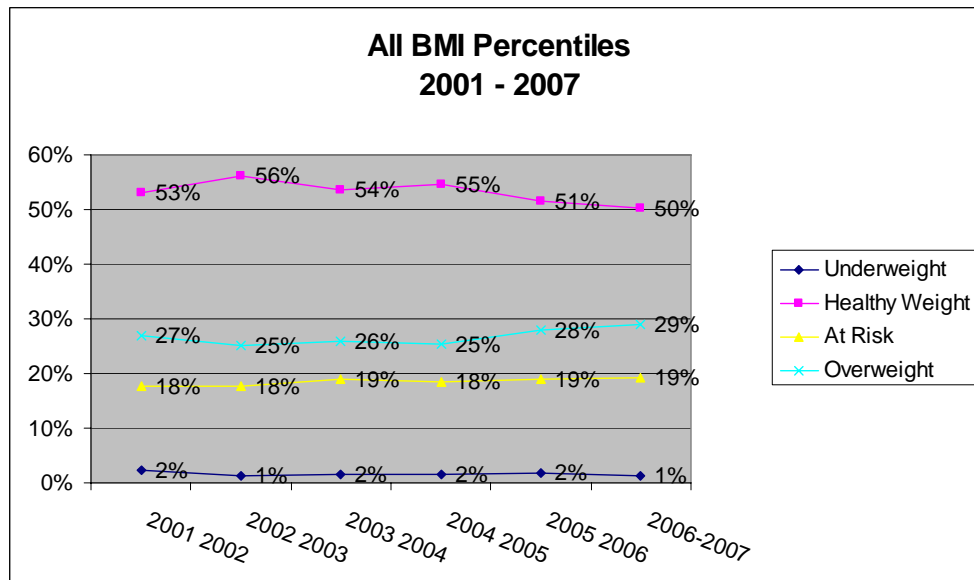
A Look at the Body Mass Index (BMI) in WV SBHCs 2006 – 2007

The West Virginia School Health Technical Assistance and Evaluation Office at Marshall University worked with a number of SBHCs this year to identify and work with students who are overweight or at-risk for becoming overweight. Children and adolescents with a BMI-for age above the 85th percentile are more likely to be at risk for cardiovascular disease, diabetes, asthma and depression. In addition, these students are more likely to become overweight adults.

The current tool for identifying those at risk is the Body Mass Index (BMI). BMI is calculated by dividing weight in kilograms by height in meters squared. Clinical Fusion, the management information system used by the WV SBHCs, automatically calculates the BMI and BMI category when the student's height, weight, sex and age are entered at the time of the visit to the SBHC.

The following chart displays the percent of student BMIs by category for the past 6 years. The categories of BMI used in the report are:

- < 20th percentile – At risk for underweight
- ≥ 20th and < 85th percentile – Healthy range
- ≥ 85th - < 95th percentile – At risk of overweight
- ≥ 95th percentile - Overweight



For the purpose of this report, the WV SBHC Office of Technical Assistance and Evaluation exported the BMI data from SBHCs that were diligent about entering the student measurements during the 2006 – 2007 school year. Data analysis was performed using SPSS statistical computing package (SPSS 12.0 for Windows). Frequency distributions were run on all variables and were computed separately for each school

This year, 7,800 students in 19 counties were assessed for BMI through the SBHCs. A detailed breakdown of the results by school is enclosed. In response to the high number of students at risk or obese, the SBHCs have developed a number of interventions and tools to encourage increased physical activity and healthier eating. The MU team has a number of resources currently available for SBHCs.

- Obesity CQI tool: a snapshot of obesity management best practice recommendations in a SBHC, developed by WV SBHC staff who volunteered their time to serve on the Clinical Advisory Group.
- Forms: Dr. Patricia Kelly from the Cabell County SBHCs has developed weight and nutrition documentation forms. These forms can be easily adapted and help to serve as a reminder of activities a provider should complete such as: BMI, Risk Factors, Family History, Guidance, Studies, Consults and Education.
- A notebook with additional resources is available online and the tools can be downloaded and modified for your use. This notebook includes selected health and nutrition tools for the school, teachers, parents and healthcare providers. To review these tools go to www.wvsbha.org, click on the Technical Assistance and Evaluation tab and then click on the Toolkit link. Choose Clinical Quality from the list of Toolkits. Under Weight Management you will find the Obesity Notebook.

If you are unable to access or download any of the tools from the Internet please contact

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Additional data such as BMI by gender, grade or age for the schools listed in this report may be received by contacting:

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**West Virginia School-Based Health Centers
Student Body Mass Index by School Category
2006 - 2007**

Elementary/Early Middle Schools

BMI Percentile	<i><20th Risk of Underweight</i>	<i>≥20th and <85th Healthy</i>	<i>≥ 85th - <95th Risk of Overweight</i>	<i>≥ 95th Overweight</i>	<i># of Students Screened</i>	<i>% of All SBHC Users</i>	<i>% of All Registrants</i>	<i>% of School Population</i>
Arnoldsburg Elementary	0	63	21	32	116	89%	60%	51%
	0%	54%	18%	28%				
East Hardy Early Middle	1	98	43	67	209	48%	37%	37%
% School Total	0%	47%	21%	32%				
Geary Elementary	0	35	4	13	52	66%	19%	15%
% School Total	0%	67%	8%	25%				
Jefferson Elementary	1	13	3	16	33	15%	9%	6%
% School Total	3%	39%	9%	48%				
Meadow Bridge Elementary	5	72	26	44	147	165%	80%	64%
	3%	49%	18%	30%				
Moorefield Elementary	0	58	39	58	155	56%	27%	24%
	0%	37%	25%	37%				
Mt. Hope Elementary	0	106	34	67	207	99%	80%	74%
% School Total	0%	51%	16%	32%				
North Fork Elementary	0	23	3	8	34	47%	27%	26%
% School Total	0%	68%	9%	24%				
Pleasant Hill Elementary	0	53	22	19	94	76%	43%	37%
% School Total	0%	56%	23%	20%				
Ripley Elementary	0	22	5	9	36	68%	17%	5%
% School Total	0%	61%	14%	25%				
Sherman Elementary	1	38	12	26	77	77%	26%	15%
% School Total	1%	49%	16%	34%				
Walton Elementary	0	13	9	7	29	31%	10%	8%
% School Total	0%	45%	31%	24%				
Total	8	572	216	357	1,189	63%	34%	25%
% of Students Screened	1%	48%	18%	30%				
% of School Population	0%	12%	4%	7%				

Junior High/Middle Schools

BMI Percentile	<i><20th Risk of Underweight</i>	<i>≥20th and <85th Healthy</i>	<i>≥ 85th - <95th Risk of Overweight</i>	<i>≥ 95th Overweight</i>	<i># of Students Screened</i>	<i>% of All SBHC Users</i>	<i>% of All Registrants</i>	<i>% of School Population</i>
Calhoun County Middle	2	94	43	61	200	77%	66%	60%
% School Total	1%	47%	22%	31%				
Collins Middle	1	49	14	36	100	21%	15%	13%
% School Total	1%	49%	14%	36%				
Moorefield Middle	0	32	21	43	96	45%	23%	22%
% School Total	0%	33%	22%	45%				
Mt. View Middle	1	67	30	53	151	89%	76%	39%
% School Total	1%	44%	20%	35%				
Pleasants County Middle	0	14	5	14	33	16%	9%	8%
% School Total	0%	42%	15%	42%				
Richwood Junior High	0	62	28	30	120	47%	37%	36%
% School Total	0%	52%	23%	25%				
Ripley Middle	0	34	14	10	58	87%	22%	8%
% School Total	0%	59%	24%	17%				
Ritchie County Middle	4	111	62	102	279	87%	78%	77%
% School Total	1%	40%	22%	37%				
Sherman Junior High	0	14	6	10	30	64%	19%	13%
% School Total	0%	47%	20%	33%				
Summersville Middle	3	140	53	105	301	77%	54%	49%
% School Total	1%	47%	18%	35%				
Wayne Middle	3	68	41	49	161	63%	34%	31%
% School Total	2%	42%	25%	30%				
Western Greenbrier Middle	0	66	26	36	128	75%	47%	39%
Total	14	751	343	549	1,657	58%	38%	30%
% of Students Screened	1%	45%	21%	33%				
% of School Population	0%	14%	6%	10%				

West Virginia State Data Evaluation Office

High Schools

BMI Percentile	<20th Risk of Underweight	≥20th and <85th Healthy	≥85th - <95th Risk of Overweight	≥ 95th Overweight	# of Students Screened	% of All SBHC Users	% of All Registrants	% of School Population
Cabell Midland High	4	185	57	94	340	60%	22%	19%
% School Total	1%	54%	17%	28%				
Calhoun County High	6	93	34	46	179	70%	57%	53%
% School Total	3%	52%	19%	26%				
East Fairmont High	9	199	90	81	379	86%	53%	43%
% School Total	2%	53%	24%	21%				
East Hardy High	0	20	6	14	40	51%	17%	17%
% School Total	0%	50%	15%	35%				
Gilmer County High	3	80	27	39	149	72%	44%	34%
% School Total	2%	54%	18%	26%				
Greenbrier West High	3	49	17	28	97	58%	25%	22%
% School Total	3%	51%	18%	29%				
Huntington High	4	155	42	68	269	30%	20%	16%
% School Total	1%	58%	16%	25%				
Meadow Bridge High	3	61	33	49	146	84%	63%	61%
% School Total	2%	42%	23%	34%				
Moorefield High	0	25	12	13	50	66%	12%	11%
% School Total	0%	50%	24%	26%				
Mt. Hope High	1	29	14	27	71	26%	19%	18%
% School Total	1%	41%	20%	38%				
Mt. View High	5	94	42	69	210	82%	66%	40%
% School Total	2%	45%	20%	33%				
Nicholas County High	4	159	78	103	344	71%	43%	40%
% School Total	1%	46%	23%	30%				
North Marion High	3	127	36	72	238	78%	32%	25%
% School Total	1%	53%	15%	30%				
Oak Hill High	10	155	49	65	279	58%	41%	37%
% School Total	4%	56%	18%	23%				
Pendleton County High	1	44	13	24	82	47%	18%	15%
% School Total	1%	54%	16%	29%				
Phillip Barbour High	2	240	84	131	457	82%	59%	57%
% School Total	0%	53%	18%	29%				
Richwood High	0	58	10	22	90	32%	20%	19%
% School Total	0%	64%	11%	24%				
Ripley High	6	103	36	59	204	96%	48%	22%
% School Total	3%	50%	18%	29%				
Ritchie County High	3	121	40	52	216	54%	43%	42%
% School Total	1%	56%	19%	24%				
Riverside High	9	286	105	152	552	82%	70%	43%
% School Total	2%	52%	19%	28%				
Sherman High	2	34	14	16	66	63%	18%	15%
% School Total	3%	52%	21%	24%				
Spring Valley High	3	142	66	77	288	37%	27%	25%
% School Total	1%	49%	23%	27%				
Wayne High	5	120	33	50	208	83%	34%	32%
% School Total	2%	58%	16%	24%				
Total	86	2,579	938	1,351	4,954	61%	36%	30%
% of Students Screened	2%	52%	19%	27%				
% of School Population	1%	15%	6%	8%				

All Schools Total

BMI Percentile	<20th Risk of Underweight	≥20th and <85th Healthy	≥85th - <95th Risk of Overweight	≥ 95th Overweight	# of Students Screened	% of All SBHC Users	% of All Registrants	% of School Population
Grand Total	108	3,902	1,497	2,257	7,800	61%	36%	29%
% of Students Screened	1%	50%	19%	29%				
% of School Population	0%	14%	6%	8%				