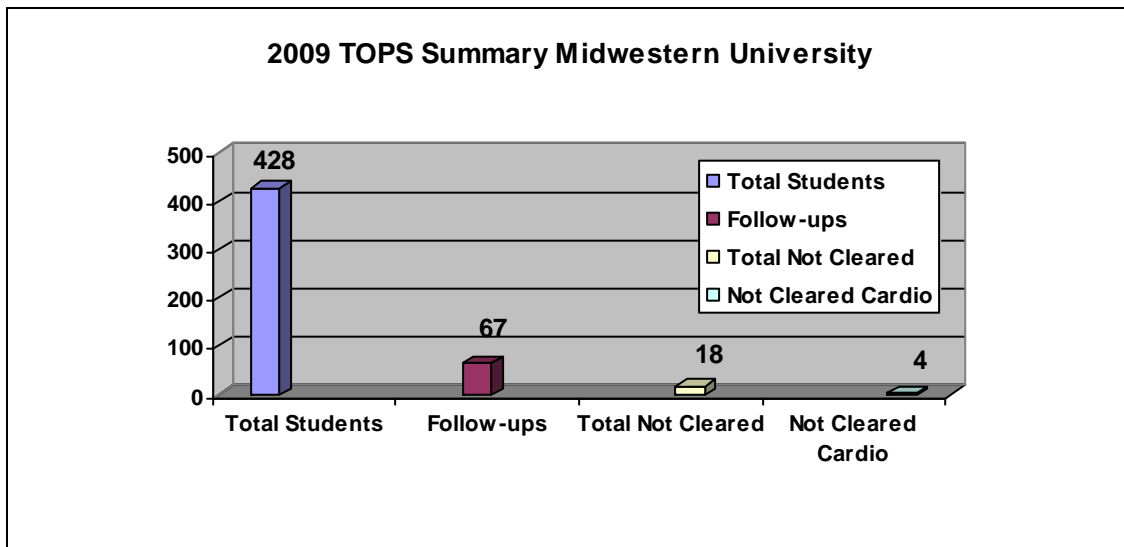


2009 TOPS Screening Results Summary Midwestern University

428 students from 17 schools were examined. 67 students required follow-up examinations. Those 67 follow-ups included blood pressure rechecks, clearance from their personal physician for current injuries and illnesses, and evaluations by a cardiologist.

18 of the 67 students had issues which were serious enough to deny them clearance, pending further evaluation. Four of those 18 students who were not cleared, required further evaluation for cardiac related issues.



The four students who were not cleared due to cardiac related issues represent less than one percent, of the total students examined. They represent the “needles” in the proverbial haystack that the TOPS program dedicates its efforts to find. These are the students that might never be diagnosed until they become a medical emergency.

When reviewing the attached pages of statistics it is important to keep them in perspective. We endeavor to follow the criteria of the original Italian study. So many of the EKG findings fit that criteria. However, our cardiologists using their knowledge and experience evaluate the totality of information; family history, physical examination and EKG when determining which students need an echocardiogram.

Not all findings that require follow-up are life threatening or keep a student from participating in sports. Some simply need to be evaluated and perhaps monitored over time.

TOTAL FINDINGS 2009

Midwestern University

Males	Females	Total
287	141	428

Total Schools
17

Followups	High BP	Not Cleared Cardio	Not Cleared Total
67	57	4	18

EKGs Preliminarily Meeting Criteria	Echos	Abnormal Echos
169	68	3

Preliminary EKG Findings 2009

Midwestern University

Heart Block		Bundle Branch Block	
1st Degree	1	<i>Left - LBBB</i>	0
2nd Degree	2	<i>Right - RBBB</i>	0
3rd Degree	0	Incomplete Right - IRBB	45
Left Atrial Enlargement	1	Left Axis Deviation	5
Right Atrial Enlargement	5	Right Axis Deviation	24
Bi-Atrial Enlargement	0	Indeterminate Axis	1
Left Ventricle Hypertrophy	34	<i>T-Wave</i>	24
Right Ventricle Hypertrophy	2	<i>D-Wave</i>	0
		<i>U-Wave</i>	0
Supraventricular Tachicardia	0	Short PR	0
Minor Intraventricular Conduction Defect	19	Long PR	0
Ectopic Atrial Rhythms	1	ST Segments	1
Bifascicular Block Anterior	0	Wide QRS	0
		Premature Ventricular Contractions	0

Additional Findings - 2009:

2 2nd Degree AV Block
 2 Left Ventricle Hypertrophy - (1 ASH, 1 mildly concentric)
 1 Bicuspid Aortic Valve (prior history)
 2 Wolff-Parkinson-White Syndrome