Introduction:

This Movable Soccer Goal Safety Act, as referenced in Board Policy 4.170 -Safety, offers guidance for the installation, use and storage of full size and near full size movable soccer goals. This safety act can help prevent deaths and serious injuries resulting from soccer goal tip overs.

This safety act is intended to address the risk of movable soccer goal tip-over. It is not a U.S. Consumer Product Safety Commission (CPSC) standard, nor is it a mandatory requirement.

Soccer Goal Injuries and Deaths:

Many of the serious incidents occurred when the soccer goals tipped over onto the victim. Almost all of the goals involved in these tip-overs appeared to be "home-made", not professionally manufactured goals. These "home-made" goals are often very heavy and unstable. School District U-46 does not own any "home-made" goals or allow the use of "home-made" goals on our property.

The majority of movable soccer goals are constructed of metal, typically weighing between 150 and 500 pounds. The serious injuries and deaths are a result of blunt force trauma to the head, neck chest and limbs of the victims from the goals being tipped onto the victims from climbing on them. High winds can also cause movable soccer goals to fall over.

Rules of Soccer:

From the National Federation of State High School Associations' (NFSHSA) 1994-1995 *National Federation Edition-Soccer Rules Book*.

"They shall consist of 2 uprights (posts) 4 inches but not more than 5 inches. The top of the posts shall be joined by a 4 inches but not more than 5 inches horizontal crossbar."

Design/Construction Guidelines:

The common dimensions of a full size goal are approximately 24 feet in width, 8 feet in height and 6 feet in depth. The stability of a soccer goal depends on several

School District U-46 Movable Soccer Goal Safety Act

factors. One effective design alternative uses a counterbalancing strategy by lengthening the overall depth of the goal to effectively place more weight further from the goal's front posts (more weight at the back of the goal). A second design selects lightweight materials for the goal's front posts and crossbar and provides much heavier materials for the rear ground bar and frame members. This tends to counter balance the forces working to tip the goal forward. Another design uses a heavy rear framework and folds flat when not in use, making the goal much less likely to tip over. All of the goal posts in the District are the second type made of lightweight materials. Finally, after these various designs are considered, it is imperative that all movable soccer goals be anchored firmly in place at all times (except during locked storage).

Anchoring/Securing/Counterweighting Guidelines:

A properly anchored/counterweighted movable soccer goal is much less likely to tip over. Remember to secure the goal to the ground, making sure the anchors are flush with the ground and clearly visible. It is imperative that all movable soccer goals are always anchored properly. There are several different ways to secure your soccer goals. The number and type of anchors to be used will depend on a number of factors, such as soil type, soil moisture content and total goal weight.

Anchor Types:

• Auger Style

This style of anchor is "helical" shaped and screwed into the ground. A flange is positioned over the ground shoes (bar) and rear ground shoe (bar) to secure them to the ground. A minimum of two auger style anchors (one on each side of the goal) are recommended. More may be required, depending on manufacturer's specifications, the weight of the goals and soil conditions.

• Semi-Permanent

This anchor type is usually comprised of two or more functional components. The main support requires a permanently secured base that is buried underground. One type of semi-permanent anchor connects the underground base to a soccer goal by means of two tethers. Another design utilizes a buried anchor tube with a threaded opening at ground level. The goal is positioned over the buried tube and the bolt is passed through the goal ground shoes (bar) and rear ground shoe (bar) and screwed into the threaded hole of the buried tube. A third design is to bury two concrete bases along the rear ground bar below grade with a chain extending out of the

concrete that is wrapped around the rear ground bar and locked below grade and covered with soil. When not in use the chain is then buried below grade. This method is employed by School District U-46 at some locations.

• Peg or Stake Style (varying lengths)

Typically two or four pegs or stakes are used per goal (more for heavier goals). The normal length of a peg or stake is usually 10 - 12 inches. School District U-46 uses 12 inch stakes on irrigated fields and 24 inch stakes on non-irrigated fields that do not have semi-permanent anchors using 4 stakes per goal. Pegs or stakes should be driven into the ground with a sledge hammer at an angle through available holes in the ground shoes (bar) and rear ground shoe (bar) until flush to secure them to the ground. If the peg or stake is not flush with the ground, it should be clearly visible to persons playing near the soccer goal. Stakes with larger diameters or textured surfaces have greater holding capacity.

• J-Hook Shaped Stake Style

This style is used when holes are not pre-drilled into the ground shoes (bars) or rear ground shoe (bar) of the goal. Similar to the peg or stake style, this anchor is hammered, at an angle if possible, directly into the ground. The curved (top) position of this anchor fits over the goal member to secure it to the ground. Typically, two or four stakes of this type are recommended per goal, depending on the stake structure, manufacturer's specifications, weight of the goal and soil conditions. Stakes with larger diameters and textured surfaces have greater holding capacities.

• Sandbags/Counterweights

Sandbags or other counterweights could be an effective alternative on hard surfaces, such as artificial turf, where the surface cannot be penetrated by a conventional anchor. The number of bags or weights needed will vary and must be adequate for the size and total weight of the goal being supported.

• Net Pegs

These tapered metal stakes should be used to secure only the net to the ground. Net pegs should not be used to anchor the movable soccer goal.

Guidelines for Goal Storage or Securing Goals When Not In Use:

The majority of incidents investigated by the CPSC did not occur during a soccer match. Most of the incidents occurred when the goals were unattended. Therefore, it is imperative that all goals are stored properly when not being used. When goals are not being used always:

- a.) Remove the net
- b.) Take the appropriate steps to secure goals such as:
 - 1.) Place the goal frames face to face and secure them at each goalpost with a lock and chain.
 - 2.) Lock and chain to a suitable fixed structure such as a permanent fence.
 - 3.) Lock unused goals in a secure storage room after each use.
 - 4.) If applicable, fully disassemble the goals for seasonal storage.
 - 5.) If applicable, fold the face of the goal down and lock it to its base.

Conclusion/Safety Tips:

- Securely anchor or counterweight movable soccer goals at all times.
- Anchor or chain one goal to another, to itself in a folded down position, or to nearby fence posts, dugouts or any other similar sturdy fixture when not in use. If this is not practical, store movable soccer goals in a place where children cannot have access to them.
- Remove nets when goals are not in use.
- Check for structural integrity and proper connecting hardware before every use. Replace damaged or missing parts or fasteners immediately
- Never allow anyone to climb on the net or goal framework
- Ensure safety/warning labels are clearly visible (placed under the crossbar and on the sides of the down-posts at eye level).
- Fully disassemble goals for seasonal storage.
- Always exercise extreme caution when moving goals and allow adequate manpower to move goals of varied sizes and weights. Movable soccer goals should only be moved by authorized and trained personnel.
- Always instruct players on the safe handling of and potential dangers associated with movable soccer goals.
- Movable soccer goals should only be used on level (flat) fields.