



Maintenance Strategy – Playgrounds and Athletic Fields

This category covers a broad range of a buildings playgrounds and athletic fields. The information contained in this document are general recommendations and guidelines designed to bring attention to the importance and benefits of preventive maintenance strategies supporting quality educational environments. It is important for facility managers and maintenance staff to be aware of the specific systems asset types and maintenance required to effectively maintain the systems functionality and reliability through preventive maintenance requirements. Qualified in-house maintenance combined with certified vendor staff may be necessary to manage systems safely and effectively. Consult manufacturer recommendations on playground and athletic field systems maintenance requirements.

Playgrounds are magnets for children. Opportunities to run around outdoors, interact with others of the same age groups, improve physical fitness, explore and extend their physical abilities while having fun. Adults too appreciate the opportunities to visit with like-minded grown-ups while their children play in a safe setting to avoid injuries. Every year children are severely injured and admitted to an emergency rooms as a result of a playground or athletic field related incidents. It is estimated that, each year between 200,000-250,000 such injuries occur. Injuries can range from bad cuts and bruises to broken bones and head injuries, according to statistics from the National Electronic Injury Surveillance System.

The National Recreation and Park Association (NRPA) inspector curriculum states more than one in three playground injuries are alleged to be a result of a lack of maintenance or improper maintenance. This in one area which all public schools owners have direct control of. A district's proactive maintenance efforts, or lack thereof, will have a substantial impact on reducing playground injuries. One item that has been lacking is a definitive maintenance program that improves the day to day operations of playgrounds and associated play area.

Regardless of a play area's level of compliance to the current safety standards and guidelines, owners must address their responsibility for ongoing safety inspections, routine maintenance and timely repairs that address new deficiencies in the rapidly, high use and ever-changing play environment.

There are distinct playground maintenance responsibilities as recommended by the U.S. CPSC and the ASTM for the manufacturer/designer and owner/operator. The manufacturer/designer must provide the owner with complete inspection and maintenance procedures necessary to maintain the play equipment and surfacing systems. The owner/operator is responsible for performing the inspections and maintenance as recommended by the playground equipment manufacturers to assure the safety of the users and the function of the playground equipment and surfacing system and these records must be maintained. District owners should be implementing some regular frequency of safety inspections coupled with timely routine maintenance and repairs to assure the safety of the users. This is the primary role of a playground maintenance technician.

The inspection/maintenance process begins with a thorough visual review of the entire playground environment down to each and every component. This process should be documented in the districts Facility Information Management System (FIMS) in order to assure its completeness and to provide insight into the maintenance history. The process is not complete until the identified deficiencies have been corrected. These corrective actions should also be

documented. The inspection forms used must be easy to use and should be based upon the manufacturer's recommended maintenance and inspection procedures. They must also align with your districts policies and procedures. They should be specific to the equipment and conditions identified in your site history and initial safety compliance audit.

The result of not implementing an effective proactive maintenance and inspection program has been said to contribute to almost 40 percent of all playground injuries. This is the bad news. The good news is that there are many benefits of a good playground inspection and maintenance management plan such as fewer accidents, good defense against charges of negligence, more efficient and effective use of resources, forecasting more accurate budget needs, better information to project the potential life expectancy of the play area, and most importantly, it enhances your organization's public image and relationship with your community. Proper inspection and maintenance of play equipment and playground safety surfacing are vital to ensuring a safe playground, long term use and, in many cases, maintaining a manufacturer's warranty.

MAINTENANCE AND REPAIR. Ideally, when equipment is damaged, it should be repaired or replaced immediately. If this is not possible it should be removed from service until proper repairs can be made. To avoid playground injuries there should be no loose, damaged or missing supports, anchors or footings; no loose or missing nuts, bolts or protective caps; no broken or missing rails, steps, rungs or seats; no deformed hooks, shackles, rings hangars or chains; no exposed mechanisms that could pinch or crush fingers, no splinters or deteriorated wood, no cracks or holes in the surfacing material; no trash in the area; and no environmental hazards such as roots, rocks or puddles.

In addition, all moving parts that require lubrication should be serviced regularly to reduce playground injuries. All equipment requires routine cleaning maintenance. From general cleaning to minor nuts and bolt repair, they need this attention because high use and stresses producing minor defects are constantly at work. These stresses may be caused by constant and heavy uses, misuse, neglect, vandalism, temperature fluctuations etc. Regardless of the cause, the result is the same -- without routine scheduled maintenance the equipment deteriorates before it is time.

Preventive maintenance means the early detection and repair of minor defects, before major reactive action is necessary; it is a proper way to care for a playground equipment assets. Play areas should be routinely reviewed for proper operations to include cleaning to remove routine trash and debris affecting the curb appeal, conducting minor repairs to equipment, proper upkeep of landscaping and supporting a safe and functional asset providing for a safe environment. Other factors to consider as to why it is extremely important for your school to maintain its playground areas:

Pest Control - Proper pest control should be reviewed routinely to support safe environments. Pests such as ants can take harborage in sand areas, larger pests such as groundhogs or prairie dogs can dig holes and cause damage to the sub structure creating unsafe holes leading to sprained ankles or falls.

Inspection and Evaluation - The key to successful maintenance is careful planning and programming of the work to be done. The first step in planning is a periodic evaluation of all playground and athletic areas including impact surfaces. The surfaces should be thoroughly inspected at least twice a year for surface condition, structural strength, and proper drainage.

In all cases of playground equipment, it is important to determine the cause(s). This will facilitate repairs that will both correct the defect and prevent its recurrence. Time and money spent for such repairs are well invested, since the same repairs will not have to be repeated in the future. When the inspection has been completed, there should be a record of problem areas, as well as an idea of the general condition of the equipment or surfaces. When these inspections reveal minor defects they should be repaired immediately, before they deteriorate into failures requiring major maintenance expenditures.

Maintenance Recommendations: There should be evidence that impact and general surface areas are cleaned & maintained and spread evenly with grounds managed routinely. Borders should be installed properly with no protruding/broken bolts or damage and in good condition. Tripping or physical hazards should be removed.

Equipment hardware should be intact & in good working condition; no splintering/no paint surface splitting. Fencing should be in good condition & secure; Scoreboards should be intact. Pests and rodents identified on playing and athletic impact surfaces should be managed/removed. Graffiti should be managed. Safety, risk hazards or physical property damage should be mitigated to prevent additional damage or risks.

PSFA FMAR F6 2022 – Playgrounds / Athletic Fields