

Injury Prevention Strategies for You and Your Students

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Playing-related physical problems are common in young students

Most at risk: females – over 18 – keyboards and strings

Music teacher has a unique and important opportunity to:

- 1 - Observe students in multiple practice and performance situations
- 2 - Act as the “early warning system” for playing-related problems by:
 - Recognizing and identifying potentially troublesome practices, conditions, problems
 - Modifying practice and performance to stop or reverse the situation
- 3 - Prevent problems by teaching and monitoring correct playing techniques

Observe student for evidence of problems

- Drop and shake (hand)
- Abnormal shrug, stretch, rub
- Fidgeting (sign of discomfort)
- Squinting to see music – poor posture from inadequate vision

Goals of treatment

- Eliminate pain
- Regain strength, endurance, coordination for a return to music

Basics of treatment – music-related problems

- Primary treatment is rest – variable degree and duration, depending on the problem
 - Avoiding or modifying the causative activity
 - Duration: At least long enough to relieve the pain
 - Sometimes splinting or other assistive devices may be useful; physician can help here
- Medication occasionally needed, and should be prescribed by a physician; short-term use
- Try to preserve some opportunities to play during treatment, if possible
- Early therapy to restore lost functions and prepare for return to music
 - “Musical therapy” from teacher to regain playing skills: exercises, technical modifications
- Return to playing
 - When pain is gone
 - When musician has regained flexibility, muscle strength, endurance, and coordination
 - which may have been lost or decreased during time of treatment
 - Modify practice routines or techniques if needed
 - Prevent recurrence or new problems – gradual re-entry, avoid pain and improper technique
 - Avoid a too rapid return – can cause recurrence, new problems
 - Set written schedules if needed, and monitor them

Practice modifications are a good way to begin

- 25–5 rule should become lifetime habit
 - Play/practice 25 minutes of every 30, followed by 5 minutes’ rest
 - Get away from instrument during breaks; mental rest is as important as physical rest
- Vary practice patterns, material
 - Recognize potentially damaging effects of different repertoire
 - Practice times should minimize stressful repetition of passages, especially when little musical progress seems to be made.
 - Prolonged preparation for auditions, juries, recitals usually needed

(OVER)

Controlling technical factors

Posture – seated or standing

Undetected refractive errors; squinting player has poor posture

Hand position for holding and playing instrument

Observe for excessive or abnormal hand/upper extremity forces on keys, strings

Instrument support

Can help maintain proper posture, minimize muscle force & physical stress

Proper seat height (piano, cello, students with overly long or short legs) and spacing

Look for abnormal positions and postures when playing

Padding for flute (Bo-Pep, etc.) to support portions of hands

Neck straps are available for clarinet, oboe, EH

Bassoon: seat straps while sitting, and shoulder straps or harness when standing

Floor pegs to support low clarinets, bassoon, EH

Harnesses and other body supports distribute the weight of low saxophones and basses

Chin & shoulder rests – proper combination for the individual student (trial and error)

Ultimately, changing shape of instrument may be the answer

Playing relaxed (physically)

Work from position of rest for greatest efficiency

Learn to relax specific muscles, especially those not needed for task

Avoid simultaneous co-contractions of opposing muscle groups (inefficient)

Doesn't come naturally for many; must be taught

Minimize mental tension also

Efficient instrument support

Basics of prevention

Remember the causes of music-related problems and work to avoid them

Application of logic and common sense, attributes not always adequately present in students

Practice modifications (again!) – see other side

Instrument modifications to minimize physical stress

Environmental adaptations

Proper seating; seat should be level, not tilted backward

Don't crowd flutes, large instruments, or those held at side (bassoon, saxophones)

Adequate light to see music, conductor; pit problems especially need awareness

Avoid prolonged, loud, continuous music (below)

Hearing protection

Noise-induced hearing loss (NIHL) – nerve deafness caused by repetitive or prolonged exposure to high noise levels. It cannot be treated, and progression must be prevented by decreasing exposure to high sound levels

Protective ear plugs (attenuators) for both indoor and outdoor use — conductors, too!

In-ear monitors for stage use

Larger rooms, higher ceilings, absorbent surfaces

Environmental (shields; rearrange seating; risers)

Shorten periods of extreme sound intensity

Be careful in changing technique of a student who is new to you

Change “problem” items one at a time – let student adjust both physically and mentally

Add new techniques and music slowly, as student's comfort permits

Recognize that developing and incorporating new habits is a long-term process; don't rush