

# Clinic: Playing (Less) Hurt—The Ins and Outs of Injury Prevention

presented by Janet Horvath — reported by Elizabeth Prielozny Barnes

Janet Horvath's goal is for the information in her groundbreaking book, *Playing (Less) Hurt* to be a natural part of every music teacher's curriculum. Janet's venture into the world of musicians' physical health originated from her own, all too common experiences with injury as a music student. (Please see her story on the previous page.)

Janet's overarching message to teachers at MNSOTA's recent fall workshop was that there are many, many stressors for student and professional musicians today, and unfortunately these stressors are growing evermore intense. Teachers can be vital links for helping student musicians learn how to make music with as little physical damage as possible, identifying when they have a problem, and facilitating a successful recovery from an injury. But in order to do so it is imperative for teachers to educate *themselves* in the realm of music making as an athletic activity, since so few of us were taught these essential lessons back when we were students.

Her talk was overflowing with information and advice for teachers and performers based on her unparalleled experiences uncovering and collecting wisdom on injury prevention and recovery. Here is a sample of what she talked about:

- Making music is a physically (as well as mentally) taxing activity. It is important for us to approach musical activities the same way an athlete approaches athletic activities.
- Soft tissue injuries are most common type of injury for musicians, but don't show up on traditional medical tests. Therefore musicians' injuries can be dismissed as "all in your head," or injured musicians might simply be advised to stop playing their instruments.
- Since so much of our identity is wrapped up in being a musician, we can feel great shame for doing something wrong when we become injured.
- Many resources in ergonomics, instrument modifications and instrument props are available today to help us be able to work with greater physical ease, and more are being developed all the time.

- Medical practices are available today based on helping musicians with injuries, much like medical practices developed earlier for sports injuries.
- Many challenges to playing our instruments safely are simply out of our control: stage set-ups, challenging instrumental techniques, composers and conductors asking for things that don't work best for each musician, repertoire and rehearsal schedules are only a few. Each combination of situations creates special tensions for each individual, and we must take responsibility to manage these situations for ourselves as well as possible.
- Our culture worships musical prodigies: youth producing music in inordinately taxing ways. Problems leading to injuries can be exacerbated because young people tend to feel invincible, are motivated and are energetic. But young bodies are still growing and are especially unstable, vulnerable to injury.
- During youth growth spurts structures grow before the musculature that supports them. It has been found that some young musicians have symptoms for 10 years or more before they are acknowledged and treatment is sought.

## Compelling and frightening statistics

- Girls ages 10-18 are especially prone to injury: 50% sustain hand and wrist injuries, 55% back injuries, and 30% upper limb injuries.
- 80% of freshman entering conservatories and universities already have injuries!
- 76% orchestral musicians are playing hurt!! No artist is immune, even if they are doing everything right!
- Injuries are cumulative over time: Our muscles eventually reach a point of maximum over-exposure and they simply cannot take it anymore!
- Corrective postures and injury prevention are not commonly taught in schools but if they were addressed in students—even as late as in their 20s—many injuries that typically show up in their 40s could be averted.

## Repetitive Stress injuries result from the cumulative effect of:

*Force + Tension + Repetition + Poor Posture/ Position + Lack of Rest*

- Asymmetrical body development with the right and left sides doing different activities is stressful to the body
- We underestimate how much repetitive stress we subject our bodies to, simply doing what we do in order to play our instruments. (Janet actually counted over 5000 snare drum strokes in *Bolero!* Imagine how many times we move our bows up or down in even one allegro movement.)

## Risky postures are those that take us out of normal, relaxed body positions:

- Neck: tilting or rotating the head (anytime it is off center)
- Torso: bending or twisting, collapsing the chest (which constricts breath and flow), reaching and leaning away from our center
- Shoulders: holding arms away from the body
- Wrists: flexing and deviating (wrists are weaker when flexed or raised); there is also less spread in the fingers when wrists are out of a neutral position; squeezing thumbs and fingers is less efficient than just letting them move
- Static Loading. Muscles work best in the mid-range of their motion, with movements that alternate back and forth; this way blood flows and waste is flushed out. Static loading is the opposite with opposite effects.
- Undesirable postures are those that overload the muscles and tendons

**Numbness is first sign of nerve impingement & ultimate damage. Numbness or tingling indicates that you must stop the movement/posture that is causing these sensations—now!**

## Finding an Ideal Posture and Stance

- Stand comfortably, back against the wall naturally, in order to recognize a natural, upright posture, complete with lumbar and cervical contours.
- Use imagery that lifts the head and

neck with ease while grounding the torso.

- Do not hyper extend at the knees when standing. (Be aware that music stand height can help or work against a righteous posture.)
- A seated posture should maintain the same lumbar and cervical contours that we have while standing.
- Sit with weight forward and over the feet, knees descending forward from the pelvis.
- Utilize proper chairs, (Janet mentioned the folding, portable, Adjustrite Musician's Chair by Vivo, available through Amazon [amazon.com/ADJUSTRITE-Musicians-Chair-Vivo-USA/dp/B0016OIX0](http://amazon.com/ADJUSTRITE-Musicians-Chair-Vivo-USA/dp/B0016OIX0)), chair leg supports and wedge-shaped seating cushions; horseback riding position is ideal.
- Move! Change positions! Experiment! Those who sit more than 6 hours per day are more likely to die earlier than those who don't sit so much.

### Lips, Teeth and Jaw

- Keep openness and space in the mouth; avoid clenching teeth as well as facial grimaces.
- Try to "air" mouthwash and release pressure on jaws.
- Put a carrot behind your molars; if it crunches this indicates the jaws are clenched.
- Chin rests and shoulder rests need to be fitted to each individual; shoulder rest usage requires a commensurate change in chin rest height.
- Stiff shoulder rests are now considered controversial rather than the norm.

### Teaching guidelines

- Use the least amount of force necessary to accomplish an action at all times.
- Avoid awkward or fixed postures.
- Release active and stressed parts of the body (neck, arm, wrist, etc.) whenever possible.
- Avoid excessive repetition, duration, frequency and intensity of playing.
- Be aware that changes in equipment, changes in schedule and especially abrupt increases in playing/practice time can cause problems.
- Comfort is the priority for instrument set-up.

- Repertoire choices should always be appropriate for the student's physical as well as musical development.
- Be aware of each student's individual anatomy, especially if there is joint laxity.
- Be aware of expectations placed on the student, whether self-imposed or from outside sources (preparing for juries, competitions or auditions).
- External factors cannot always be controlled; a comfortable and open relationship between teacher and student makes it more feasible to share problems.
- Offer guidance on safe practicing and help with creating preparation plans.
- Lesson plans should dedicate several minutes to warming up and taking time to stretch and cool down.
- Encourage ease of playing.
- Be aware of how the body is feeling and responding everyday.

### Five Essential Practice Rules

#### 1. Warm Up

Warm up bigger muscles and work your way down to the smaller ones. Warm up first away from instrument with walking/physical movement, then at the instrument in mid-range ("not too high, not too low; not too fast, not too slow") avoiding awkward postures and positions. Then play slow scales (ensuring that fingers are lifting and releasing). *Whipping through technically demanding music is not a warm-up.*

#### 2. Take Breaks

If we are disciplined enough to practice we can be disciplined enough to take breaks—even a few seconds in the midst of rehearsal is far better than none at all.

#### 3. Vary Your Repertoire

Different musical styles from different composers have different challenges and use different muscle groups. Variety ensures equal distribution of stressors. Isolate and analyze; limit the amount of challenging repertoire and passages in your routine.

#### 4. Increase Your Practice Load Gradually after an Injury or Vacation

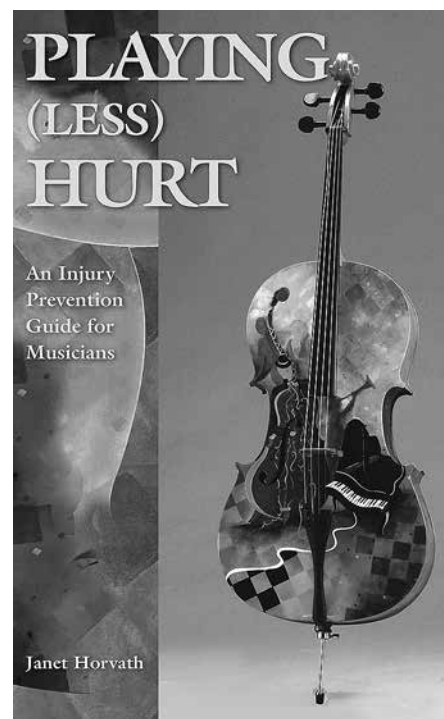
If you had 30 days off you need 10 days to get back in shape. The first day should only include 10 minutes of playing. On each subsequent day increase the number of

10-minute sessions rather than lengthening the session, especially after an injury.

#### 5. Reduce Practice Intensity Prior to Performance: Leave Your Practice Room!

### How Janet structures a lesson

- I always ask a student if they've warmed up. If they haven't warmed up I'll spend more time with that.
- Play slow scales and slow shifts to warm up bigger muscles.
- Medium-range scales serve intonation; release each finger after it is used. This constitutes the major part of the lesson to begin with.
- Bowing exercises warm up the playing arm.
- Only then go to pieces and etudes.
- Polishing can be done by the student;



the teacher doesn't need to witness this. But it's our job to make sure our students understand the concepts they're working to polish: musical, physical and stylistic.

### Tips for Stretching While Sitting Onstage

- Breathe deeply (blow out hard through mouth)
- Tuck the chin
- Pull chin in and roll forward

- Stretch the neck with ear-shoulder, right-to-left, and shoulder shrug
- Stretch pectorals, one arm at a time
- Let arms hang down, turn out and back
- Wrist circles
- Pull palm of hand up and back with arm extended
- Release and circle thumb and fingers
- Squeeze trapezius
- Move legs, raise toes, heels, turn hips inside
- Roll pelvis
- Most important: don't be static!

#### Useful tools

- Large, firm foam roller to lie on
- Thera-cane [www.theracane.com](http://www.theracane.com)

- “Musician’s Workout Wizard” (WOW) gives a full body warm up in 90 seconds: [www.flute4u.com/store/cart.php?target=product&product\\_id=16979&category\\_id=268](http://www.flute4u.com/store/cart.php?target=product&product_id=16979&category_id=268)
  - Cello key pegs
  - Instrument modifications: Pellegrina viola, Maximillion violin [www.rivinus-instruments.com/Instruments.htm](http://www.rivinus-instruments.com/Instruments.htm) (and many modifications for cellos and basses),
  - Finger splints to support joints in hands: physical therapists can easily design and manufacture splints
  - Kinesio taping [www.kinesiotaping.com](http://www.kinesiotaping.com)
  - Biofeedback can show precisely which muscles are being stressed
- It was clear that Janet had barely begun

all that she had to say when her time was finished! Her book, *Playing (Less) Hurt* has recently been reissued by Hal-Leonard (after having initially sold 10,000 copies). Not only is it packed with information, advice, lists and diagrams, it includes sections of resources. Janet Horvath is a treasure to musicians’ health and wellness; we are fortunate to have her here in Minnesota. In addition to her performing and writing, Janet presents workshops and seminars around the country. Visit Janet’s website: [www.playinglesshurt.com](http://www.playinglesshurt.com).

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