

## Health & Safety Committee

### Stand Up and Stretch!

By Anne Kingery-Schwartz, Erin Jue, and Joanne Klaar Walker

The National Safety Council reports that one-third of all illness or injury cases in 2011 were caused by musculoskeletal disorders. These included carpal tunnel syndrome and injuries to the neck, shoulders, and back that required a median of 11-16 days for recovery (Bukowski, 2014). Many of these injuries would likely have been avoided if employees maintained good ergonomic habits.

Conservators are all too familiar with uncomfortable positions that have to be maintained for long periods of time. Hunching over a bench, lying flat on a bridge, or craning backwards to look at the ceiling, conservators too often disregard their own well-being while working in uncomfortable positions for the sake of the project at hand. For your health, it is important to move around, no matter how demanding the project. Repetitive tasks or projects that require long periods of static posture should be interspersed with micro breaks of at least 30 seconds to 1 minute to allow muscles enough time to recover (McCann, 2000 and Occupational Safety & Health Administration, 2014).

Incorporating stretching into these breaks can decrease both muscular and mental strain. The following includes some stretches that you can do in your work clothes—and without too much embarrassment!—in front of your colleagues. In fact, they are so office-friendly that they will be incorporated between presentations in San Francisco at AIC's 2014 Annual Meeting.

Disclaimer: Unless specifically noted in the descriptions in this article, stretches should be held for 5-30 seconds, without bouncing, while breathing deeply and slowly. As conservators, you know about handling with care—have the discipline to treat yourself with the same care as the objects you treat. Stretches should never be painful. Please consult your physician before beginning any exercise program (National Safety Council, 2014).

Special thanks to Kate Kingery, stretching guru and photo shoot organizer, and Brian Benjamin, photographer. Photograph for side rib stretch by Jonas Cartano.

### STANDING EXERCISES:

#### 1. Triceps and shoulders



- Gently pull your right arm across your chest with your left hand and grasp your upper arm.
- Adjust as necessary to get a stretch in the back of your arm or shoulder and upper back. Switch arms and repeat.

#### 2. Side ribs



- Hold your right wrist with your left hand.
- Gently (as conservators, you know what this means) pull up and to the left—using your arm as a handle to pull on your ribs.
- Rather than holding the stretch, do it as far as it is comfortable and easy, then release.
- Repeat five to ten times. Switch hands and repeat.

#### 3. Chest and biceps



- Clasp your hands behind your back interlocking your fingers.
- Keeping your arms as straight as possible, raise your hands gently. To reduce strain on your wrists, try to keep them straight rather than bending them.

#### 4. Shoulders and trapezoids



- Place your hands on your shoulders, and roll them in circles backwards about five times.
- Then roll them forward about five times.

#### 5. Shoulders, back, and core

- Place your hands on your side ribs with the fingers and thumbs pointing forward or up towards your armpits.
- Move your elbows forwards and backwards five to ten times. Do you feel any



- movement in your shoulders? Shoulder blades? Collar bone and upper ribs?
- Now use the heel of your hand to push your left side lower ribs downward and release, five to ten times. This should help your right side ribs arch. Switch sides.

#### 6. Belly and chest



- Place your hands on your lower back.
- Gently pull your elbows back and push your pelvis forward, so your back arches slightly.
- Return to standing normally.
- Repeat five to ten times.

#### 7. Hips, glutes, and lower back



- Cross your right leg over left leg.
- Stick your left hip out to the left and lean right.
- You can shift your left hip forward and backward to adjust where you feel the stretch (glutes versus hip).
- Repeat on the other side.

#### 8. Lower back

- Put your hands on your hips and rotate your pelvis between arching and tucking. This is a motion rather than a static stretch.



## 9. Thighs (quads) and upper legs (hip flexors)



- Place your right leg behind you (2-3 feet).
- With your weight evenly distributed between your two legs, tuck your pelvis under and return to a neutral position.
- Tilt and release about five times. Switch legs.

## 10. Backs of thighs (hamstrings)



- Put your right leg out about a foot in front of your left. Flex your foot.
- Stick your backside (glutes) out and, keeping your back straight, bend slightly forward at the hip joint. You can either hold this stretch or do it repeatedly, making sure to go through

the entire range of motion from standing to bending.

- Repeat on other side.

## 11. Ankles and calves



- Put your right foot back slightly (1-2 feet).
- Bend your right knee slightly. Your weight may need to be slightly forward.
- Bend and straighten your right leg, keeping your heel on the ground.

**SEATED EXERCISES:**

## 1. Neck



- Gently grasp your right ear with your open left hand, reaching over your head.
- Gently pull your head to the left, going only as far as is comfortable and unstrained.
- Pull and release about 5 times. Switch sides.

## 2. Wrists



- Put your right arm out in front of you with the fingers flexed upwards.
- Grasp your right fingers with your left palm.
- Gently pull backwards on your right fingers with your left

hand. Pull and release.

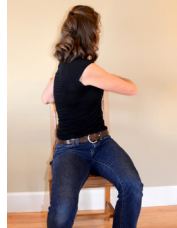
- Repeat five times. Switch hands.

## 3. Sides and core



- Place your right palm on the right side of your chair.
- Put your left hand in the air.
- Push up with your right hand and reach up and to the right with your left hand. You may need to bend your standing arm slightly.
- Reach and release about 5 times. Switch sides.

## 4. Core and back



- Sit up straight.
- Gently twist around in your chair to the right grabbing the back of your chair with one or both hands. Switch sides.

## 5. Back



- Lean forward over your thighs.
- Drape your hands down beside you towards the floor. If it is easily possible for you, clasp your arms behind your knees, grasping your forearms or elbows.
- Gently arch and round your back five to ten times.

## 6. Backside (glutes)



- Place your right ankle on your left knee.
- Keeping your back straight hinge forward from your hips. Switch sides.

## 7. Ankles and calves



- Raise your right leg and grasp behind your thigh with your hands.
- Lean back to counterbalance the weight of the leg, so you don't feel strain in your back.
- Rotate your ankle in one circle clockwise about five times, then counterclockwise about five times. Switch legs.

The Health and Safety Committee hopes that these exercises will motivate you to Stand Up and Stretch!

We are excited to announce the first full-day session dedicated to health and safety topics at the 2014 Annual Meeting. *Health & Safety Session: Sustaining the Conservator* will take place on Saturday, May 31, and will include talks on ergonomics, the mitigation of hazardous substances, solvent substitutions, medical evaluations, and mold remediation, among other great safety tidbits. Specific health and safety questions can be directed to J.R. Smith (Safety Manager – Smithsonian Institution NMNH) during “The Safety Doctor Is In,” which will take place on Friday, May 30, from 10:00 a.m.–noon and 1:00 p.m.–3:00 p.m. at the Health & Safety Booth in the Exhibitors Hall. Don't forget to register for your OSHA-required annual respirator fit testing and check out our website for additional health and safety resources. We look forward to seeing you in San Francisco!

**ADDITIONAL RESOURCES**

Bukowski, Thomas J. February 23, 2014. “Office Worker Ergonomics.” *Safety + Health Magazine*. [www.safetyandhealth-magazine.com/articles/9939-office-worker-ergonomics-workstation-assessment](http://www.safetyandhealth-magazine.com/articles/9939-office-worker-ergonomics-workstation-assessment).

McCann, Michael. September 2000. “Overuse Injuries in Museum Conservators.” *AIC News* 25, no. 5: 1, 3-6.

National Safety Council. “Stretch Your Way To Better Health.” [www.nsc.org/Pages/Stretch-your-way-to-better-health.aspx](http://www.nsc.org/Pages/Stretch-your-way-to-better-health.aspx).

Occupational Safety and Health Administration. “Computer Workstations.” <https://www.osha.gov/SLTC/etools/computerworkstations/workprocess.html>.

Occupational Safety and Health Administration. “Ergonomics.” <https://www.osha.gov/SLTC/ergonomics>.