Appendix 8

Exercises
Provided for: 1 min During work

Stretch & improve blood circulation in legs

Provided by: Susan Grobler

---

Stand with your feet together on the yellow line of the mat behind you. Take support from your table. Lean forward while you KEEP YOUR HEELS ON THE FLOOR, AND YOUR KNEES STRAIGHT.

You should feel the stretching in your calves. Hold approx. 10 secs - relax.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - both legs at the same time.

---

Stand with your feet together on the yellow line of the mat behind you. Take support from your table. Bend knees while you KEEP YOUR HEELS ON THE FLOOR.

Feel the stretching in your calves. Hold 10 sec. - relax.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - both legs at the same time.

---

Stand holding on to your table with one hand, and one forefoot in the other hand. Pinch your buttocks. Do not lock the knee of the leg you are standing on. Draw your heel towards your buttock. Feel the stretch in the front of your thigh, and front shin. Hold 10 sec.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - one leg at a time.

---

Stand. Keep your balance by holding lightly onto your table. Raise yourself on your toes. Do not push yourself up on your hands. Hold 2 sec.

Repeat 5 times every hour (09h00, 11h00, 12h00, 14h00, 16h00) - both legs at the same time.
Provided for: Date: 2005/06/03
Provided by: Susan Grobler

Recommended table height: ______

Stand with your feet together, fore feet on the yellow line of the Ergobuddy behind you. Take support from your table. Lean your body towards while you KEEP YOUR HEELS ON THE FLOOR.

Feel the stretching in your calves. Hold 10 secs - relax.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - both legs at the same time.

Stand with your feet together, fore feet on the yellow line of the Ergobuddy behind you. Take support from your table. Bend your knees while you KEEP YOUR HEELS ON THE FLOOR.

Feel the stretching in your calves. Hold 10 secs - relax.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - both legs at the same time.

Stand holding on to your table with one hand and the fore foot in the other hand. Pinch your buttocks.

Pull the forefoot towards your bottom, and hold for 10 sec. You should feel the stretch in your upper thigh, as well as your front shin.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - with each leg.

Stand with one leg in front of the other, and take the front foot in your hand.

Then bend your upper body forwards from your hips keeping your back straight, and try to put your fore head on your knee. You should feel the stretching behind your knee and thigh. Hold 10 sec.

Repeat once every hour (09h00, 11h00, 12h00, 14h00, 16h00) - with each leg.
Ease down from high heeled shoes to flat shoes.

Provided by: Susan Grobler

Date: 2005/06/06

Stand in front of a table or chair holding on to the support with both hands.

Slowly crouch keeping your back straight and heels on the floor. Stay down for approx. 20 secs. and feel the stretching in your buttocks and the front of your thighs.

Repeat 30 times.

Stand with your feet together, fore feet on the yellow line of the Ergobuddy behind you. Take support from your table. Lean your body forwards while you KEEP YOUR HEELS ON THE FLOOR.

Feel the stretching in your calves. Hold 20 secs. - relax.

Repeat 30 times.

Stand with your feet together, fore feet on the yellow line of the Ergobuddy behind you. Take support from your table. Bend your knees while you KEEP YOUR HEELS ON THE FLOOR.

Feel the stretching in your calves. Hold 20 secs. - relax.

Repeat 30 times.

This exercise will mobilise the neural tissue (nerves) coming from your spine - and running down to your toes. It is NOT recommended that you do this exercise into any pain with a new back injury - but a bit of discomfort (stretch) is OK in the "maintenance & prevent recurrence"-phase.

Lying on your back with a cushion under your head. Put a band/towel under the sole of your fore foot and hold onto the band/towel with both hands.

Lift your leg up, with a bent knee. Gently straighten your knee, while you maintain the tension in the band/towel. Pull the straight leg now further up - if possible. Hold approx. 20 secs. - relax. Repeat to the other side.
Stand on a step with both heels over the edge. Hold on to a support.

Let the weight of your body stretch your heels towards the floor. Hold 20 sec.

Repeat 30 times.

Half kneeling. Place your hands on the floor. Bring the ankle to be stretched close to your bottom keeping the sole of your foot on the floor.

Bring your chest forwards and shift your weight over the sole of your foot. Keep your heel on the floor during the exercise. Hold approx. 20 secs.

Repeat 30 times.

Sit on a chair or on the floor. Put one foot on top of the other foot.

Try to lift the foot that is under while preventing any movement with the foot that is on top. Hold approx. 5 secs.

Repeat 30 times.

Stand with your back against a wall and your knees slightly bent.

Lift your toes and front of feet of the floor. Keep your heels on the floor. You should feel your shin muscles working. Hold 5 sec.

Repeat 30 times.

Stand or sit with your foot on a towel on a slippery surface (eg. tray/tiled floor).

KEEP YOUR TOES STRAIGHT, and lift the middle part of your foot to crumple up the towel under the middle part of your foot. DON'T curl your toes and crimple the towel under your toes.

Repeat 30 times & do often during the day in your shoes.
Sit to stand-up sewing

Provided for: Trim Ladies
Provided by: Susan Grobler
Date: 2008/08/22

Stand holding on to a support. Bend one knee and take hold of the ankle. Do not lock the knee of the leg you are standing on.

Draw your heel towards your buttock. Tilt your hip forwards so that your knee points towards the floor. Feel the stretch in the front of your thigh. Hold 20 secs.

Repeat 10 times with each leg.

Stand. Hold onto a support and bring one leg slightly backwards.

Bend your knee and lift your foot off the floor. Keep your knees next to each other. Hold 5 secs.

Repeat 50 times with each leg.

Stand on one leg.

Push up on your toes.

Repeat 50 times with each leg.

Stand on a step with both heels over the edge. Hold onto a support.

Let the weight of your body stretch your heels towards the floor. Hold 30 sec.

Repeat 10 times.
Stand in a walking position with the leg to be stretched straight behind you and the other leg bent in front of you. Take support from a wall or chair.

Lean your body forwards and down until you feel the stretching in the calf of the straight leg. Hold approx. 30 secs. - relax. KEEP YOUR HEEL ON THE FLOOR AND YOUR KNEE STRAIGHT.

Repeat 10 times with each leg.

Half kneeling.

Tighten your stomach muscles to keep your back straight. Rotate the heel behind you outwards while pushing your hip forwards. Hold approx. 20 secs. - relax.

Repeat 10 times with each leg.

Sit on a chair.

Pull your toes up, tighten your thigh muscle and straighten your knee. Hold approx. 5 secs. and slowly relax your leg.

Repeat 50 times with each leg.

Sit on a chair/lay down. Put a non-elastic band/belt around your knees. Feet together.

Spread knees apart. Hold 6 sec.

Repeat 30 times.

Kneeling with your heels off the floor and both arms on the floor as shown.

Sit on your knees and stretch your calves. Hold approx 20 secs.- relax.

Repeat 10 times.
Half kneeling. Place your hands on the floor. Bring the ankle to be stretched close to your bottom keeping the sole of your foot on the floor.

Bring your chest forwards and shift your weight over the sole of your foot. Keep your heel on the floor during the exercise. Hold approx. 30 secs.

Repeat 10 times with each leg.

Lying on your back.

Bend your leg and resist the movement with your hand. Hold 6 secs. Repeat with other leg.

Repeat 30 times with each leg.

Lying on your back with hands supporting pelvis.

Make a cycling movement with both legs for 10 min.

Sidelying. Keep the leg on the bed bent and the upper leg straight.

Lift the upper leg straight up with ankle flexed and the heel leading the movement.

Repeat 30 times with both legs.

Lying face down with a band around your ankle.

Tighten your stomach muscles to keep your lower back straight. Bend your knee and pull the band with both hands until you feel tightness on the front of your thigh. Hold approx. 5 secs. - relax.

Repeat 10 times with each leg.
Lying on your back with one leg straight and the other leg bent. (You can vary the exercise by having your foot pointing either upwards, inwards or outwards).

Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg 20 cm off the bed. Hold approx 5 secs. - slowly relax.

Repeat 50 times with each leg.

Lying on your back with a cushion under your head. Put a band under the sole of your foot and hold onto the band with both hands.

Lift your leg straight up. Pull the band flexing the ankle and stretching the back of your thigh. Hold approx. 20 secs. - relax. Stop if you feel any pain in your lower back.

Repeat 10 times with each leg.
Appendix 9

Approval from ethics committee
Faculty of Health Sciences Research Ethics Committee

17/02/2012

This Student Protocol was reviewed by the Faculty of Health Sciences, Research Ethics Committee, University of Pretoria on 17/02/2012 and found to be acceptable. The approval is valid for a period of 3 years.

Prof M J Bester: BSc (Chemistry and Biochemistry); BSc (Hons)(Biochemistry); MSc (Biochemistry); PhD (Medical Biochemistry)

Prof R Deleport: (female) BA at Sefc; B Curationis (Hons) (Intensive care Nursing), MSc (Physiology), PhD (Medicine), M Ed Computer Assisted Education

Prof J A Ker: MChB; MMed(Int); MD – Vice-Dean (ex officio)

Dr NK Likhi: MBB HM – (Representing Gauteng Department of Health) MPH

Dr MP Mathebula: Deputy CEC; Steve Biko Academic Hospital

Prof A Nienaber: (Female) BA (Hons) (Wits); LLB (Pretoria); LLM (Pretoria); LLB (Pretoria); PhD; Diploma in Datametrics (UNISA)

Prof L M Nithe: MChB(Natal); FCS(SA)

Mrs M C Nzuku: (Female) BSc(NUL); MSc Biochem(UCL/UK)

Snr Sr J. Pretali: (Female) BSc(EI); BTech Oncology

Dr R Reynders: MChB (Pret), FCPath (CMSA) MRCPCH (Lon) Cert Med. Onc (CMSA)

Dr T Rossouw: (Female) MChB (cum laude); M.Phil (Applied Ethics) (cum laude), MPH (Biostatistics and Epidemiology (cum laude), D.Phil

Mr Y Sikweyiya: MPH (Umea University Umea, Sweden); Master Level Fellowship (Research Ethics) (Pretoria and UKZN); Post Grad Diploma in Health Promotion (Unifrac); BSc in Health Promotion (Unifrac)

Dr L Schoeman: (Female) BPharm (NWU); BAHons (Psychology)(UP); PhD (UKZN); International Diploma in Research Ethics (UCT)

Dr R Sommers: Vice-Chair (Female) – MChB, MMed (Int), MPharMed.

Prof T J P Swart: BChD, MSc (Odont), MChD (Oral Path), PGChE

Prof C W van Staden: Chairperson – MChB; MMed (Psych); MD; FC Psych; FTCL; UPLM; Dept of Psychiatry

Prof R S K Apatu: MChB (Lugon,UG); PHD (Cantab); PG Dip International Research Ethics (UCT)

Mrs N Briers: (female) MChB (Stellenbosch); BSc Hons (Pretoria); MSc (Pretoria); DHETP (Pretoria)

Prof M M Ehlers: (female) BSc (Agric) Microbiology (Pret); BSc (Agric) Hons Microbiology (Pret); MSc (Agric) Microbiology (Pret); PhD Microbiology (Pret); Post Doctoral Fellow (Pret)

Dr R Leech: (female) B Art et Sci; BA Cur; BA (Hons); M (ECI); PhD Nursing Science

Dr S A S Oforonju: BSc(Hons), States (Ahmadu Bello University –Nigeria); MSc (Applied Statistics (UKC United Kingdom); PhD (Ahmadu Bello University – Nigeria)

Dr L Schoeman: CHAIRPERSON: (female) BPharm (North West); BAHons (Psychology)(Pretoria); PhD (KwaZulu-Natal); International Diploma in Research Ethics (UCT)

Dr R Sommers: Vice-Chair (Female) MSc(B); MMed (Int), MPharMed.

Prof L Sykes: (female) – BSc, BDG; MDent (Proe)
Approval Notice

Approval Notice

Ethics Reference No.: S157/2011

Title: The impact of a change in work posture on work-related musculoskeletal disorders among sewing-machine operators, managed within a physiotherapy and ergonomics programme

Dear Susanna Helena Grobler

The Amendment as described in the documents dated 1 March 2013 and that we received on 1 March 2013 was approved by the Faculty of Health Sciences Research Ethics Committee on the 27/03/2013.

Please note the following about your ethics amendment:

- Please remember to use your protocol number (S157/2011) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics amendment is subject to the following:

Standard Conditions:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

The Faculty of Health Sciences, Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

We wish you the best with your research.

Yours sincerely

DR L SCHOEMAN; BPharm, BA Hons (Psy), PhD; Dip. International Research Ethics
VICE-CHAIR of the Faculty of Health Sciences
Research Ethics Committee, University of Pretoria

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

012 354 1677  0866516047  deptexa.bejhari@up.ac.za  http://www.healthethics-up.co.za
Private Bag X323, Arcadia, 0007  31 Bophelo Road, HW Snyman South Building, Level 2, Room 2.33, Gezina, Pretoria
Appendix 10

Medical surveillance forms
Surname: [blank]
Initials: [blank]
Employee No.: [blank]
Date of Birth: [blank]
Department: C & S
Code: 01
Address: Zone 16
2a - rankunja
Job Title: Seizer
Date Engaged: 08.08.2000
I.D.Number: [blank]
Medical Aid: Y X
Hospital Folder Numbers: [blank]
Known Allergies: None
Chronic Medical Conditions: None
Chronic Medications: None
Supplied by: [blank]
Date started / changed: [blank]
Surveillance Required: [blank]
Comments: [blank]
PRIVATE & CONFIDENTIAL

Name ________________________________

Company John Smith

No. ________________________________

Consent for taking of Specimens

This is to acknowledge that I, ________________________________ Co. No. ________________________________

Agree to undergo medical examinations / consent to the collection of biological specimens (as required for medical surveillance)

This document is confidential and relevant finding’s about occupational exposure may need to be divulged to the appropriate authorities.

Signature ____________________________

Date 23/08/06

Form AB
A. PRE-EMPLOYMENT MEDICAL EXAMINATION


11. ID/Passport Number  12. Company No.

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13. Occupational History and Hazard Exposure (in chronological order)

<table>
<thead>
<tr>
<th>Hazard Exposure (Radiation, Noise, Asbestos, etc.)</th>
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<tbody>
<tr>
<td>1. Heart disease or high blood pressure</td>
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<tr>
<td>N</td>
</tr>
<tr>
<td>4. Glaucoma or blindness</td>
</tr>
<tr>
<td>N</td>
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<td>10. A smoker (expanded in section 45)</td>
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<td>N</td>
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14. Medical History: If YES please provide complete details below (if space is insufficient, add supplementary notes on separate sheet). (N = No, Y = Yes)

Family History of:

- Heart disease or high blood pressure
- Refused work on medical grounds
- Malignant tumours or cancer
- Refused/Laid off for insurance

1. Heart disease or high blood pressure | 13. Head injury/concussion/unconsciousness | 27. Stomach, liver or intestinal trouble |
| N | Y | N | Y | Y |
| 2. Epilepsy or convulsions | 14. Epilepsy or fits of any kind | 28. Unexplained weight-loss or gain |
| N | Y | N | Y | Y |
| 3. Glaucoma or blindness | 15. Any other neurological disorder | 29. Bleeding from the rectum |
| N | Y | N | Y | Y |
| N | Y | N | Y | Y |
| 5. Cancer/Blood diseases | 17. Suicide attempt | 31. Sugar Blood or protein in urine |
| N | Y | N | Y | Y |
| 6. Hereditary diseases/Genetic abnormalities | 18. Eye or vision trouble (except glasses) | 32. Diabetes Mellitus (sugar sickness) |
| N | Y | N | Y | Y |
| 7. Refused work on medical grounds | 19. Hearing or speech disorders | 33. Prostate/Gynaecological problems |
| N | Y | N | Y | Y |
| 8. Refused/Laid off for insurance | 20. Allergies: Resp./Skin/Medicines | 34. Any blood or thyroid disorder |
| N | Y | N | Y | Y |
| 9. Refused/Laid off for insurance | 21. Asthma/lung disease/chronic cough | 35. Malignant tumours or cancer |
| N | Y | N | Y | Y |
| 45. Smoking No. of packs per day |
| If stopped, what date? |

15. REMARKS: (To be completed by Medical Examiner. Comment in full on all items marked YES.)

16. Medical Treatment within the last three (3) years which required sick leave > 7 days or hospitalisation

Date  | Name of Medical Practitioner, Specialists, etc.  | Diagnosis/Treatment

- | | |

17. Medications:

No

Medications:

18. Signature of Applicant

19. Signature of Med. exam

20. Date (DD-MM-CCYY)
## Occupational Health

### B. Physical Examination

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| 110 BMI | 18.7 |

Mark each item in the appropriate column

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<th>ABN</th>
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- Head, face, scalp and neck
- Ears, nose and throat
- Lungs, chest and breast
- Heart (size and sounds)
- Vascular system and lymphatics (pulses/glands)
- Abdomen (viscera and hernia)
- Genito-urinary system (external and rectal)
- Neurological system (cranial nerves, motor, sensory, reflexes)
- Upper and lower limbs (strength, range of motion)
- Spine and musculoskeletal (cervical, thoracic and lumbar)
- Skin and appendages
- Psychological evaluation report/impressions

### SPECIAL MEDICAL INVESTIGATIONS

To be conducted as prescribed by the OREP

#### 18. Vision Examination

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#### 19. Initial Screening Audiometry (Attached Audiogram)

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#### 20. Special Examinations (Attach reports)

- Lung function test (spirometry)
- FVC %, FEV1 %, FEV1/FVC %
- Chest X-ray (attach report)
- Peak flow
- Rest ECG (attach ECGs)
- Lab analysis (Attach reports)
- Hematological (FBC, Hb)
- Liver functions (GGT, ALT, AST)
- Lipogram (cholesterol, HDL, LDL, TG)
- Toxocology (lead, PCB, cholinesterase, etc.)

### 21. BASELINE

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### DECLARATION BY MEDICAL EXAMINER

I hereby certify that I personally examined the applicant and this report and attachments embody my findings completely and correctly.

The applicant (Full name): [Signature]

Company no: [Signature]

Occupation: [Signature]

Temporary unit: [Signature]

Unit: [Signature]

Recommended: [Signature]

Not recommended: [Signature]

Telephone no: [Signature]

Name and Qualifications: [Signature]

UNIVERSITAT VAN PRETORIA UNIVERSITY OF PRETORIA
UNIBESITHI YA PRETORIA

[Stamp] 28, 08, 00