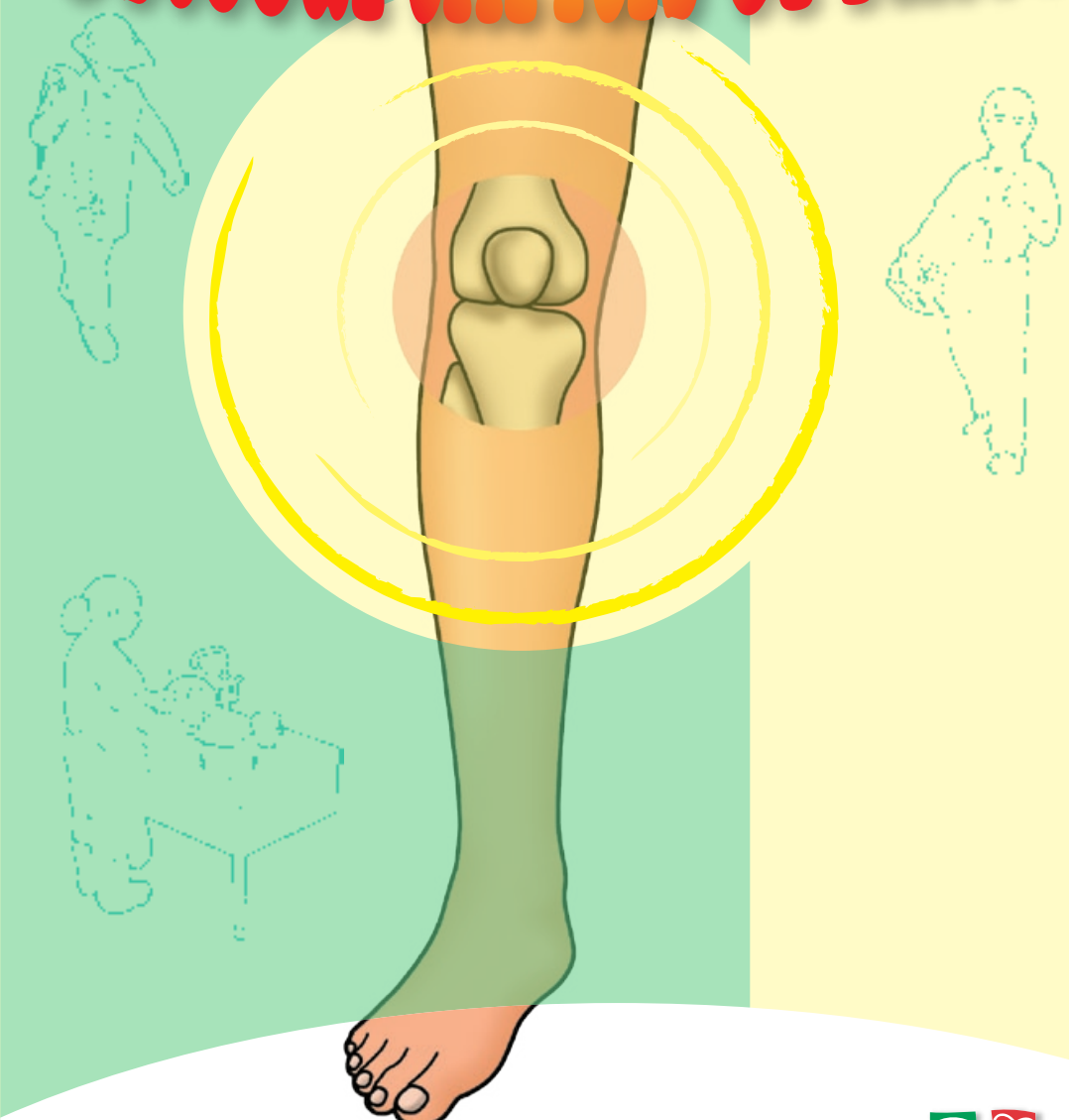


# Osteoarthritis of Knee



## Conclusion

Osteoarthritis of knee is a **"work-related disease"**. Although work is only one of the many risk factors in the development of the disease, the chance of getting this disease can be minimized by eliminating the health hazards at work, reducing the associated risks, and adopting appropriate preventive measures.

## Enquiry Service

For enquiries on this pamphlet or advice on occupational health and hygiene matters, please contact the Occupational Safety and Health Branch of the Labour Department through:

Telephone : 2852 4041  
Fax : 2581 2049  
E-mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found on our website [www.labour.gov.hk](http://www.labour.gov.hk).

Information on the services provided by the Occupational Safety and Health Council can be obtained through its hotline at 2739 9000 and website [www.osch.org.hk](http://www.osch.org.hk).

## Complaints

If you have any complaints about unsafe workplaces and practices, please call the Labour Department's Occupational Safety and Health Complaint Hotline at 2542 2172. All complaints will be treated in the strictest confidence.

## How to treat it?

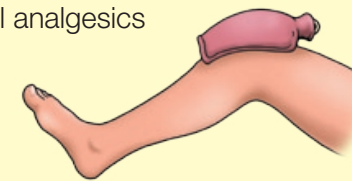
### Reduction of stress on the knee

- ▶ Suitable resting
- ▶ Weight reduction
- ▶ Use of assistive devices, e.g. walking stick



### Pain control

- ▶ Heat or cold application
- ▶ Medication, e.g. oral or local analgesics



### Exercise

- ▶ Help maintain suitable body weight, e.g. swimming
- ▶ Train up muscles



### Physiotherapy

- ▶ Relieve symptoms, e.g. ultrasound
- ▶ Strengthen the muscles around the knee joint, especially quadriceps femoris

### Surgery

- ▶ Surgical treatment and even artificial knee replacement may be required in serious cases

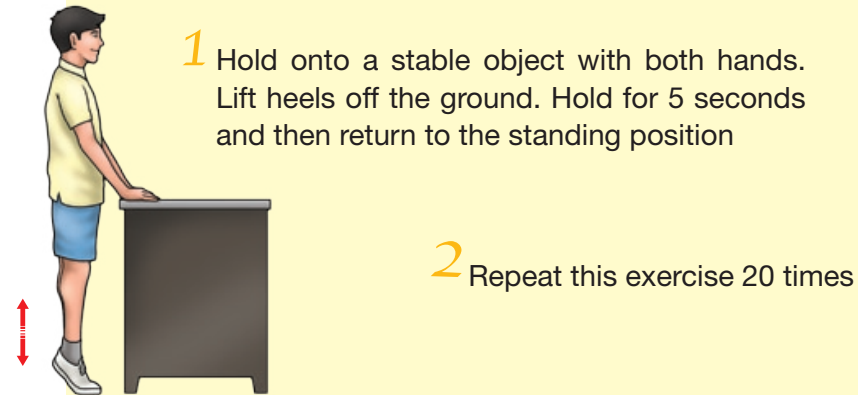
### Second Series



1 Sit upright with feet on the floor. Lift right leg at the horizontal level. Move right foot up and down 5 times

2 Repeat 5 times with left leg

### Third Series



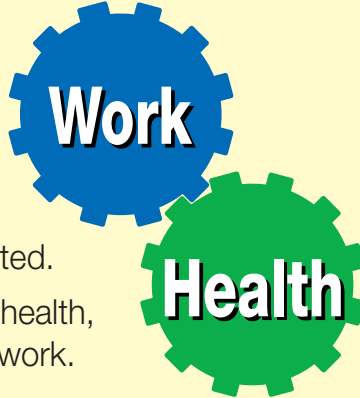
1 Hold onto a stable object with both hands. Lift heels off the ground. Hold for 5 seconds and then return to the standing position

2 Repeat this exercise 20 times

6. Consult medical practitioners for treatment as soon as possible after knee injury

7. Healthy lifestyle
- Adequate rest and sleep
  - Regular exercises
  - Balanced diet and avoid overweight

# Introduction



Work and health are closely related. While our work could affect our health, our health could also affect our work.

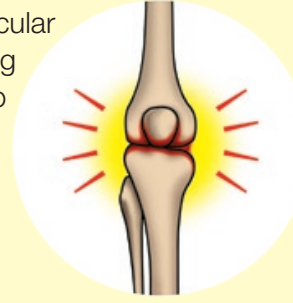
According to the International Labour Organization, the relationship between work and disease can be classified into the following three categories:

- 1 Occupational diseases** have specific or strong relationship to the exposure to physical, chemical, biological or psychosocial factors in the workplace. These factors in the work environment are predominant and essential in the causation of the diseases, for example, silicosis, asbestosis, occupational deafness, etc.
- 2 Work-related diseases** are multifactorial in origin, where factors in the work environment may play a role, together with other risk factors, in the development of such diseases, for example, plantar fasciitis, osteoarthritis of knee, shoulder tendonitis, etc.
- 3 General diseases** are diseases affecting the working population. They do not have causal relationship with work but may be aggravated by occupational health hazards, for example, diabetes mellitus, gout, rheumatoid arthritis, etc.

This pamphlet introduces osteoarthritis of knee which is a common "work-related disease".

# What is osteoarthritis of knee?

It is a common type of degenerative arthritis resulting from damage of the articular cartilage and disruption of the underlying bone structure of the knee joint, leading to pain and disability.



## Causes

- Degenerative changes of the knee associated with aging
- Knee trauma
- Excessive stress on the knee due to overweight
- Additional load borne by the knee in lifting and carrying heavy objects
- Frequent and repeated bending of the knee
- Other factors, e.g. congenital diseases of the knee



# Symptoms and Signs

## Early Stage

- Joint pain, especially when walking up or down stairs
- Stiffness of the joint, particularly after periods of inactivity, e.g. when wake up in the morning



## Late Stage

- Joint pain and stiffness increase. In more severe cases, there can even be tenderness and swelling of the joint



# Which occupations have a higher risk?

Manual labourers, cleaners, construction workers, firemen, professional sportsmen, etc.



# How to prevent it?

- 1.** Avoid prolonged walking
- 2.** Avoid prolonged bending of knees or squatting
- 3.** Reduce manual handling operations, or use suitable mechanical aids (e.g. trolley), to decrease the stress on the knee
- 4.** Maintain appropriate body weight
- 5.** Perform suitable lower limb exercises to relieve fatigue and strengthen the muscles



## First Series

- 1** Stand with feet apart at shoulder-width
- 2** Left foot steps forward, place your hands on the wall
- 3** Lean forward. Bend your left leg and stretch right leg behind without moving the heels. Hold for 10 seconds
- 4** Repeat the movements with the other leg
- 5** Repeat this exercise 5 times

