Number of Work/Study-Related Injuries

A total of 38 work/study-related injury cases were recorded in 2009. Among the cases:

- 27 cases involved staff members
- 4 cases involved students
- 7 cases involved contractors

A comparison of accident numbers over the past 10 years is shown in Table 1 below.

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Accident Number</td>
<td>28</td>
<td>28</td>
<td>25</td>
<td>23</td>
<td>21</td>
<td>25</td>
<td>23</td>
<td>20</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Student Accident Number</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>18</td>
<td>8</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

Lost Workdays

A total of 473 lost workdays of all staff injury cases were recorded by the end of 2009. More than half of the total lost workdays were contributed by 4 cases.

The comparison of lost workdays over the past 10 years is shown in Table 2 below.

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Lost Workday</td>
<td>453</td>
<td>71</td>
<td>190</td>
<td>382</td>
<td>123</td>
<td>278</td>
<td>430</td>
<td>86</td>
<td>140</td>
<td>473</td>
</tr>
<tr>
<td>Average Lost Workday Per Accident</td>
<td>16.2</td>
<td>2.5</td>
<td>7.5</td>
<td>16.6</td>
<td>4.1</td>
<td>7.9</td>
<td>17.2</td>
<td>4.8</td>
<td>6.4</td>
<td>17.5</td>
</tr>
</tbody>
</table>

The severity of individual cases is analyzed and indicated by the number of lost workdays as shown in Table 3. Among all the 27 staff injury cases, 4 cases did not incur any lost workdays, 9 cases incurred 3 or fewer lost workdays and 14 cases incurred more than 3 lost workdays.

The largest number of lost workdays in one single case was 134 days. The case involved an operational staff falling down from a ladder when descending.

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of Accidents</th>
<th>LWD=0</th>
<th>0&lt;LWD≤3</th>
<th>LWD&gt;3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>BIOL</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CSO</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DBM</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FMO</td>
<td>16</td>
<td>1</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>LANG</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SAO</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>4</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

LWD = Lost Workday(s)

Cause of Work/Study-Related Injuries

Figure 1 summarizes the causes for all work/study-related injuries in 2009.

Working with machinery and equipment had become the top cause for work/study-related injuries in 2009 although there were only 5 such cases in total.

The number of cases for “Sharp Objects”, which was the top cause in 2008, had been much reduced from 9 cases to 3 cases in 2009.

The cases were in fact rather evenly distributed among other causes.
## Locations of Accidents

Of the 31 staff and students injury cases:

- 9 occurred in laboratories
- 6 occurred in staff/student quarters
- 5 occurred in common areas
- 4 occurred in workshops/plant rooms
- 2 occurred in sport facilities
- 2 occurred in office areas
- 2 occurred off campus
- 1 occurred in classroom
Common Root Causes of Accidents

Besides classifying causes of injuries in terms of physical sources and energies involved, investigation of the injury cases also revealed some common underlying root causes. These root causes are summarized in Figure 2 below.

Figure 2. Common Root Causes of Accidents

<table>
<thead>
<tr>
<th>Root Cause</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Condition</td>
<td>5 cases</td>
</tr>
<tr>
<td>Unsafe Process or Improper Procedure</td>
<td>12 cases</td>
</tr>
<tr>
<td>Unsafe Knowledge or Skill</td>
<td>4 cases</td>
</tr>
<tr>
<td>Negligence</td>
<td>6 cases</td>
</tr>
<tr>
<td>Inadequate Protective Gears</td>
<td>3 cases</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1 case</td>
</tr>
</tbody>
</table>

Non-injury Incidents

A total of 11 non-injury incidents were reported in 2009, all of which occurred in laboratories. The incidents included:

- spills of chemicals due to accidental dropping of glass containers, mercury thermometer, etc. (4 cases),
- electric fault causing small fire in electrical equipment (1 case),
- flooding caused by water overflow from sink (1 case),
- odour complaints due to accidental release of gas and vapour in laboratories (2 cases),
- failure of a bench top centrifuge (with rotor flew out) during operation (1 case),
- bursting of a glass flask due to the building up of excessive pressure (1 case),
- improper functioning of a vacuum pump, giving out strange noise (1 case).

Summary of Significant Findings

1. There was an increase in number of staff injury cases, from 22 cases in 2008 to 27 cases in 2009.
2. There were 4 student injury cases in 2009, which were the lowest in the past 10 years.
3. The number of lost workdays in 2009 was 473 days which was 3 times larger than that of 2008. More than 50% of the total lost workdays were contributed by 4 cases.
4. The 31 injury cases involving staff and students were rather evenly distributed among the various causes with “Machinery/Equipment” being the top cause (5 cases), “Sharp Objects”, being the top cause for injuries (8 cases) in 2008, had caused fewer injuries (3 cases) in 2009.
5. Analysis of underlying root causes of the accidents indicates that the portion of accidents caused by “unsafe process or improper procedures” was still quite high. Efforts in risk assessment for improving work processes and procedures should be continued.
The annual Environment Week will be held from 18 to 22 April. It will cover many interesting topics on environment issues. The following are the highlights of the event.

**Showcase and Demonstration**

- **Electrical Vehicle Showcase and Demonstration**
  
  This event tells you about the latest electrical vehicle innovations and designs such as myCar concept. A seminar on the development of electrical vehicles and its charging infrastructure in Hong Kong will also be organized.

- **Low Carbon Food Cooking Demonstration**
  
  Former Hong Kong Commissioner of Police, Mr Dick Lee Ming Kwai and HKUST’s President Prof Tony Chan will demonstrate how to cook an environmentally friendly meal. A group of HKUST students will also make a presentation on food cooking using locally grown and seasonal food.

- **HKUST Green Fashion and Product Design Show**
  
  A group of HKUST students will show you their creative ideas on green living.

**Seminars**

- **Post-Copenhagen: Now What?**
  
  The implications of the Copenhagen Climate Change Summit 2009 on Hong Kong will be discussed.
• **HKUST 2020 CO₂ Emission Strategy**

  The proposed targets and goals of HKUST’s CO₂ emission strategy in the next ten years will be discussed.

• **Green Buildings**

  The seminar will discuss sustainability from an architectural perspective.

• **Green Jobs in Asia**

  Up-to-date information about green jobs in Asia will be presented by the Asia Business Council.

• **Students Sharing Session**

  A group of HKUST students will share with us their opinions on different international conservation strategies.

**Exhibition**

The theme of the exhibition is on recycling. It helps us to think about how our daily lives affect the environment.

**The Great Disconnect**

It is a book talk by Prof Bill Barron of the Institute for the Environment. His book discusses the world economy and the environment. He will also share with us how we can develop a more sustainable life.

**Inter-hall Eco-olympics Competition**

Seven halls will be assessed based on their green efforts, energy saving efforts, recycling rate and their degree of participation in the Environment Week.

**Library Collection Highlights on Environment and Sustainability**

It is a display of the Library collection. We can find books on topics of the environment and sustainability.

**HKUST Annual Coastline Cleanup**
Qualified divers will help clean the seabed along the coastline of our campus.

**Green Ambassador Award Ceremony**

The ceremony will officially appoint the first group of HKUST Green Ambassador and the nominees for the second group of the Green Ambassador.

Please stay tuned for further announcements and details!
A Unit Heads and DSOs Safety Management Meeting was held on February 25, 2010. Periodically, HSEO organizes meetings with colleagues involved in management of individual units to discuss safety management matters. In this year’s gathering, a recorded video message from our President, Professor Tony Chan, regarding HKUST’s commitment on health, safety and environment was shown to the audience to help communicate this important goal. Subsequently, Professor YS Wong, VP-AB and Chairman of HKUST’s Environmental Health and Safety Committee kicked off the event by sharing a message on departmental management’s roles and responsibilities in ensuring safe operations. This was followed by the presentation of accident and incident statistics for the past year by Professor Joseph Kwan, Director of Health, Safety and Environment. He also discussed several major accidents which occurred at universities elsewhere and reiterated the importance of continuing our effort in ensuring the proper implementation of a comprehensive safety and health management program. Several new initiatives were introduced. They include:

- The new Dangerous Goods Ordinance which requires accurate inventory tacking of hazardous materials in storage in DG stores, and in use at labs
- The new electronic inventory database
- The availability of HKUST workplace hazards assessment information
- The initiation of school-based audit of departmental safety management performance
- The requirement for conducting risk assessment of hazardous operations

In sharing with the audience how risk assessment is conducted at the unit level, Professor Richard Haynes of the Department of Chemistry, Professor Gordon Mckay of the Department of Chemical and Biomolecular Engineering and Mr Chung Wing Leong of the Nanoelectronics Fabrication Facility took turn in introducing their schemes. While each scheme is a bit different from the others, they all achieve the purposes of systematically identifying various physical, chemical and biological hazards encountered in specific work processes and determining the necessary control measures required to ensure safety.
Prior to the end of the meeting, Professor TC Pong, AVP-AA delivered a short message to remind colleagues in leadership roles to fulfill their safety management responsibilities and to cooperate with HSEO to help ensure a safe, healthy and environmentally sustainable campus.

While there were many unit heads and departmental safety officers at the meeting, those who missed the meeting, and others colleagues as well as students can view a video recording of this event by accessing: http://videochannel.ust.hk/Watch.aspx?Video=B8CE2780C604DEF1.
What is physiotherapy?

Physiotherapy is a treatment approach utilizing natural and physical ways to cure muscular and joint problems. It is a non-invasive method and is non-pharmaceutical. Based on the knowledge of human anatomy and physiology, physiotherapists use various modalities (such as electro-stimulation, ultrasound and heat) or manual techniques so as to restore the normal function of the body.

Who is a physiotherapist?

In Hong Kong, physiotherapists receive intensive training at the university and need to be registered at the Physiotherapists’ Registration Board before they can practice. All physiotherapists are well trained in assessing the problems of the patient and will design a suitable treatment plan so as to speed up the recovery and restore normal function.

Common problems seen at physiotherapy clinic at UST

The most common problems seen at the physiotherapy clinic of UST are either back or neck problems. The problems are either due to overuse syndrome or poor working postures. The rest are either sprain or strain injuries. The following are the summary of the injury types:

1. Sports and Musculoskeletal Injuries
   - Spinal problem (neck and back injuries)
   - Head and dizziness which are with neck as source
   - Headache
   - Limbs problem (including frozen shoulder, tennis elbow, sprain wrist, knee injury, heel pain, etc.)
   - Other orthopaedic conditions (rehabilitation of fractures and other surgery)

2. Occupational Repetitive Strain Injuries
How does the physiotherapy help the problems?

When a staff comes to the clinic for treatment, the physiotherapist would spend time to assess the problems and find out the “root” causes. Then, the physiotherapist will use the best way to treat the problems and restore the normal functions:

- Manual and manipulative therapy
  - Use manual techniques such as mobilization and manipulations to restore the normal joint functions.

- Electrotherapy
  - It is an electrical means such as interferential therapy, ultrasound and heat therapy so as to reduce pain and improve blood circulation to speed up the healing process.

- Exercise and posture re-education
  - Physiotherapist may use various exercises and postural re-education so as to improve the body function and reduce recurrence of problems. It is believed that self care or management would be the most effective way to cure the problem.

When would be the best time to have physiotherapy?

If you have a problem, the best way is to talk to your doctor early and see if it is appropriate to be referred for physiotherapy. The longer you leave the problem, the more pain you suffer and it is harder to cure. The physiotherapy clinic is equipped with ultrasound and interferential therapy machines. The physiotherapist can also use manual therapy techniques to restore joint and muscle function. Other techniques such as muscle energy and trigger point therapy may also be used. Pilates, stretching and strengthening exercises can be used to maintain the treatment result. It is also important for patients to do the exercises that the physiotherapist recommends regularly.

Preventing Musculoskeletal Problems

The best way to address musculoskeletal problems is to prevent them. In this connection, proper workplace design and proper work postures are two important keys. Contact your Departmental Safety Officer or HSEO colleagues if consultation is required.