

LIFE IS PRECIOUS!
CHERISH YOUR
HEALTH!



STAYING HEALTHY AT WORK – A STRATEGY FOR ORGANISATIONAL HEALTH

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Question

What is the biggest asset in Singhealth?



**Is it important to have healthy staff?
How can we keep our staff healthy?**

Aim

1. Why **Healthy Employees** are an advantage?
2. Understand interaction between the
Work Environment – Personal Health
3. **FIVE Principles of Integrating Personal Health** into
existing **Workplace Health** programme

US Health System – Relationship between Work, Life and Health

US = Wealthiest country in the world with highest healthcare expenditure

1. Chronic disease rates increasing – 78% healthcare costs
2. Ageing workforce
3. 5000+ occupational fatalities & 4 million occupational injuries and diseases
4. Average time spent at work = 8.7 hrs/day

**To fully address health –
address what happens at work and outside of work**

Do You Know?

	1998	2004	2010
Prevalence among adults aged 18 – 69 (%)			
Hypertension	27.3	24.9	23.5
Diabetes Mellitus	9.0	8.25	11.3
High Total Cholesterol	25.4	18.7	17.4
Obesity	6.0	6.9	10.8
Daily Smoking	15.2	12.6	14.3

Hypertension: $\geq 140/90$ mmHg

Diabetes: 2-hour plasma glucose during an oral glucose tolerance test ≥ 11.1 mmol/l

High Total Cholesterol: Total cholesterol ≥ 6.2 mmol/l

Obesity: BMI ≥ 30 kg/m²

Daily Smoking: Smokes cigarettes at least once a day

Cancer is the Number 1 Killer in Singapore

* **1 in 3** Singaporeans dies of cancer

* **14** people die from cancer every day

33 people are diagnosed with cancer every day

Ministry of Health, Singapore Health Facts, Principal Causes of Death, updated 30 Jan 2012.

Top 5 Causes of Cancer 2010-2014, National Disease Registry

Men		Women	
Colorectal	17%	Breast	29%
Lung	15%	Colorectal	13%
Prostate	12%	Lung	8%
Liver	7%	Corpus uteri	6%
Lymphoid neoplasm	7%	Ovary	5%

Costs of Work-Related Diseases

Occupational Fatalities (2008)	67 fatalities
Work-related Disease Fatalities (2008)	1,388 fatalities 62% cancers + 22% cardiovascular diseases
Singapore's Cost of Work Injuries & Work-related Ill Health (2011)	\$10.45 billion (3.2% Singapore's GDP)
Employer's Cost of Work Injuries & Work-related Ill Health (2011)	\$2.31 billion or \$8,000 per case
Direct Cost of Diabetes (2010)	\$2034/individual/year
Indirect Cost of Diabetes to Employers (2010) Productivity losses from absenteeism, presenteeism, non-participation in labour force, lost productivity capacity from early mortality	USD500m/year

From Workplace Safety and Health Institute, Singapore: Global Estimates of Burden of Injury and Illness at Work in 2012
Ng S et al. Direct medical costs of Type 2 diabetes in Singapore. PLoS One. 27 Mar 2015; 10(3)
Economic costs of diabetes mellitus in Singapore, 2010

Who Pays?

Economic Costs of Work Injuries & Ill Health

22%

Employers

- Staff turnover costs
- Training costs
- Drop Productivity
- Insurance Premium
- Legals Costs

51%

Workers

- Net Loss of future earnings (loss of future earnings – compensation)
- Medical costs
- Rehabilitation costs

27%

Community

- Social payouts
- Investigations / Inspections
- WSH promotion
- Loss of human capital
- Medical subsidy

From Workplace Safety and Health Institute: Global Estimates of Burden of Injury and Illness at Work in 2012

\$140k compensation for worker's death

Judge rejects appeal on payout to kin of Chinese national, 21, who had heart attack at work

By K.C. VIJAYAN
LAW CORRESPONDENT

THE family of an airport worker who died suddenly from a heart condition at the age of 21 will receive \$140,000 in compensation after the High Court ruled that his death was work-related.

Mr Wang Zengming, a Chinese national whose parents are farmers from Shandong province, collapsed after carrying heavy food and drink containers that were to be loaded onto a plane at Changi Airport.

His family was awarded the compensation by the Commissioner for Labour last October.

But his employers and their insurers appealed against the payout, arguing that Mr Wang's death was not work-related.

On Monday, Justice Lai Siu Chiu threw out the appeal, saying in a written judgment that the death was linked to carrying the heavy loads.

She said the decision to challenge the payout had served only to prolong the parents' grief at losing their son, which could have been especially painful

given that China allows many families to have only one child.

"No amount of compensation, let alone the award, would have consoled (the parents) in their irreplaceable loss if the deceased had been their only child," said Justice Lai.

Mr Wang had been working as a cabin service assistant for Singapore Airport Terminal Services since July 2007. His job was to deliver food and drinks from the catering building to airplanes.

On the day he died in April 2009, he and a colleague made deliveries to three planes. On the third delivery, they loaded between three and four containers and from eight to 10 oven racks onto trolleys. Each container and oven rack weighed up to 25kg.

The items were then loaded onto a nearby delivery truck, and the workers followed the truck to the plane so they could help unload it. Mr Wang then went to a resting area, where he vomited and collapsed. He died in hospital about an hour later.

It later emerged that he was unknowingly suffer-

ing from a heart condition, which caused an irregular heartbeat.

Associate Professor Gilbert Lau from the Health Sciences Authority testified at a previous hearing that the physical strain of Mr Wang's work caused him to suffer the cardiac arrest.

The insurers - Allianz Insurance, and Singapore Aviation and General Insurance - brought in a private-practice cardiologist, Dr Baldev Singh, who testified that it was more likely the Chinese national had suffered from an unexplained random attack of "sudden death syndrome".

He said this was based on the length of time that the dead man had spent resting after the third delivery, and the non-strenuous nature of his job.

But Justice Lai said in her judgment that the cardiac arrest occurred while Mr Wang was at work. This meant the incident happened in the course of employment, and the insurers had failed to disprove this.

She said the evidence of Prof Lau and Mr Wang's co-worker Lee Keok Chuan was more convincing, as "Lee... had personal experience of the nature of the deceased's duties and because Prof Lau appeared to be the more reliable witness".

Justice Lai added that the Commissioner for Labour had been right to discount the "armchair evidence" of supervisors who said Mr Wang's work was not strenuous and Dr Singh's opinion that his heart condition was generally benign.

The dead man's family was represented by lawyer Shanker Kumar, while the insurers' lawyer was Mr Niru Pillai.

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May 2011

Worker with unknown pre-existing heart condition died during strenuous physical work - Judge ruled as Work-related

Dark Clouds on Singapore Workforce

- Ageing workforce
 - Work longer and retiring later
 - Higher risk of chronic diseases + work-related diseases
- Chronic diseases earlier age of onset
- Emerging work-related health conditions eg musculoskeletal and mental health conditions

Silver lining

Chronic and Work related diseases =
Preventable or can be detected early

Administrative Staff

Medical Social Worker

- *Her father, a very senior OT attendant, broke his finger while transferring a patient*
- *Work is stressful and demanding. Sometimes I bring my stress home too and it can affect my husband and children.*
- *When one has flu in the office, the rest gets the flu too*

Clerical Staff, Outpatient Clinic

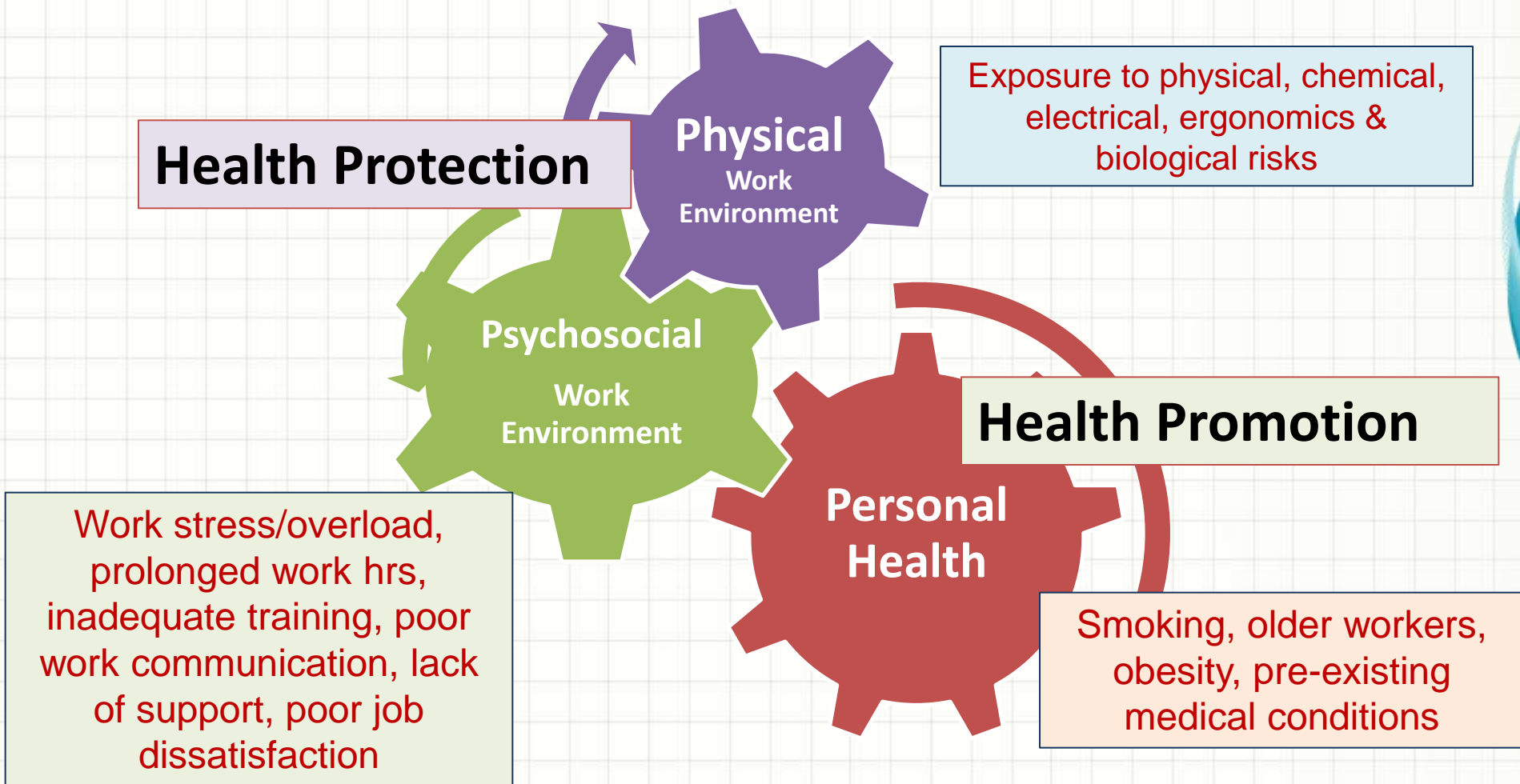
- *Pain – neck, shoulders and back*
- *Has not heard of office ergonomics*
- *Treatment – go for massage and has to take MC*
- *No time to be healthy. Hence overweight!*

Clinical Staff

Physiotherapist: *I experience pain in the thumbs and low back pain. This could be due to manipulations and transferring patients. The pain was always affecting me even when I'm at home.*

Dental Surgeon: *We are all hearing impaired and perpetually have neck and back aches – these are occupational hazards. I don't listen to music via earpieces anymore. After 3 months of physiotherapy, I stretch and always take the stairs wherever I can.*

Concept of Total Health



Interactions between Work and Personal Health

Family issues causes stress and anxiety – impacts patient safety at work.

De Quervain's Syndrome of right thumb from carrying baby at home. Difficult to type or handle equipment at work.

Physical Work Environment

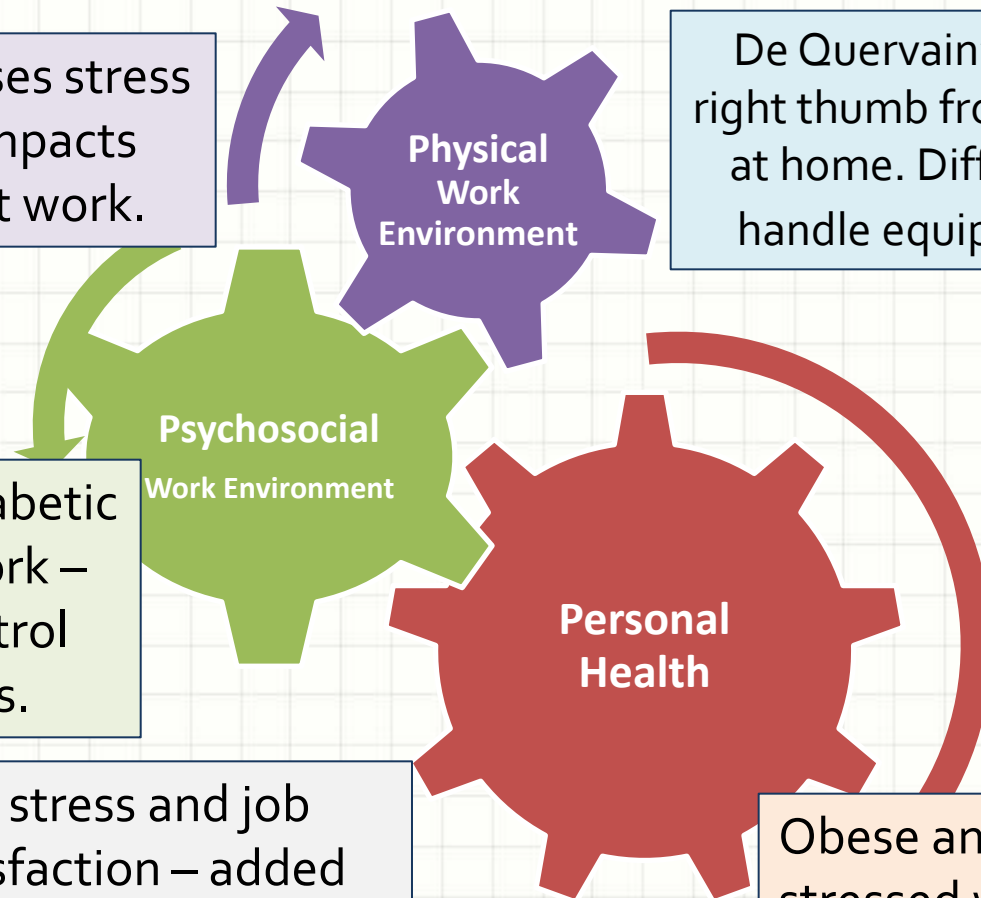
Psychosocial Work Environment

Personal Health

Insulin dependent Diabetic nurse doing shift work – has poor sugar control during night shifts.

Work stress and job dissatisfaction – added stress from home. Smokes and drinks more.

Obese and hypertensive, stressed worker suffers a heart attack while doing strenuous work.





5 PRINCIPLES OF STAYING HEALTHY @ WORK

P1. Mindset Change - Senior Management

DARTMOUTH-HITCHCOCK MEDICAL CENTRE



- **Live Well Work Well** policy
- Vision - achieve the healthiest population possible, leading the transformation of health care in our region and setting the standard for our nation. *Achieving the healthiest population possible starts here with our own workforce.*

Senior Management Support

- Total Health approach:

Health = Physical Hazards + Psychosocial Factors +
Personal Health

- Link Health to business strategies and priorities
- Make business case – prevention saves money
- Safety and Health is an investment, not a cost

Safety = Return on Investment

Every \$1 invested in workplace safety



≥ \$3 in savings



workplace injuries & illness



Workers' compensation costs, lost work time,
hiring/retraining replacements

McDonald C. "Workplace safety pays, survey shows." National Underwriter; Sep 17,2001;105,38

Breastfeeding Support Best for Mother, Child & Bottom Line

- **AETNA** provides breastfeeding support as part of its **New Child** program
- = preconception planning, fitness to work, return to work, breastfeeding support
- “Mother’s rooms” with breast pump & private cubicles
- Reduced stress & increased social support
- Savings of **\$1400 + 3 sick days** per breastfeeding employee in 1st year / 3-to-1 ROI



Entrusted with the Health of A



Health Risk Assessments Make a Difference

- Johnson & Johnson's **Healthy People** program
- Health risk assessments + intervention program
 - Target smoking cessation, physical inactivity, blood pressure, cholesterol
 - Occupational Medicine
 - Support balance - work and life responsibilities
 - Counseling to resolve job performance issues
- Savings of **\$224/employee/year**

Johnson & Johnson

Keeping people safe, helping employees to lead healthy lives and protecting the environment are among our top priorities



P2. Engage Employees – Key Stakeholder

- **Why OHS and Wellness programmes fail?**
 - Insufficient awareness, charging too much for participation, unrealistic timing
 - Privacy concerns
 - “high risk” employees fear discrimination
- **Some ways to encourage participation:**
 - Employee involvement in all steps
 - Clear, consistent communication
 - Joint employee-management committees
 - Regular updates
 - Consult with unions
 - Medical confidentiality

P3. Integrate Systems to Common Goals



Components of TWSH



Total
Workplace
Safety
and
Workplace
Health

Management System
Policies, Structure, Processes

Multi-disciplinary Management
Committee/Unit/Department/Division

Holistic Risk Management
Safety and Health risks

ACCIDENTS

GENERAL
DISEASES

OCCUPATIONAL
DISEASES

WELL-BEING

Contextualized Programs
Health Protection and Promotion

Workplace
Safety

Ergonomics

Diabetes
Management

Hearing
Conservation

Weight
Management

Return to
Work

Government
Employer
Worker

Accidents

Occupational
Diseases

General
Diseases

Well-Being

Leverage on Occupational Medicine

Primary Healthcare + Occupational Medicine



Comprehensive suite of medical solutions

- Preventive Medicine strategies
- Fitness to work and return to work
- Management of workplace health risks
- Disability assessments
- Workplace assessments and modification
- Medical Board for job transfers

Nurse with Hand Rash

- Staff Clinic noted redness, swelling and vesicular rash of hands bilaterally. Repeatedly treated for dermatitis. Referred to OM Doctor.
- Allergic contact dermatitis to latex gloves
- Changed to non-latex gloves (vinyl or nitrile gloves) with great improvement



Fitness to Return to Work

- Fitness to return to work assessment by Physician following a change in medical status:
 - Chronic disease eg diabetes mellitus, hypertension, strokes, cancer
 - Medical condition affecting functional capacity eg cataracts
 - Notifiable workplace injuries
 - Pregnancy
- Assess:
 - if chronic disease will be aggravated by workplace exposures
 - if medication taken will impact work safety
 - Normal duties or Work Restrictions

Risk to self or others
Poor DM control with
shiftwork

Hypoglycaemia

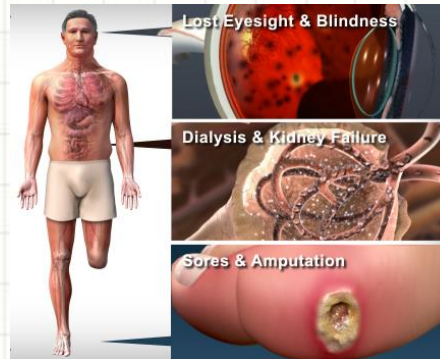
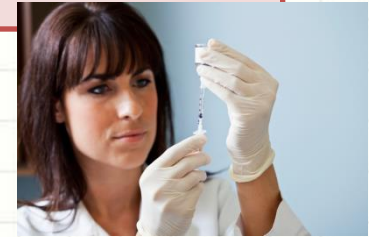
Poor fitting shoes +
prolonged walking – foot
abrasion/ulcers
Fine hand coordination –
syringing, lab bench work

Neuropathy

Risk from Infectious
Agents

Retinopathy Cataracts

Visual impairment



DIABETES

Kidney Disease & Immune Suppression

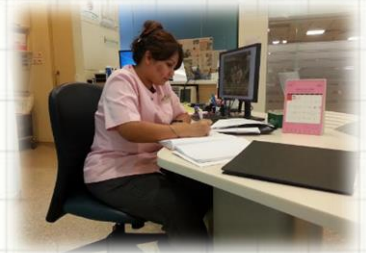
Risk of stroke & heart
attack during manual
work & stress
Can't use N95

Heart Disease



P4. Wellness and Ergonomics for All

- Ergonomics Risk Factors:
 - Repetitive work
 - Awkward postures
 - Heavy loads
 - Close visual work
- Adjust your workstation to suit yourself using ergonomics guidelines
- 20 / 20 Rule to prevent eye fatigue
- Stretching few mins before, during and end of each work day



Stretch & Flex Programme

- UC Berkeley - **Stretch & Flex** program for maintenance & service workers
- Ergonomic & wellness principles during 1st week of training to promote safer techniques
- Covers neutral postures, lifting techniques, muscle conditioning, diaphragmatic breathing
- Stretching exercises done at start of work shift



Berkeley
UNIVERSITY OF CALIFORNIA



Bus captains trying out healthier food options recommended by the Health Promotion Board, at the SMRT Choa Chu Kang bus interchange, as Senior Minister of State for Health and Manpower Amy Khor (back row, in red) and Senior Minister of State for Finance and Transport Josephine Teo (in white) look on. ST PHOTO: DESMOND FOO



Drive to help bus captains stay healthy

New programme offers free health checks and coaches to advise on diet and exercise

Adrian Lim

Bus drivers are getting free health checks and tips on how to eat right, exercise properly and manage their chronic diseases, under a new workplace health programme being piloted.

More importantly, the six-month programme will be brought right to their doorstep – through monthly talks and health coaching sessions that will be held at bus interchanges in Ang Mo Kio, Boon Lay and Choa Chu Kang.

The programme, which kicked off two months ago and was unveiled yesterday, is an initiative of the Ministerial Committee on Ageing and the Tripartite Oversight Committee on Workplace Health.

Some 400 bus captains from SBS Transit and SMRT are taking part in the scheme, and have already undergone a basic health screening.

Senior Minister of State for Health and Manpower Amy Khor said bus captains face specific challenges from the long hours they put in – up to 10 hours a day, six days a week – which lead to fatigue, poor hydration and backaches.

“(There are) multiple stress (factors) also, because of road conditions, demanding passengers, as well as perhaps trying to meet service requirements to be punctual,” she added.

The workforce is also mature – about 60 per cent of bus captains

as nutrition, exercise, driving ergonomics, and looking after one's vision and mental health. Chronic diseases such as hypertension, diabetes and high blood pressure will be addressed as well.

There will also be healthier meals at the canteens, including dishes with brown rice.

Moreover, the health talks will be held between noon and 4pm, while the bus captains are changing shifts, to minimise disruption to their work schedules.

Bus drivers are taking these health lessons to heart.

Take Mrs Wang Moi Fan, 46, a senior bus captain with SBS Transit, who said in Mandarin: “In the past, I always ate fried foods like fried chicken but, now, I go for steamed fish and more vegetables.

“The company also gave us health screenings before, but there were no coaching sessions. This is good,” she added.

SMRT chief bus captain Lam Choong Kian, 60, has ramped up his workout routines.

“I used to do just 15 minutes on the step trainer but, now, I go for 40 minutes to an hour. I'm dripping in sweat by the end!” he said.

The workplace health programme for bus captains is being conducted in collaboration with the Ministry of Health, the National Transport Workers' Union, SBS Transit, SMRT, the Health Promotion Board and Tan Tock Seng Hospital's Institute of Geriatrics

SG
50

*Come Celebrate With Our
Collection Of International Brands*

1 August 2015. 400 bus captains from SBS Transit & SMRT – works up to 10 hrs/day x 6 days/week. Fatigue, poor hydration, backaches. Health program = health screening, exercise, nutrition, driving ergonomics, vision and mental health.

Tips for Office Ergonomics

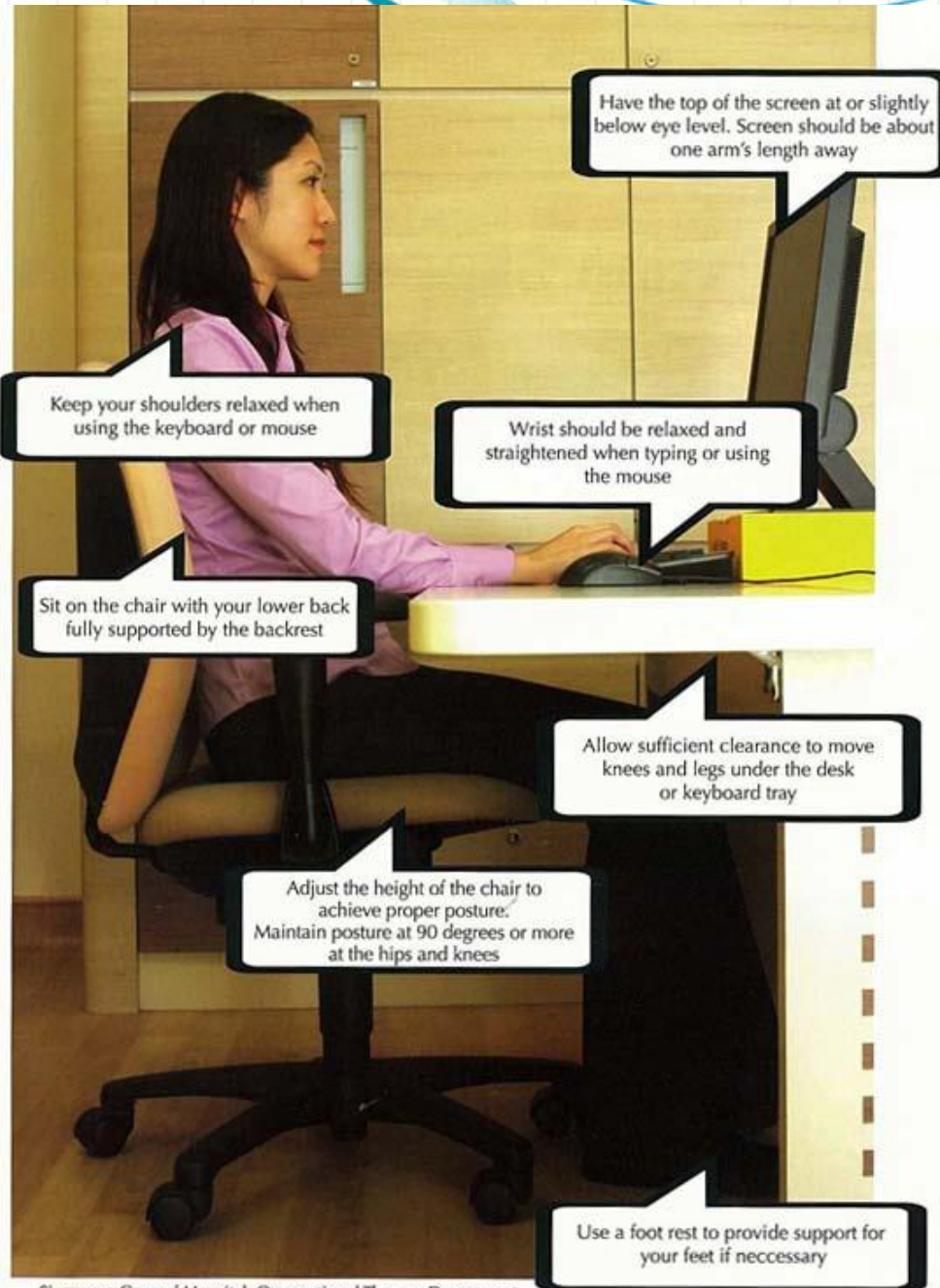
Give your eyes a break by looking at a distant object regularly

Use minimum force when typing on the keyboard

Interrupt long periods of sitting at regular intervals

Alternate between tasks that use different muscle groups

Perform stretching exercises regularly



Have the top of the screen at or slightly below eye level. Screen should be about one arm's length away

Keep your shoulders relaxed when using the keyboard or mouse

Wrist should be relaxed and straightened when typing or using the mouse

Sit on the chair with your lower back fully supported by the backrest

Allow sufficient clearance to move knees and legs under the desk or keyboard tray

Adjust the height of the chair to achieve proper posture. Maintain posture at 90 degrees or more at the hips and knees

Use a foot rest to provide support for your feet if necessary

Singapore General Hospital, Occupational Therapy Department

ving Medicine Centre

www.workhealth.com.sg

Easy Office Stretches

TAKE A FEW MINUTES TO RELAX TIGHT MUSCLES, RELIEVE EYE STRAIN AND BOOST ENERGY!

NECK

Lower ear to shoulder. Slowly roll chin on chest up to other shoulder and back again. Repeat 5x.



Turn head, look over shoulder. Hold 5 counts. Repeat 2x each side.



LOWER BACK

Bend to one side. Hold 10 counts. Repeat on other side.



HANDS & WRISTS

Circle wrists inward, then outward. 10x each direction.



Interlace fingers (palms outward) and extend arms forward. Hold 5 counts, release. Repeat 3x. Shake out hands.



UPPER BACK & SHOULDERS

Move arms overhead in climbing motion. Repeat 10x each side.



Circle shoulders forward, then backward. Repeat 10x each direction.



Bend forward and hold 10 counts. Raise up slowly and hold 10 counts.



Stretch!

It's good for your mind and good for your body. Your muscles, bones and structures require the stretching activities. Being sedentary is harmful to stretching and stretching is good for you. Stretching is good for you. Stretching is good for you. Stretching is good for you.



Get more ergonomic stretching solutions at www.ergonomic.com

AMTAR KOLFO

P5. Measure Impact and Returns

- Plan for ways to evaluate progress & effectiveness
- Evaluate ROI – MC rates, turnover, medical claims
- Case studies of success stories

Integrated Value Chain Approach

ORGANISATIONAL HEALTH

Key Index	Components
Occupational Health & Safety	<ul style="list-style-type: none">• Work environment risk evaluations• Incident reporting• Work injury/disease rates• Workers Compensation claim rates• MC rates
Personal Well-being	<ul style="list-style-type: none">• Lifestyle risk factors• Job engagement• Health culture index• Readiness to change
Clinical Outcomes	<ul style="list-style-type: none">• Disease burden• Absenteeism rates
Business Outcomes	<ul style="list-style-type: none">• Staff turnover• Lost productivity• Programme utilisation• Return on investment

Summary

