UNIVERSITI PUTRA MALAYSIA

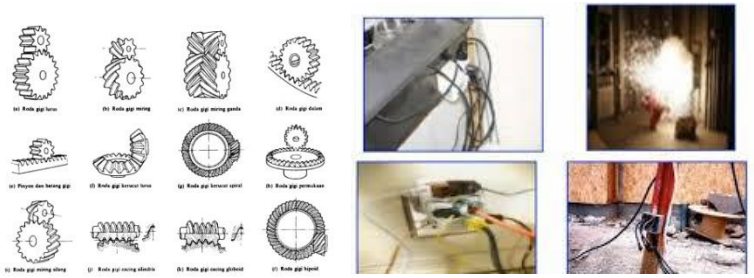
AGRICULTURE • INNOVATION • LIFE

OSH in Office

SAFETY IN THE OFFICE

Why UPM?

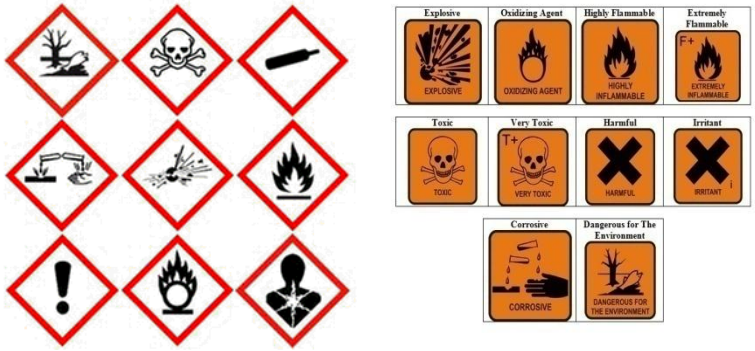
HAZARD IN WORKPLACE



PHYSICAL

BIOLOGY

ERGONOMIC



CHEMICAL

PHYCHOSOCIAL

ENVIROMENT - NATURE

People are different – how boring if we were all the same….

"We like to bring together people from radically different fields and wait for the friction to produce heat, light and magic. Sometimes it takes a while."

HUMAN RUNS THE OFFICE

COMPUTERS CHANGE THE OFFICE ON 1980s

THE OFFICE DESIGN

A place to work and perform

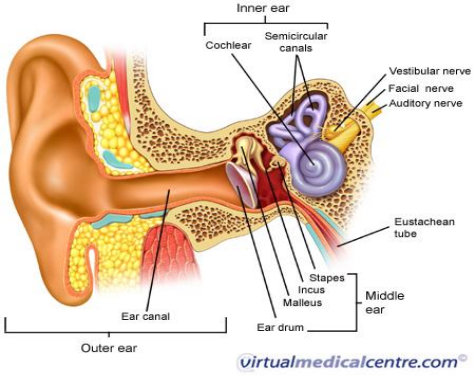
OPEN OFFICE

Advantages	Disadvantages
Generally less expensive	Noise
Less utilities bills	Lack of privacy (confidential information)
Communication	Extend to physical health
Collaboration among workers	

THE OFFICE ENVIRONMENT

Affect health, ability and performance

- Temperature
- Humidity
- Ventilation
- Contaminated Air
- Smoking
- Ozone and Photocopiers
- Sick Building Syndrome
- Lighting
- Colour
- Office Floor Space
- Welfare Facilities
- Cleanliness

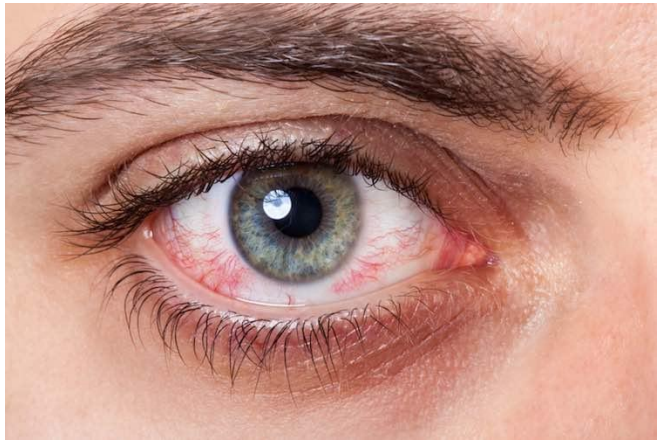


Pencahayaan umum - yang memberikan pencahayaan seragam ke seluruh kawasan kerja dan tidak mengehadkan kedudukan kerja;

Rajah 15: Pencahayaan umum

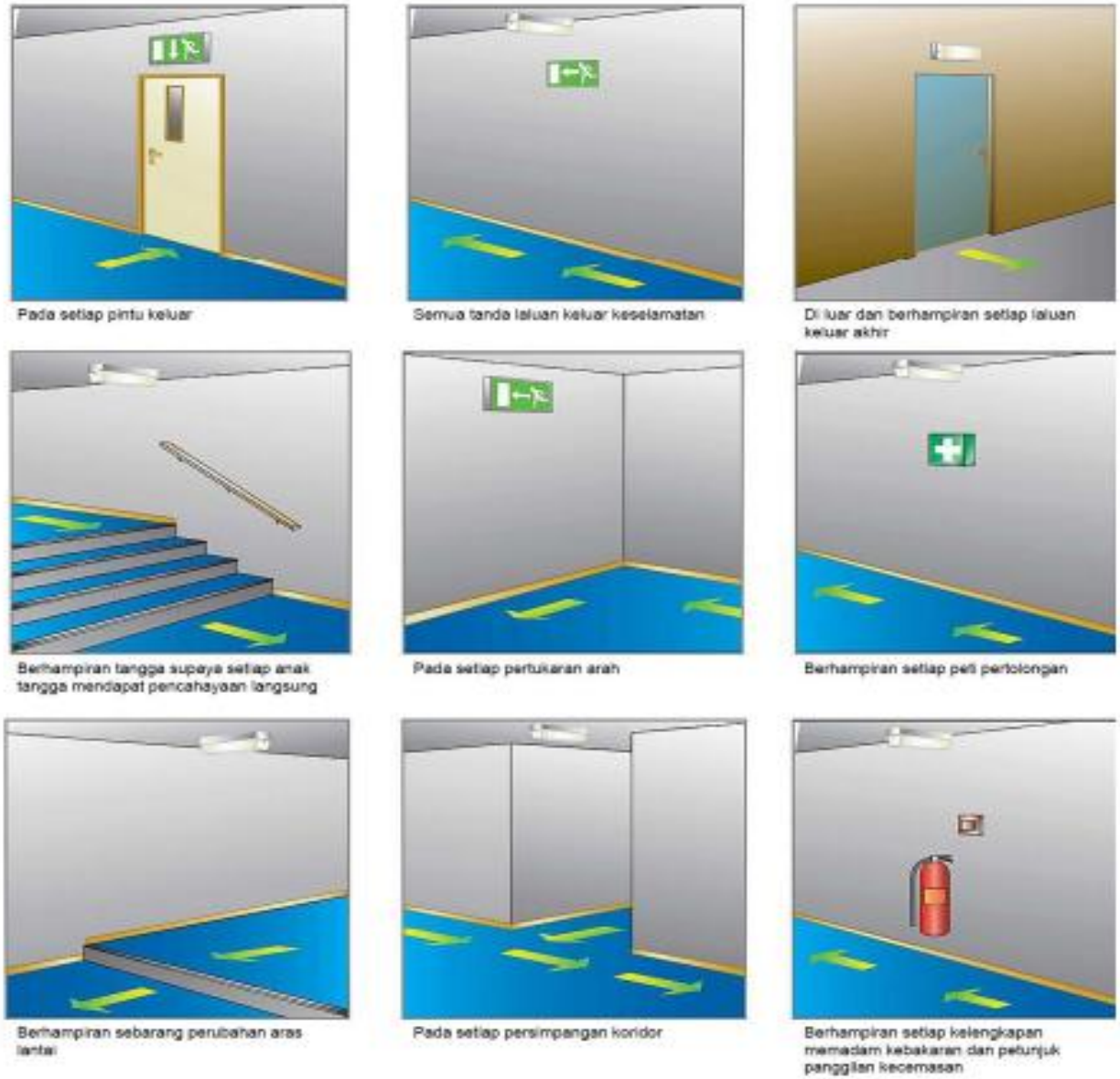
Pencahayaan setempat - menyediakan pencahayaan pelbagai tahap di bahagian yang berbeza di kawasan kerja yang sama dan ia sepadan dengan tahap pencahayaan di lokasi kerja;

Rajah 16: Pencahayaan setempat

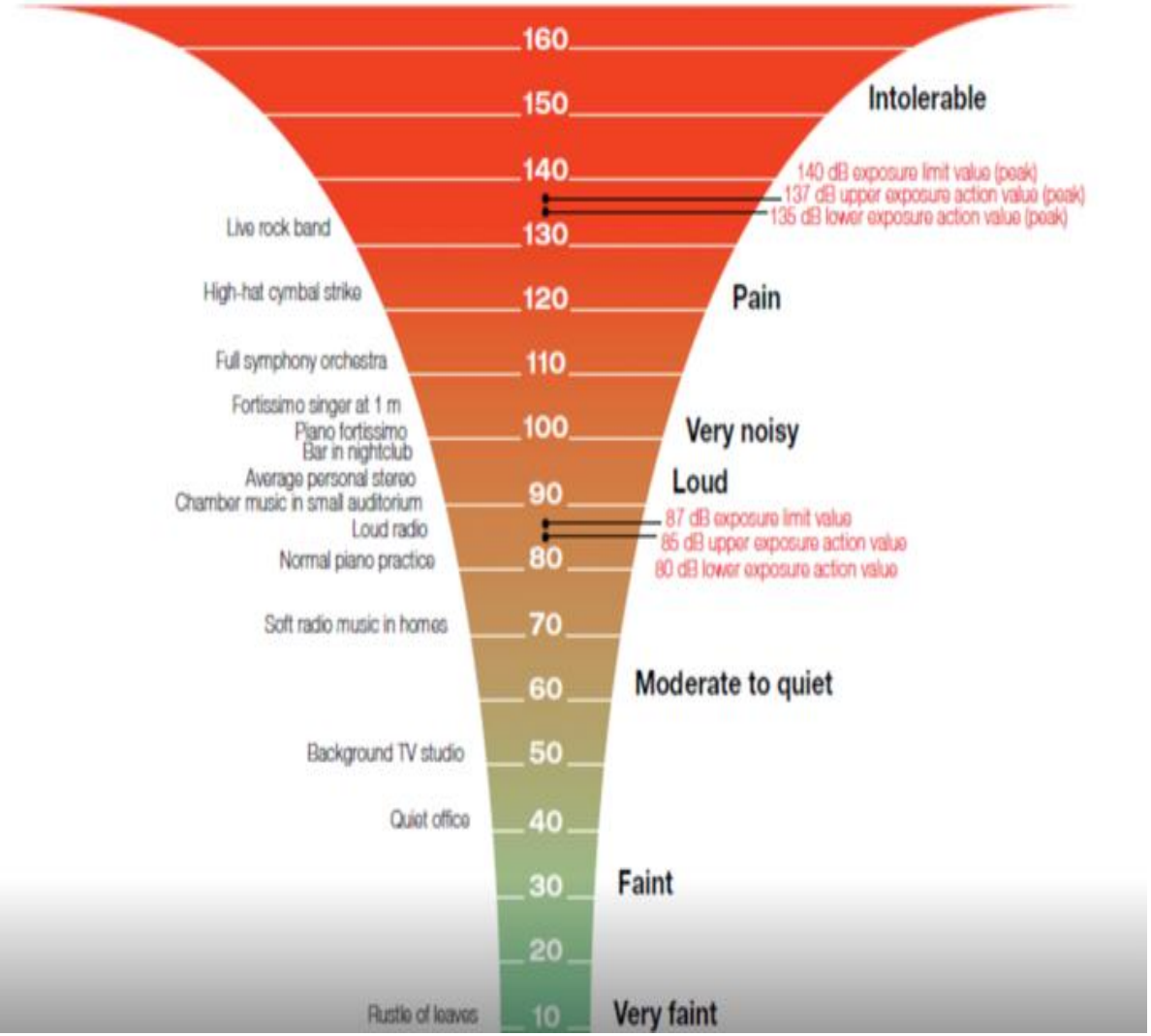


Activity	Illumination *(lux, lumen/m^2)*
Public areas with dark surroundings	20 - 50
Simple orientation for short visits	50 - 100
Working areas where visual tasks are only occasionally performed	100 - 150
Warehouses, Homes, Theaters, Archives	150
Easy Office Work, Classes	250
Normal Office Work, PC Work, Study Library, Groceries, Show Rooms, Laboratories	500
Supermarkets, Mechanical Workshops, Office Landscapes	750
Normal Drawing Work, Detailed Mechanical Workshops, Operation Theatres	1,000
Detailed Drawing Work, Very Detailed Mechanical Works	1500 - 2000
Performance of visual tasks of low contrast and very small size for prolonged periods of time	2000 - 5000
Performance of very prolonged and exacting visual tasks	5000 - 10000
Performance of very special visual tasks of extremely low contrast and small size	10000 - 20000

Lokasi khusus sistem lampu yang perlu disediakan ditunjukkan dalam **Rajah 30**.



Rajah 30: Lokasi khusus sistem lampu yang perlu disediakan
(sumber: BS 5266:1999 Part 7: Emergency Lighting Design Guide)


160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Intolerable
140 dB exposure limit value (peak)
137 dB upper exposure action value (peak)
135 dB lower exposure action value (peak)
Live rock band
High-hat cymbal strike
Pain
Full symphony orchestra
Fortissimo singer at 1 m
Piano fortissimo
Bar in nightclub
Very noisy
Average personal stereo
Chamber music in small auditorium
Loud
Loud radio
87 dB exposure limit value
85 dB upper exposure action value
80 dB lower exposure action value
Normal piano practice
Soft radio music in homes
Moderate to quiet
Background TV studio
Quiet office
Faint
Rustle of leaves
Very faint

Pendedahan Dilarang
Aras Tindakan Selamat
Had Pendedahan Dibenarkan
Ambang Kesakitan
85 dBA
90 dBA
115 dBA
130 dBA

OFFICE FLOOR SPACE

Workstations should be comfortable with safe and suitable chairs and sufficient space.

A good rule of thumb for personal space is to allocate 6.25 square meters per individual workstation, including furniture and fitting, but excluding passageways and amenities.

CHAIRS AND OTHERS FURNITURE

Our body is built to move about, not to hold still

WORKSTATIONS DIMENSIONS

Recommended dimensions for seated and standing work are given in figures 2 and figure 3. These recommendation are base on International Labour Office (ILO) Higher Productivity and A Better Place to Work - 1988.

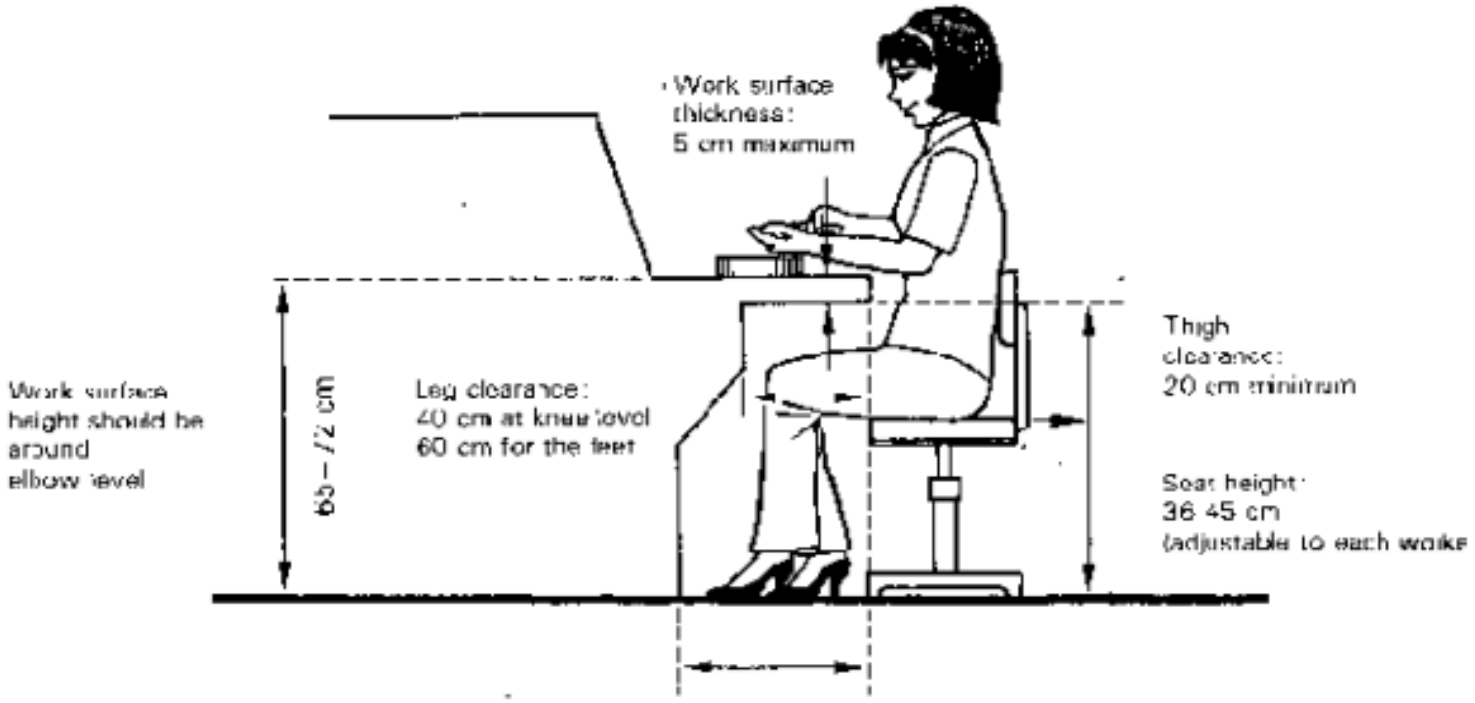
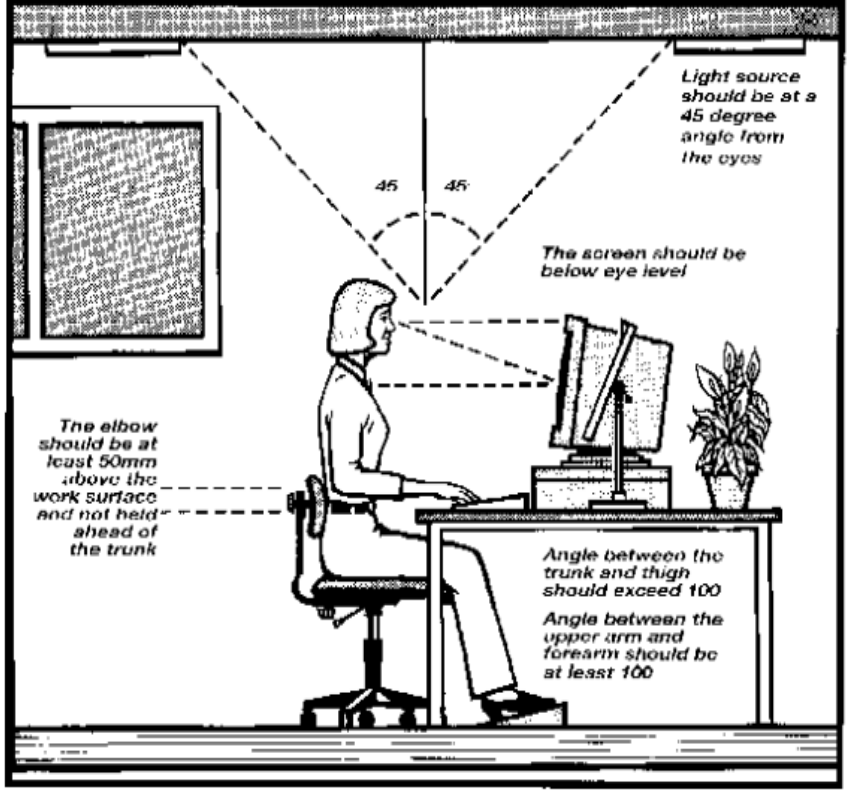
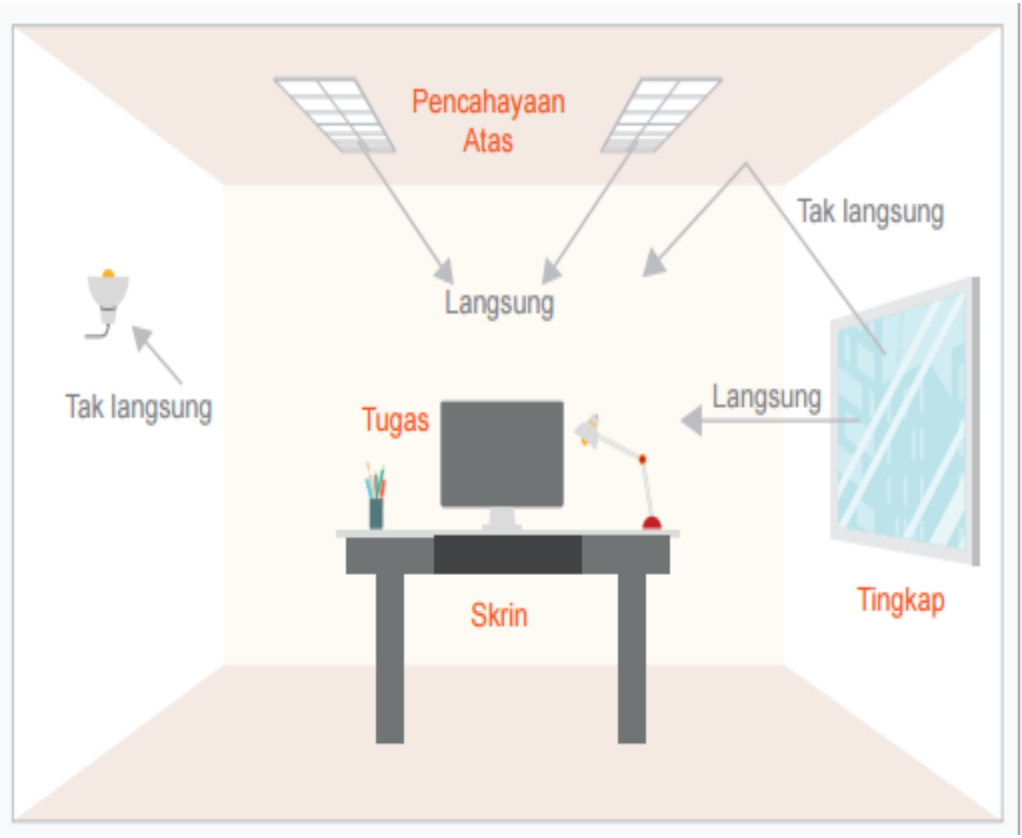


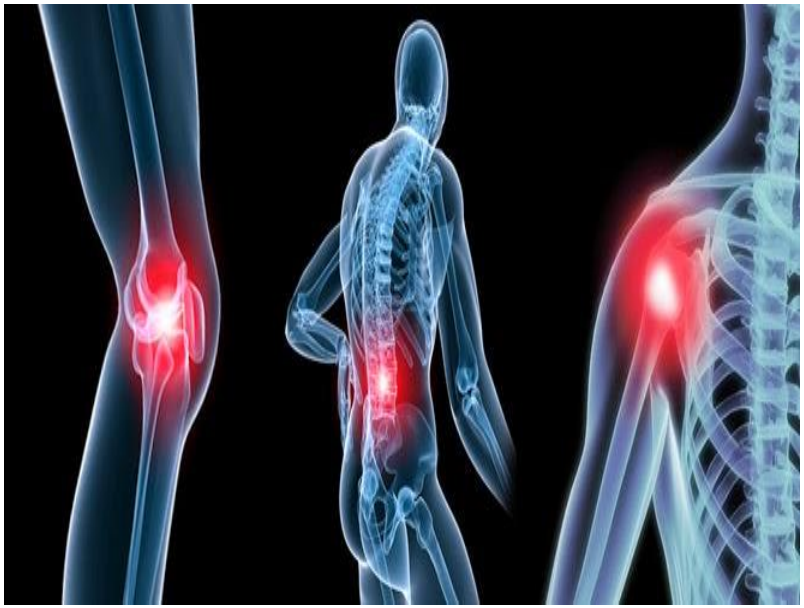
Figure 54

Recommended dimensions for most seated tasks


Light source should be at a 45 degree angle from the eyes
45
45
The screen should be below eye level
The elbow should be at least 50mm above the work surface and not held ahead of the trunk
Angle between the trunk and thigh should exceed 100
Angle between the upper arm and forearm should be at least 100


Pencahayaan Atas
Tak langsung
Langsung
Tak langsung
Tugas
Langsung
Skrin
Tingkap

COMMON COMPLAINTS



Headaches

Blurry vision

Irritated eyes
that may be red
or feel dry

Pain or strain in
the neck, shoulders,
or back

MUSCLE WORK

Stimulate Contraction

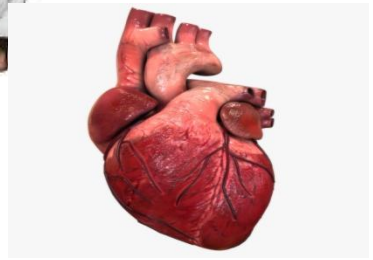
Streched

Elasticity

Adaptability

Voluntary vs. Involuntary

Movement



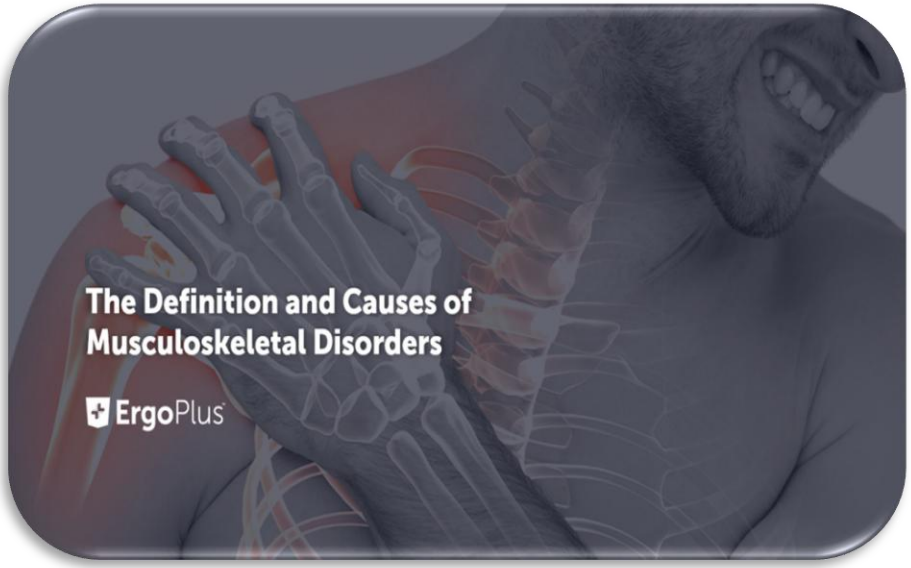
Cardiac Muscle

Nervous System

Skeleton Muscle

Smooth Muscle

MUSCULOSKELETA DISORDER



A study of Work Related Complaints of Arm, Neck & Shoulder (CANS) among office workers in Selangor & Kuala Lumpur

Repetitive Motion

Carpal Tunnel Syndrome

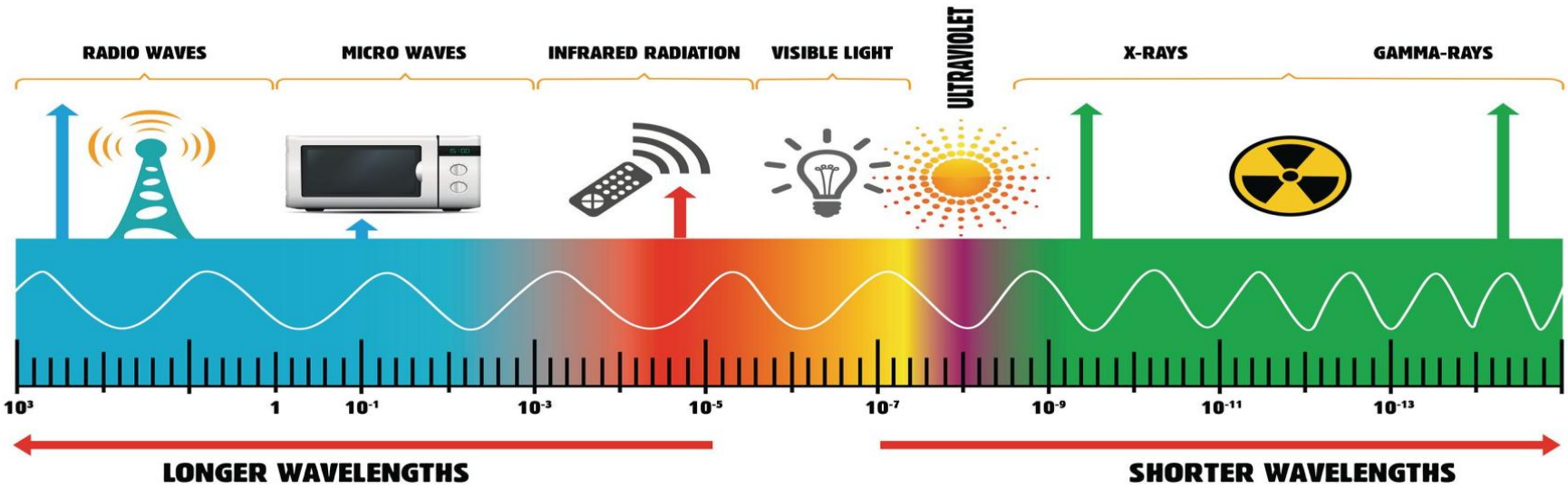
Back & Neck Pain

EXERCISE / STRECHING

COMPUTER RADIATION?

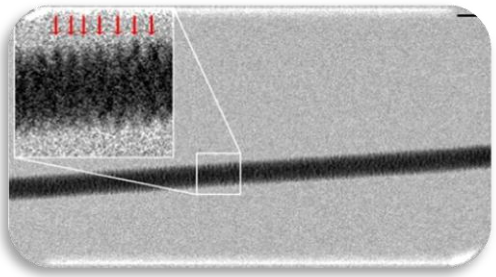
IONIZING RADIATION

...is a band of colours, as seen in a rainbow, produced by separation of the components of light by their different degrees of refraction according to wavelength.



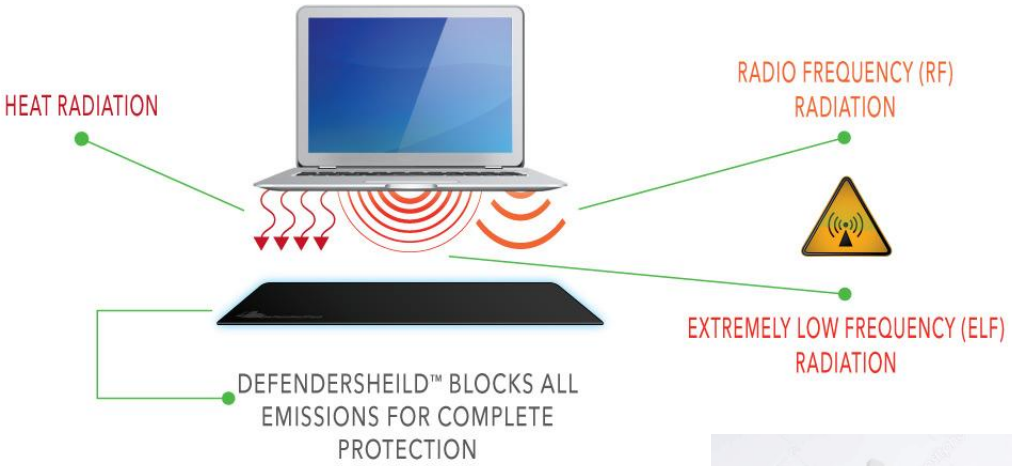
Radiation Symbol

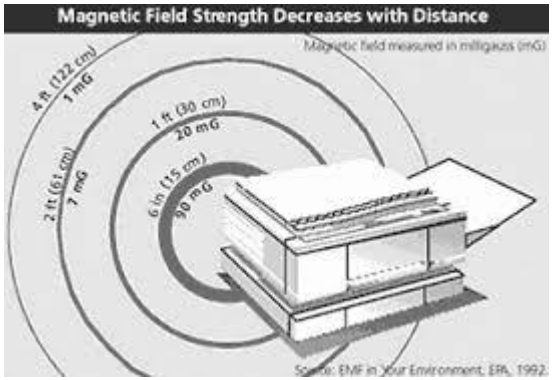
OSL Badge

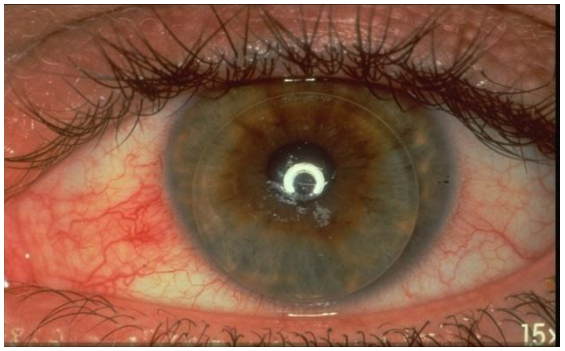


deoxyribonucleic acid

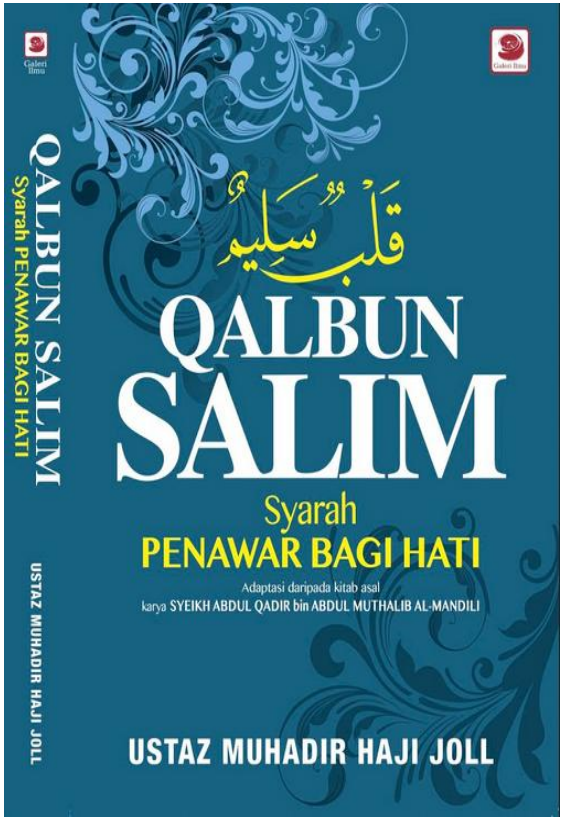
NON - IONIZING RADIATION

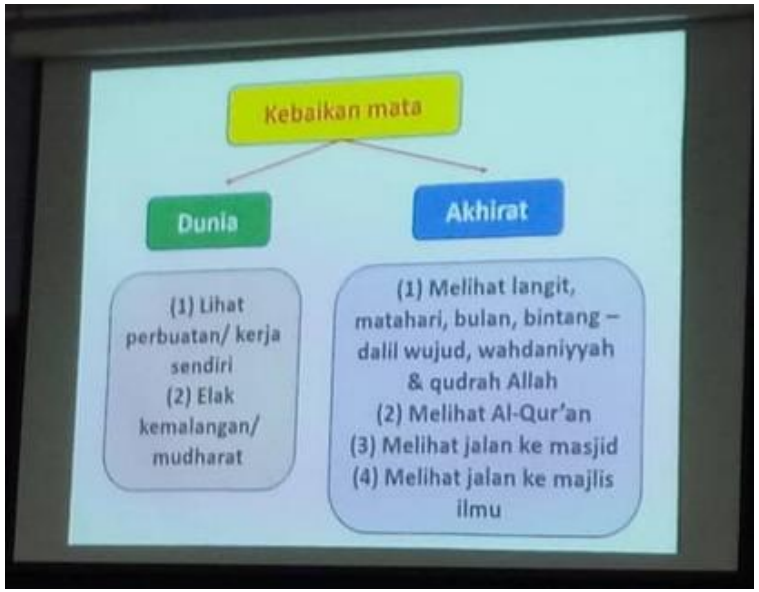


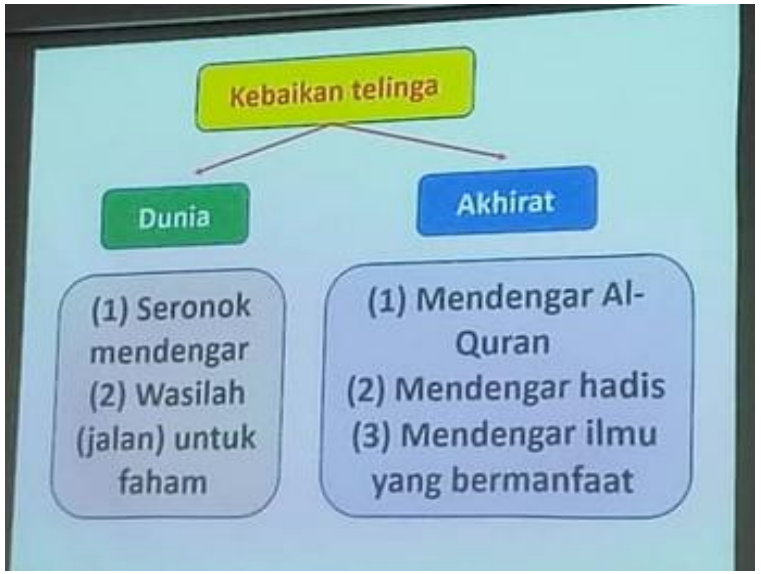


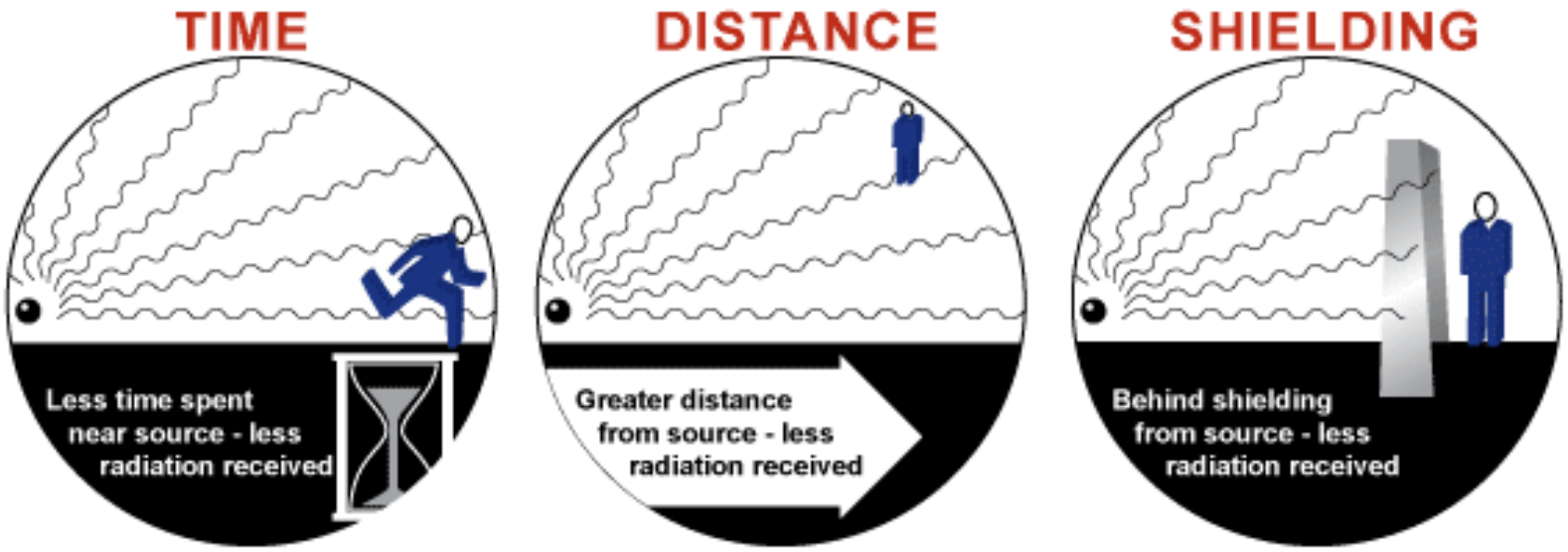


0.000093 W/m²


قَلْبٌ سَلِيمٌ
QALBUN SALIM
Syarah
PENAWAR BAGI HATI
Adaptasi daripada kitab asal
karya SYEIKH ABDUL QADIR bin ABDUL MUTHALIB AL-MANDILI
USTAZ MUHADIR HAJI JOLL
QALBUN SALIM
Syarah PENAWAR BAGI HATI
USTAZ MUHADIR HAJI JOLL

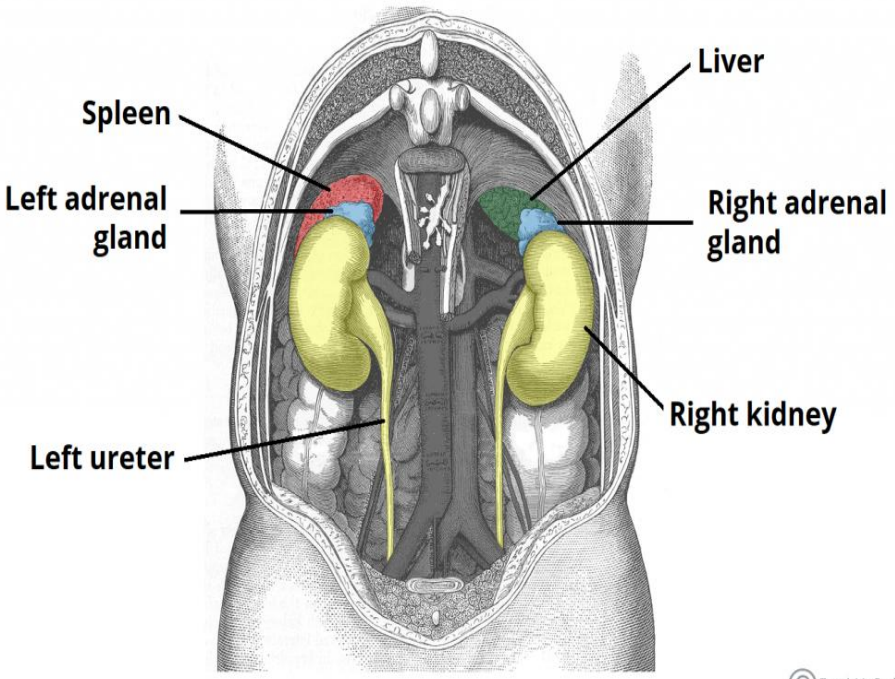

Kebaikan mata
Dunia
Akhirat
(1) Lihat perbuatan/ kerja sendiri
(2) Elak kemalangan/ mudharat
(1) Melihat langit, matahari, bulan, bintang – dalil wujud, wahdaniyyah & qudrah Allah
(2) Melihat Al-Qur'an
(3) Melihat jalan ke masjid
(4) Melihat jalan ke majlis ilmu

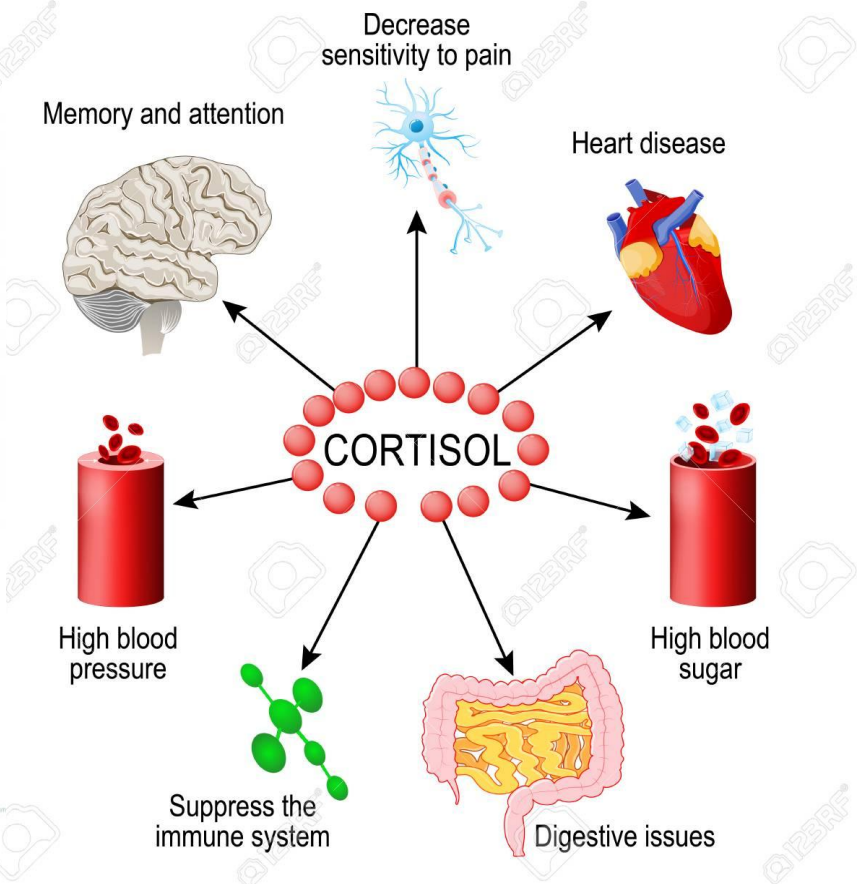

Kebaikan telinga
Dunia
Akhirat
(1) Seronok mendengar
(2) Wasilah (jalan) untuk faham
(1) Mendengar Al-Quran
(2) Mendengar hadis
(3) Mendengar ilmu yang bermanfaat


TIME
Less time spent near source - less radiation received
DISTANCE
Greater distance from source - less radiation received
SHIELDING
Behind shielding from source - less radiation received

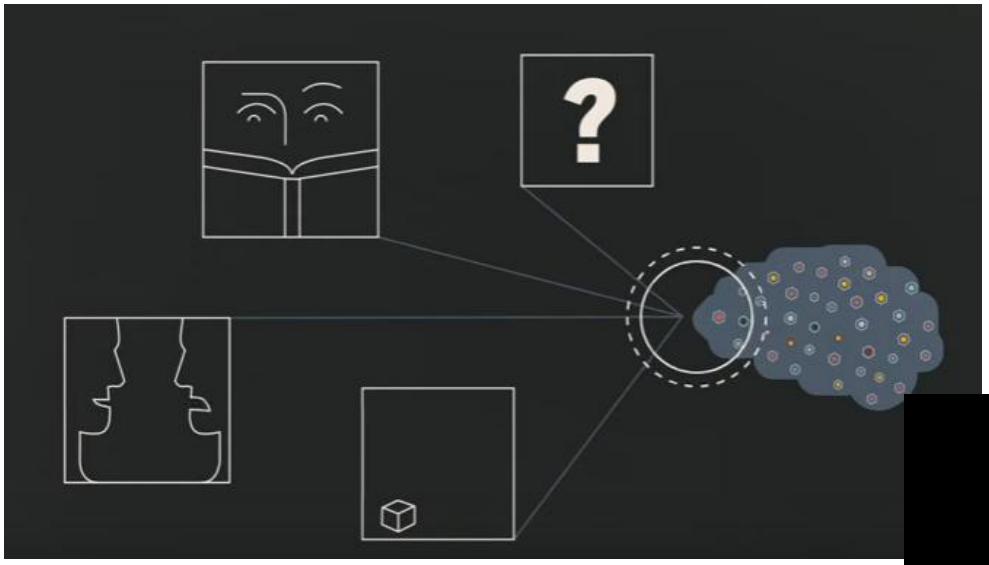
Stress refer to an individual's psychological and physiological responses to environmental demands

PRIMARY STRESS HORMONE

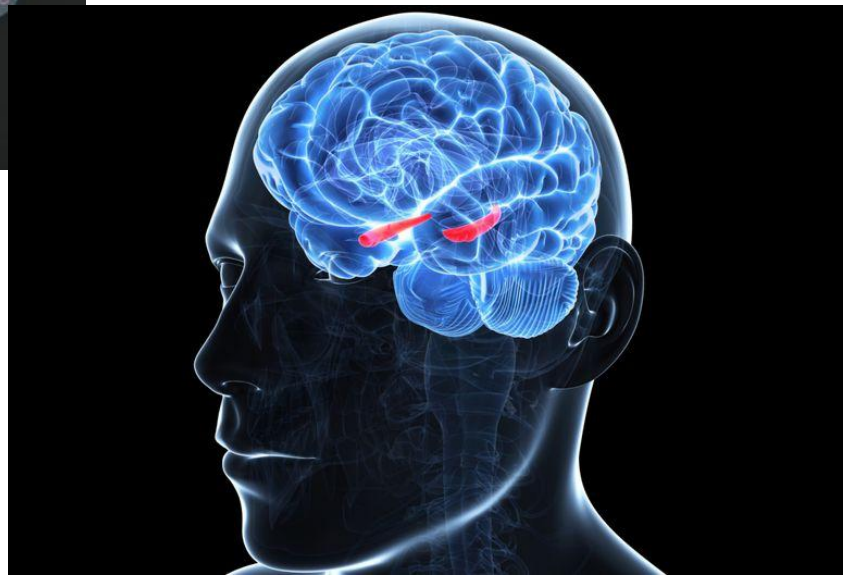




Brain affected and lead to…



Alzheimer's



Depression

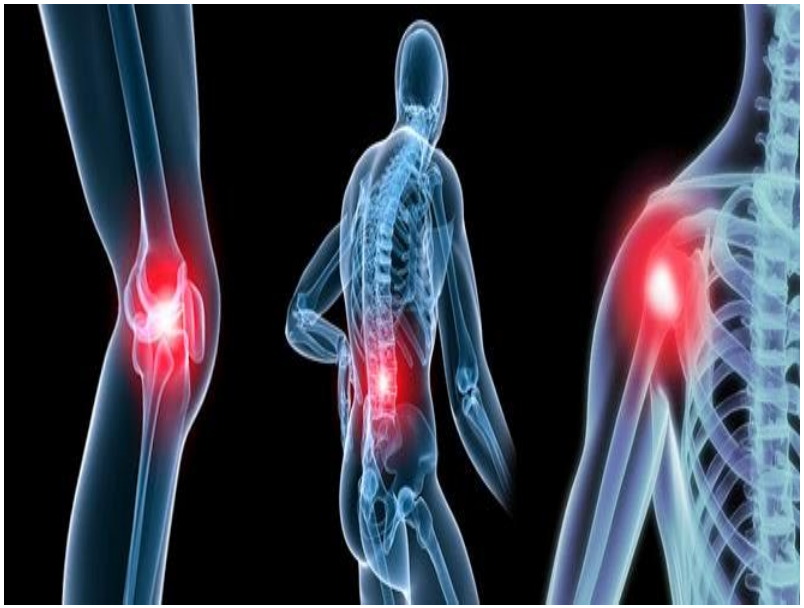
Ujian DASS 21 (Depression Anxiety Stress Scale 21)

LOSS OF MONEY, ABILITY PEOPLES & ETC

STRESS CAN BE CURED?

OR JUST A COMBAT…

TAKE ACTION IF….



Headaches

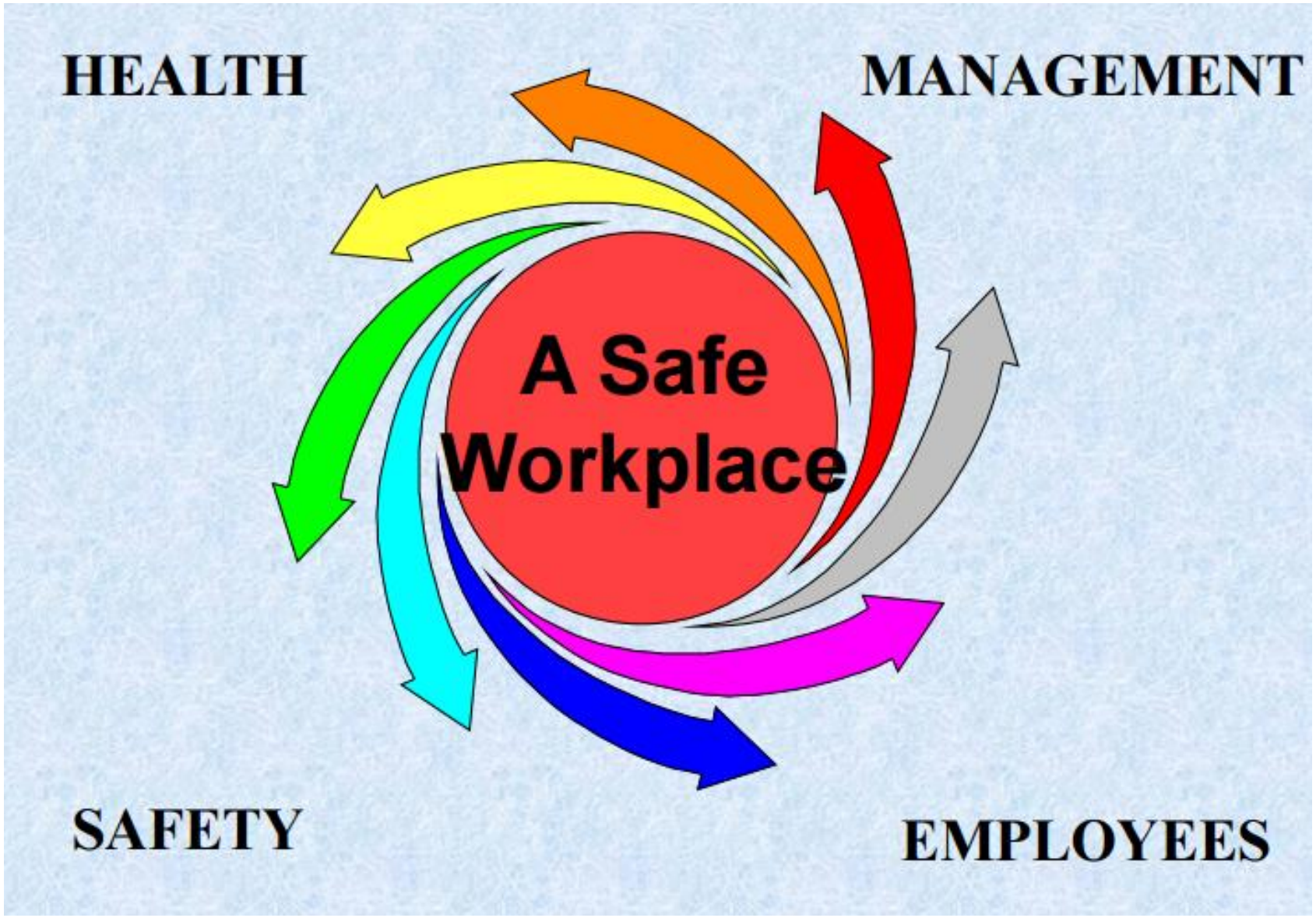
Blurry vision

Irritated eyes
that may be red
or feel dry

Pain or strain in
the neck, shoulders,
or back

In Emergency…

Watch out..


HEALTH
MANAGEMENT
A Safe Workplace
SAFETY
EMPLOYEES

MENGAPA JAWATANKUASA KESELAMATAN DAN KESIHATAN PENTING?

Jawatankuasa Keselamatan dan Kesihatan memberi peluang kepada pihak pengurusan dan pekerja untuk berjumpa dengan lebih kerap bagi membincangkan isu keselamatan dan kesihatan di tempat kerja. Ianya adalah satu cara yang penting untuk membimbing pekerja dalam pengetahuan praktikal dan gambaran pihak pengurusan ke atas tempat kerja dan organisasi kerja.

3.0 OBJEKTIF JKKP

3.1 OBJEKTIF UMUM

- Pematuhan kepada Akta Keselamatan dan Kesihatan Pekerjaan 1994 dan peraturan-peraturan yang berkaitan dengannya.

3.2 OBJEKTIF KHUSUS

- Sebagai landasan untuk mewujudkan kerjasama antara majikan dan pekerja dalam usaha meningkatkan keselamatan dan kesihatan di tempat kerja, sejajar dengan kehendak Akta Keselamatan dan Kesihatan Pekerjaan 1994.
- Sebagai satu mekanisma untuk perhubungan dua hala antara majikan dan pekerja dalam menyebarkan informasi berkaitan aspek keselamatan dan kesihatan pekerjaan.
- Meningkatkan kesedaran pihak majikan dan pekerja dalam aspek keselamatan dan kesihatan pekerjaan

4.0 KOMPOSISI DAN KEANGGOTAAN JKKP

4.1 JKKP mestilah terdiri daripada:-

- Seorang Pengerusi
- Seorang Setiausaha
- Wakil majikan
- Wakil pekerja

4.2 Setiap anggota yang mengisi komposisi JKKP ini mestilah diberikan surat atau sijil lantikan sebagai ahli JKKP.

Carta Alir 1
Organisasi Jawatankuasa Keselamatan dan Kesihatan Pekerjaan

4.3 Bilangan ahli di dalam JKKP ialah :-

- Jika 100 (satu ratus) orang pekerja atau kurang - tidak kurang dari 2 (dua) orang wakil pekerja dan tidak kurang dari 2 (dua) orang wakil majikan.
- Jika lebih 100 (satu ratus) orang pekerja atau kurang - tidak kurang dari 4 (empat) orang wakil pekerja dan tidak kurang dari 4 (empat) orang wakil majikan
- Sebaik-baiknya bilangan wakil majikan dan wakil pekerja adalah seimbang supaya tidak berlakunya berat sebelah
- Sungguhpun tidak dinyatakan di dalam akta, adalah dinasihatkan supaya bilangan ahli JKKP ini tidaklah terlalu ramai. Idealnya, seramai 10 – 14 orang.
- Sekiranya perlu, jawatankuasa kecil bolehlah diwujudkan.
- Bagi mengelakkan keanggotan ahli yang terlalu ramai, ahli tersebut boleh diwakilkan seorang sahaja berdasarkan bentuk risiko atau kluster hazad yang serupa.

TIPS KEJAYAAN JKKP YANG BERKEKALAN

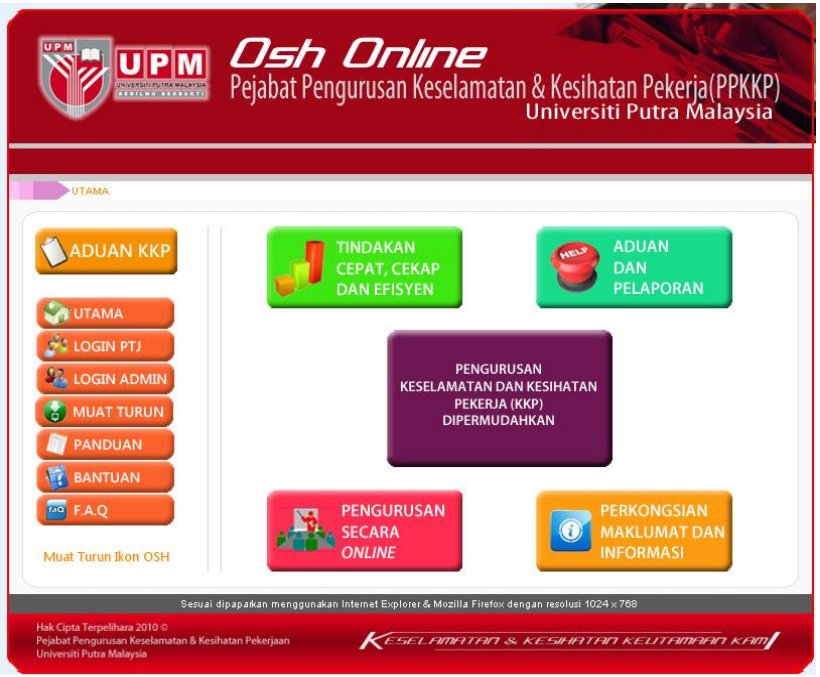
- Pengerusi:
  - Komited dan bertanggungjawab.
  - Mengetahui dan percaya tentang kepentingan aspek keselamatan dan kesihatan pekerjaan.
  - Mengetahui fungsi JKKP.
  - Memantau aktiviti JKKP.
  - Menyemak tindakan JKKP.

- Ahli-ahli JKKP:
  - Komited dan bertanggungjawab.
  - Mengetahui dan percaya tentang kepentingan aspek keselamatan dan kesihatan pekerjaan.
  - Mengetahui fungsi JKKP.
- Tindakan bersifat aktif dan bukannya sebagai reaktif di atas sesuatu kejadian.
- Skop, fokus dan fungsi JKKP adalah menurut garispanduan, iaitu tidak terpesong meliputi aspek-aspek selain dari keselamatan dan kesihatan pekerjaan.
- Berkongsi tanggungjawab antara ahli-ahli JKKP.
- Mengamalkan prinsip kerja berpasukan.
- Bersikap terbuka dalam menerima maklumbalas dari mana-mana pihak untuk mempertingkatkan aspek keselamatan dan kesihatan pekerjaan.
- Proaktif.
- Bertindak pantas ke atas keputusan mesyuarat atau sebarang aduan.
- Tidak melengah-lengahkan tindakan yang dipersetujui.
- Tidak cepat berputus asa dalam mempertingkatkan aspek keselamatan dan kesihatan pekerjaan.

Pelaporan
-Aktiviti JKKP
-Aduan
-Kemalangan/Kejadian Berbahaya

OSH ONLINE

- Alamat : http://www.oshonline.upm.edu.my



TAMAT

SEKIAN
TERIMA KASIH