

Road Safety, Eye Care and Quality of Life

MiNDSET



ROAD SAFETY AND EXPECTATIONS FROM A DRIVER

Continual undertaking for driving (Tick as applicable)

- ☐ I am not under the influence of alcohol & will not consume any while driving
 - ☐ I am not under the influence of drugs & will not use any while driving
 - ☐ I am as deemed physically fit to drive
 - ☐ I am as deemed mentally fit to drive
 - ☐ I will adhere to the rule of fastening seatbelts
 - ☐ I will adhere to the rule of wearing protective headgear (driver & co-driver)
 - ☐ I am driving a vehicle of permissible weight (as mentioned in the license/cleared to drive assessment)
 - ☐ I am aware and will comply with the duty of the driver to stop or remain stationary (when required to do so by a RTO/police officer in uniform, an alarmed driver/co-driver or unmanageable vehicle, or when there is an accident)
 - ☐ I am aware and will comply with the duty of the driver in case of an accident and injury to a person/person(s) (exceptions only as mentioned in the rules and regulations for a driver by the RTO/transport authorities)
- ☐ I will by rule keep aware of any eye care needed to visualize traffic or interpret traffic signs from the line of sight distance
 - ☐ I will by due regard get tested and try to use eye-wear needed to drive at night or needed to drive when there may be headlight glare issues

ROAD SAFETY AND WARNING SIGNS FOR A DRIVER

Continual awareness of warning signs (Tick as applicable)

- ☐ Yawning
- ☐ Inability to keep eyes open
- ☐ Talking incoherently or inability to respond to questions from assisting team co-drivers
- ☐ “Nodding off” and trouble keeping your head up
- ☐ Inability to remember driving the last few laps/kilometers
- ☐ Ending up too close to nearby cars
- ☐ Missing route/road system/road signs or guided turns
- ☐ Drifting into other lanes or onto rumble strips

☐ Inability to visualize traffic or interpret traffic signs from the line of sight distance

☐ Inability to visualize traffic due to blinding light sensitivity from the line of sight distance

ROAD SAFETY AND CONCERNING SIGNS FOR A DRIVER

Most common reasons for night driving becoming an issue:

- 1.Cataracts - Cataracts scatter light inside the eye, causing glare, halos, and blurry vision.
- 2.Retinal Issues - Conditions like macular degeneration or diabetic retinopathy make it harder to see contrast and fine details in low light.
- 3.Dry Eyes - When your eyes are dry, light scatters across your cornea, making glare more intense and recovery from headlights slower.
- 4.Outdated Prescription - Even a small change in your prescription can make night driving noticeably harder — especially when paired with aging eyes.
- 5.Undetected degenerative conditions like glaucoma

ROAD SAFETY AND EYE WEAR FOR A DRIVER

Night Driving and Vision Glasses



Glasses with anti-reflective coatings or polarized lenses.

Before Wear(night)



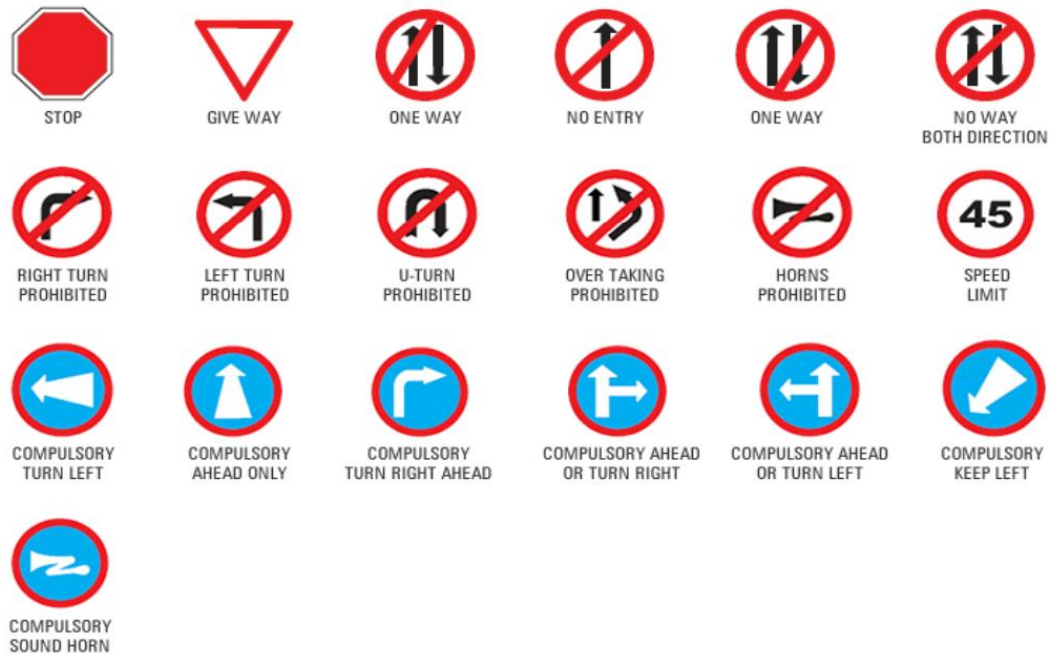
After Wear(night)



Yellow-Tinted Night Glasses

ROAD SAFETY AND EXPECTATIONS FROM A DRIVER

Mandatory traffic signs



ROAD SAFETY AND EXPECTATIONS FROM A DRIVER

Cautionary traffic signs

				
Right Hand Curve	Left Hand Curve	Right Hair Pin Bend	Left Hair Pin Bend	Right Reverse Bend
				
Left Reverse Bend	Steep Ascent	Steep Descent	Narrow Road Ahead	Road Wideness Ahead
				
Narrow Bridge	Slippery Road	Loose Gravel	Cycle Crossing	Pedestrian Crossing
				
School Ahead	Men at Work	Cattle	Falling Rocks	Ferry



ROAD SAFETY AND CONCERNING CONDITIONS FOR A DRIVER



Glare



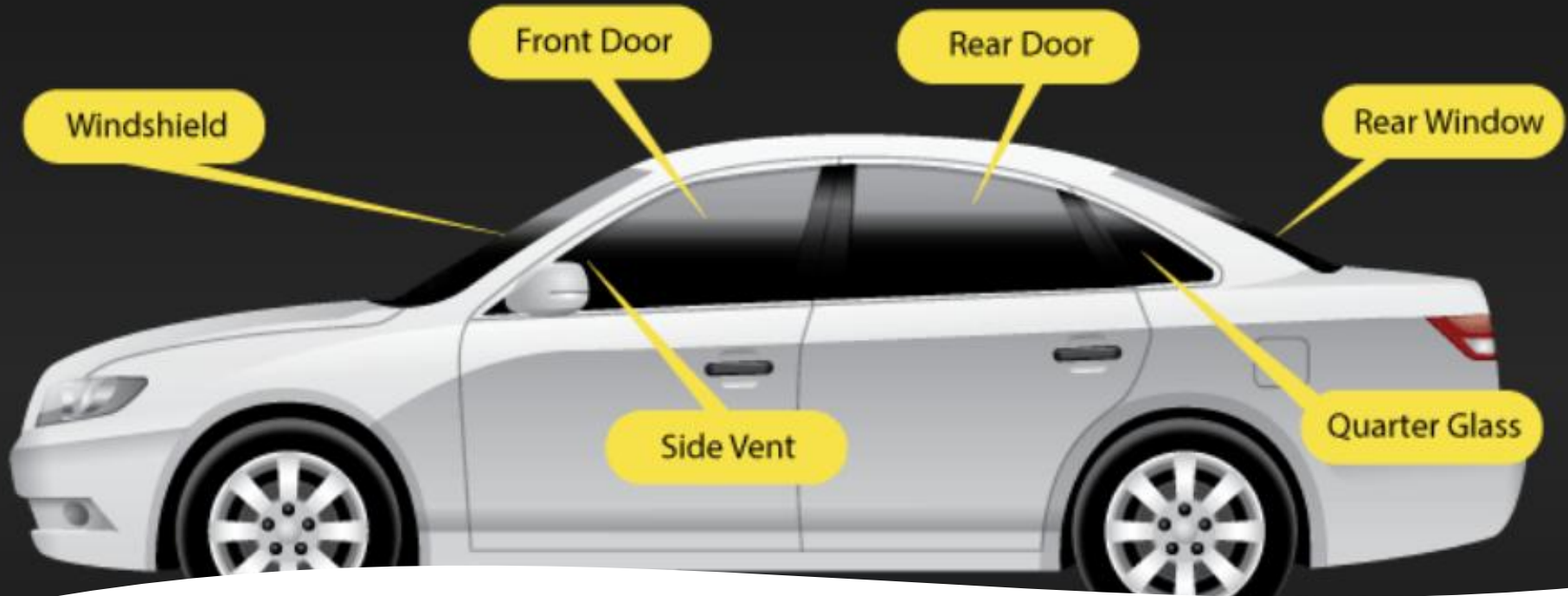
Simulated

ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER

WINDSHIELD

Wire Heated • Solar Absorb • IR Refelctive
& Heating • Acoutsic • HUD

Technology	Function	Type
Acoustic	Acoustic	Comfort
Thinner Lamination	Lightweight	Low-Carbon
Solar Absorbing	Temperature Reduction	Comfort/Low-Carbon
Solar Reflective	Temperature Reduction	Comfort/Low-Carbon
Wire Heating	De-Ice & De-Fog	Safety
Rain Sensor	Wiper Control	Smart
Heads Up Display	Quick Response	Safety



ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER

- Steps involved in manufacturing and installation :
 - From Raw materials to glass
 - Cut to fit perfectly
 - Laminated for Safety
 - Installed and Ready to Go



Pass a number of tests, such as the: ball impact test, fragmentation test, and tests of resistance to the environment, abrasion, high temperatures, radiation, humidity, weathering

ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER



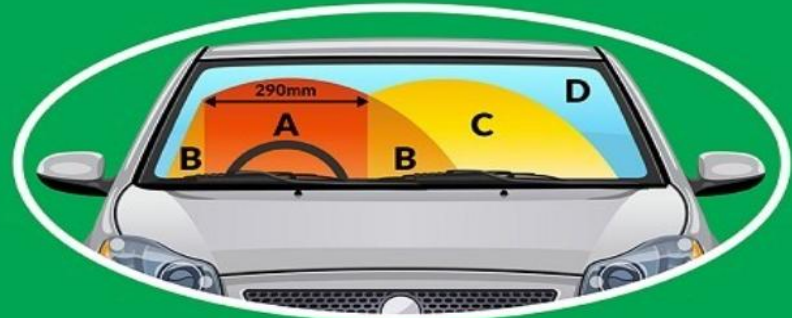
Windshield Wiper Failure

- When windshield wipers stop suddenly during rain or snow, the motorist should slow down, pull to a safe area off the roadway and turn on emergency flashers.









Repair or Replace?



Passenger Car With Two Windscreen Wipers











ROAD SAFETY AND CONCERNING WINDSHIELD RISKS

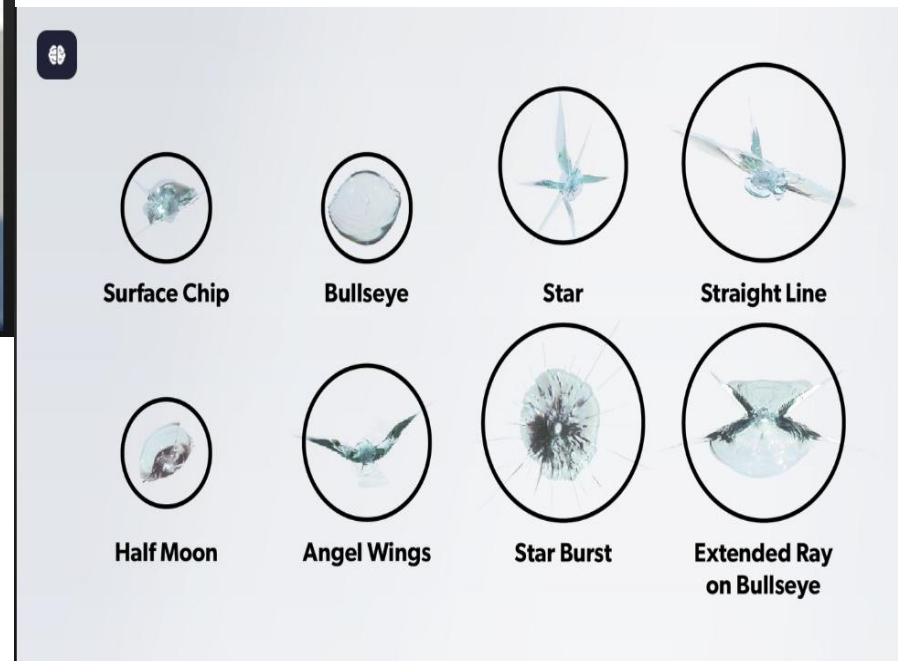
WINDOW CRACK TYPES				
1 CRATER	2 HORSESHOE	3 STAR	4 BULLSEYE	5 CRACK
				
maximum diameter 5mm	maximum diameter 25mm	maximum diameter 30mm	maximum diameter 20mm	maximum diameter 100mm
6 COMBO SAME TYPE	7 COMBO DIFFERENT TYPE	8 COMBO SAME & DIFFERENT		
				
diameter of smallest circle around all incidences is measured and maximum diameter applied	each type measured and maximum diameter applied separately	diameter of smallest circle around all incidences of same types are measured and maximum diameter applied		

CrackedWindshieldLaws.com



	Repair	Replace
Length of Crack		
Size of Damage		
Number of Chips/Cracks		
Sensor/Camera Damage		

ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER



ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER

Common types of windshield failures

- **Impact cracks** – rock chips, debris, hail. Often start small and spread.
- **Stress cracks** – no impact; caused by temperature swings or body flex.
- **Edge cracks** – begin near the border due to improper installation or frame stress.
- **Delamination** – the laminated layers separate, causing hazy or milky areas.
- **Pitting / abrasion** – sand and dust wear down visibility over time.
- **Shattering** (rare in modern cars) – usually linked to manufacturing defects or severe impact.

Root causes

- **Thermal shock** (hot defroster on a freezing windshield)
- **Poor installation** (uneven urethane, wrong glass, frame misalignment)
- **Vehicle body flex** (especially in older cars or after collisions)
- **Manufacturing defects** (rare, but possible)
- **Previous damage** that wasn't repaired

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Repair or Replace?

ROAD SAFETY AND CONCERNING WINDSHIELD RISKS FOR A DRIVER

Warning signs

- Chips larger than a coin
- Cracks reaching the edge
- Distortion or waviness in your field of view
- Whistling or water leaks (installation issue)



Prevention tips

- Repair chips early (cheap + effective)
- Avoid extreme temp changes
- Keep distance from gravel trucks
- Replace worn wiper blades
- Use OEM-quality glass and certified installers



Repair or Replace?

Health of People

As a healthcare goal, we think it is cause-worthy to increase your awareness about specific inner health influences on eye care, to help you identify emerging issues, and improve your Quality of Life



IMPROVE QUALITY
OF LIFE



Health of People

Eye related problems

Out of best current knowledge, the following list of medical conditions affect your eyes.

1. Common eye problems
2. Vision problems
3. Squint problems
4. Cornea problems
5. Cataract
6. Diabetic retinopathy
7. Glaucoma
8. Accidental eye injury cases
9. An Initial opinion on conditions needing other healthcare services



What is available today to treat eye related problems?

Comprehensive eye care that ranges from consultation, to diagnostics (via in-house laboratories), to treatment and where applicable reconstructive / corrective surgery for patients with the above conditions

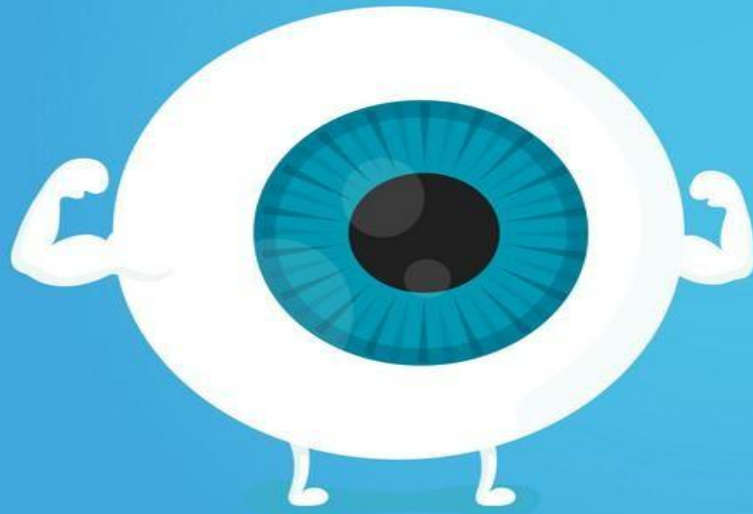
Health of People

Eye care and points of importance



Eye Care...
Do You Really
Care??

8 TIPS FOR EYE HEALTH



**REGULARY EYES
CHECKING**



**PROPER
LIGHTING**



**BLINK
FREQUENTLY**



**WEAR SUNGLASSES
ON SUNNY DAY**



**DISTANCE
ADJUSTMENT**



**GAZE FOR
A GREEN TREE**



**EYES
EXERCISING**



**EAT
HEALTHY FOOD**

Health of People

Eye care and points of importance



Eye Care...
Do You Really
Care??

SIX STEPS TO HELP KEEP YOUR EYES AND VISION HEALTHY



Eat right for good sight

Nutrients found in many fruit and vegetables and fatty acids can help protect your sight



Cover up

Cumulative exposure to the sun's UV light increases your risk of developing cataracts and macular degeneration



Quit smoking

Smokers are up to four times more likely to develop macular degeneration – the UK's leading cause of sight loss – than non-smokers



Be screen smart

Avoid eye strain by using the 20-20-20 rule, especially if you're using a computer for long



Watch your weight

Damage to blood vessels in the eye caused by excess body weight has been linked to the onset of glaucoma



Get tested

Get your eyes checked every two years even if you think your vision is perfect. Early detection is vital to prevent avoidable sight loss



Eye Care

Nature of process flow

The process flow for eye care could be the following

1. Registration or Repeat consultation
2. Review by optometrist for background or medical history, vision issues and need for glasses, correction or advanced eye care
3. First level doctor consultation that could lead to (a) a need for further investigation, or (b) clean chit and no treatment required, or (c) prescribing of glasses or eye wear, or (d) referral for a more advanced opinion
4. In case of prescribing of glasses or eye wear, a session involving dilation, fundus examination or glass power examination and glasses or eye wear prescription with a schedule of future follow-ups
5. In case of a need for further investigation, direction to (a) proceed to the diagnostics laboratory for blood tests, or to (b) proceed to the scanning facility
6. At the diagnostics laboratory, prescription of blood tests to check for Genetic influences, Vitamin A, D and B12 deficiency issues, Allergy issues

Eye Care

Nature of process flow

The process flow for eye care could be the following

7.A Via Patient Education Programs for advanced eye health issues like pre-disposition to glaucoma, refer to a panel of blood tests like

- (a) Random Blood Sugar levels for diabetes that can lead to the growth of abnormal blood vessels that clog the drainage system of the eye increasing IOP
- (b) Anti-nuclear antibodies (ANA) to determine if normal tension glaucoma (where there is no elevated IOP) coexists with elevated levels of IgG, IgM, IgA autoantibodies detected in rheumatic diseases.
- (c) Antiphospholipid antibodies (APL) levels, Cardiolipin Antibody Screening (ACL) and Beta2 Glycoprotein 1 for auto-immune disorders leading to progression of primary open angle glaucoma or other variants, as inflammation can clog the drainage system in the eyes leading to increase in IOP
- (d) Beta2 Micro-globulin, to check internal inflammation levels and possible damage to healthy tissues or cells

Eye Care

Nature of process flow

The process flow for eye care could be the following

7.B Via Patient Education Programs for advanced eye health issues like pre-disposition to glaucoma, refer to a panel of scans like

- (a) High Blood Pressure levels that can lead to the growth of abnormal blood vessels that clog the drainage system of the eye increasing IOP
- (b) Tonometry for intra-ocular pressure (IOP), where there is an elevated IOP in different cases of glaucoma
- (c) Multiple tests of visual field and retinal imaging
- (d) ECG with any cross consultation and opinion
- (e) Dilation for more specific Fundus examinations like the Retina Fundus, Cataract Fundus, or other examinations to **diagnose the diseases of the vitreous , optic nerve head , retina and choroid.**

Eye Care

Nature of process flow

Interpreting +ANAs!

What **diseases** are associated with a **+ANA**?

Rheumatic Diseases

- Lupus (SLE)
- Systemic Sclerosis (scleroderma)
- Rheumatoid Arthritis
- Sjögren Syndrome
- Myositis
- Mixed Connective Tissue Disease (MCTD)
- Juvenile Idiopathic Arthritis
- Drug-Induced Lupus

Non-Rheumatic Diseases

- Malignancy
- Lymphoproliferative Disorders
- Infection
- Autoimmune Thyroid
- Autoimmune Hepatitis
- Primary Biliary Cirrhosis
- Drug-Induced
- Inflammatory Bowel Disease
- Interstitial Pulmonary Fibrosis
- Multiple Sclerosis



Normal Fundus

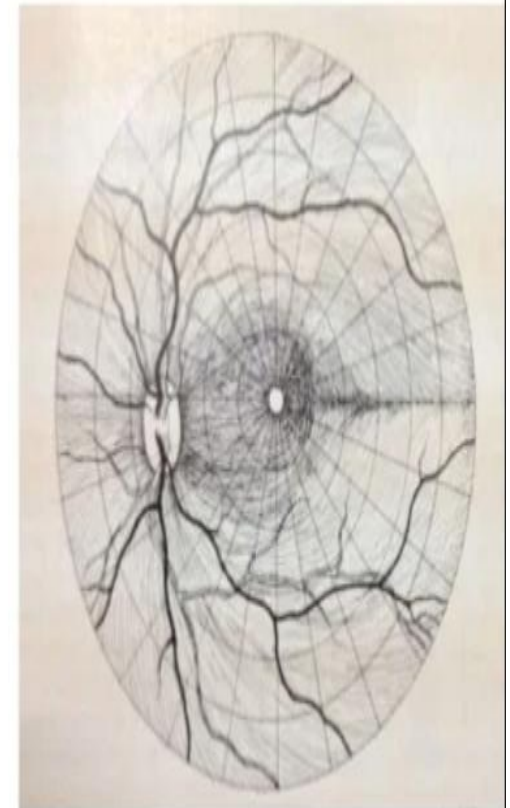
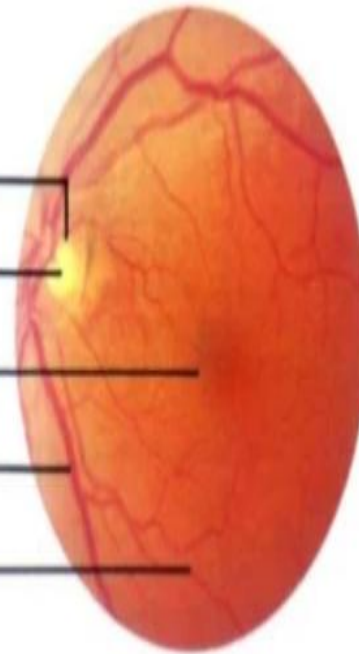
Optic Disc

Physiological Cup

Macula

Vein

Artery



Eye Care

Nature of process flow (for Eye Care assessment for Road Safety)

The process flow for eye care could be the following

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6. At the diagnostics laboratory, prescription of blood tests to check for genetic influences, Vitamin A, D and B12 deficiency issues, Patient Education Programs for advanced eye health issues like pre-disposition to glaucoma, issues of night vision

Health of People

HGI makeup and immunity levels

Out of best current knowledge, your HGI makeup (Health-Growth-Immunity) depends upon

- (a) what you eat, what you drink, your RDA/RNI diet adherence, your soluble and insoluble fibre intake
- (b) how long you sleep or rest, how much you exercise, your wellness routine
- (c) your nature of immunity patterns, your genetic makeup
- (d) your nature of work or study environment, your travel experiences
- (e) the system of medicine availed, the drugs and medicines you take, your consumption of right antibiotics
- (f) the immunizations you avail of, the protection you give yourself from microbial infections or diseases
- (g) your understanding of oxidative stress (caused by smoking, excess drinking, drug addiction, not following a balanced diet, mental or emotional stress, apnoea) and inflammatory diseases



Health of People



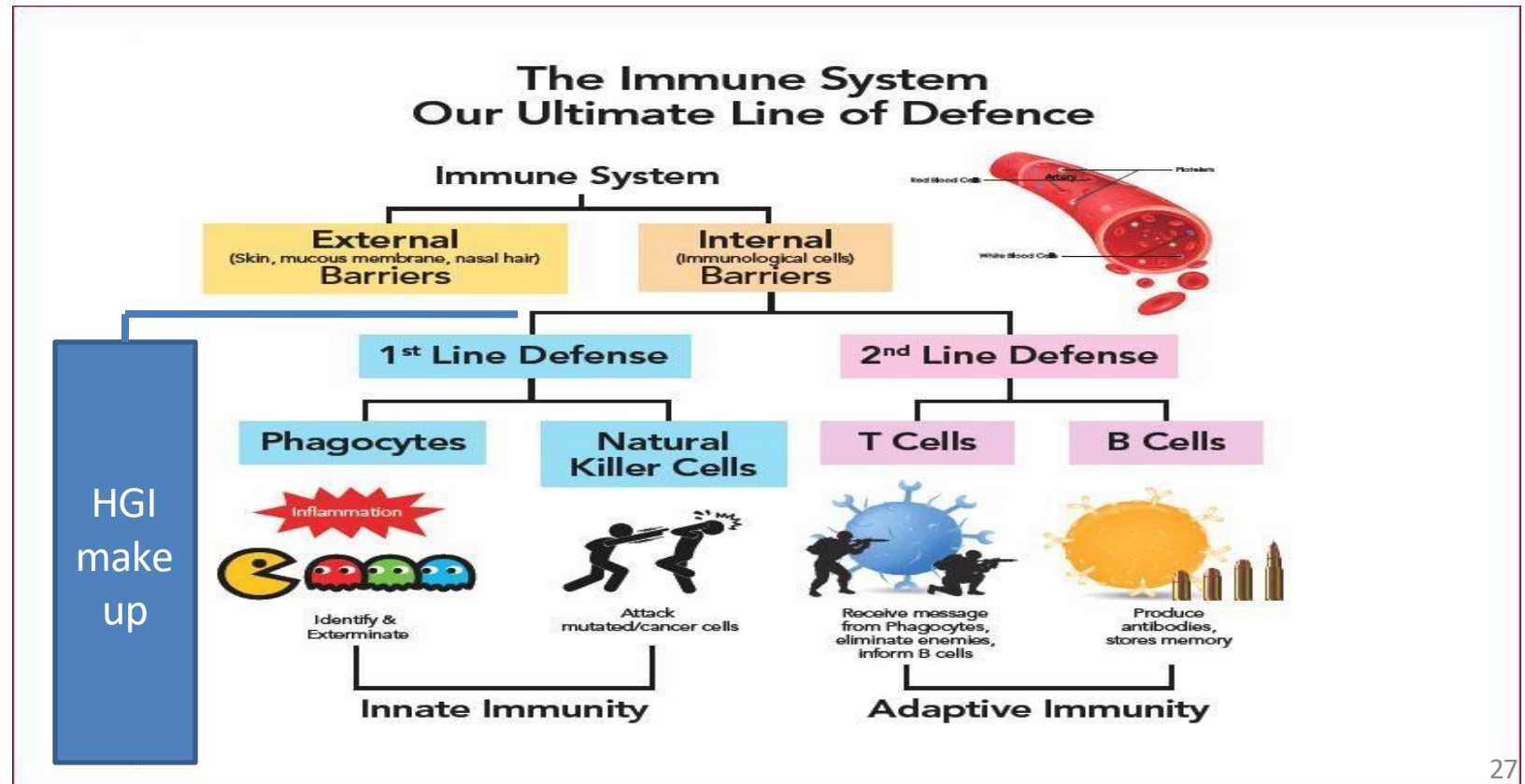
- (h) diagnostic tests you regularly avail of, the success in the line of treatment based on the diagnosis or specimen's culture sensitivity tests
- (i) the climate change in your city or region
- (j) the quality of the sewer systems, drainage systems in your city or region (keeping in mind that rains and mini floods cause contamination)
- (k) disaster, endemic, epidemic, infection incidence or prevalence in the associated RADIUS or catchment area, drug resistance incidence or prevalence in the associated RADIUS or catchment area
- (l) the mosquito or vector bred disease menace prevalent in your city or region
- (m) whether socially equitable and accountable healthcare is available
- (n) whether veritable & accountable druggists & chemists are available
- (o) the quality of water available to you
- (p) the quality of air or the presence of greenhouse gases, smoke, smog, toxins, particulate matter, pollen dust, dust mites in the air

Health of People

(q) your exposure to pesticides/insecticides, contaminants or hazardous chemicals

(r) your city's or region's slaughter houses or suppliers of meat

The booklet states that these terrarium markers can be managed via a P2PC (Plan to Prevent & Control) methodology in knowing your health



Health of People



What you must know about drugs or medicines?

Is the drug spelt right in your latest prescription? Does the name include special symbols “like () or *a+”, lettered or numbered prefixes or suffixes? Is there any mention about the **drug dispersion or drug release**? What is the drug’s generic name, as this can help you know and procure the right drug to prevent medication errors due to different medicines having a similar name or having names that sound the same or when labelling is improper?

What does the drug treat as per the prescription or consultation slip? Is the drug safe for you and your Consumer Group (Pregnant, Paediatric, Geriatric or Others)? Has the drug cured you “satisfactorily” earlier? Do you know of the drug’s possible side effects? Do you know about Drug Adverse Events & steps to taken? Has the method of administration (orally, sublingual, rectal, IM, SC, IV or topical) been indicated correctly?

Health of People



Is the drug being bought in the right dosage & condition?
how to and for how long you need to consume the drug? Have you been advised on how wrong consumption or casual disposal of medicines can affect you, or your family, or close in proximity social circles & even the environment?

To know more, review points such as: Is the drug on the Core Essential Medicines List? Is the drug on the Complementary Essential Medicines List indicating it needs specialized healthcare facilities or training? Is the drug an approved drug? Is the drug being prescribed as a repurposed product? Is the drug part of old or dead stock? Is the drug available in a newer or alternate formulation as a medicine?

Do you have safe dispensing mechanisms to take your medications according to priority, dosage, timing or frequency (even if you suffer from failing eyesight, or cannot read)? Do you get your bag of medicines reviewed every time you consult your doctor or medical practitioner? Do you know of how to return or dispose of the drug when it is not needed?

Eye Care and Quality of Life (booklet)