

4 HABITS

- 1. Look well ahead**
- 2. Move your eyes**
- 3. Keep space**
- 4. Spot the problem**

1. LOOK WELL AHEAD

Plan your route

Circle check

Minimum eye lead time - MELT

- 12-15 seconds in city
- 20-30 seconds on highway

Respond to anticipated problems

- Lane of least resistance or risk
- Best view ahead, best flow or traffic, least risk
- Covering the break
- Covering the horn
- Change lanes early for bicycles
- Cooperate with other drivers, anticipate their needs
- Adjust speed, providing space for other drivers
- Slow early when you see traffic slowing ahead (avoid fuel wasting stops)

Maintain flow

- 2 seconds in city situation
- 3 seconds in highway situation
- 4 seconds in onramp situation

2. MOVE YOUR EYES

Move your eyes every two seconds

Check your rear view mirror every 5-8 seconds

Check side mirrors every 5-8 seconds

Check these mirrors before slowing, turning (before and after), and while stopped

Scan inside parked vehicles

Left, centre, right scan

- Do this on approach and before entering intersection from a stopped position

Ground view

- Front wheels as approaching parked vehicle with driver behind steering wheel
- Ground view as you approach any vehicle you can't see through.
- Look at feet of pedestrian about to walk in front of you or bicycles
- Ground view as you approach/pass any moving vehicle, when other vehicles pass you, and when oncoming vehicles approach
- Glance repeatedly at distance between other vehicles front wheel and lane markings
- Ground view when vehicles approach on a side road

3. KEEP SPACE

Lights on at all times

Low beams on at all times, high beams at appropriate times

- Reduce your chance of collision by 20% (Sweden 28%)
- Use high beams when practical

Stagger

- Always drive next to open space
- An open lane on both sides is ideal
- Adjust speed or change lanes if someone takes your open space
- Always think “to where can I escape?”

Clear blind spots

- Cover the horn
- Ground view (see eyeballs of other driver)
- Get out of blind spot within 3 seconds
- Keep your own blind spots clear

Communicate

- Look for “after you” situations
- Leave space in front
- Signal
- Horn
- Wave
- Flash high beams
- 4 ways
- Break lights
- Reverse lights (white typically)

Control traffic behind

- When approaching stop:
5. Check rear view and break early to control traffic behind
 6. If no traffic behind, wait 3-4 vehicle lengths back from vehicle in front or from crosswalk
 7. Monitor rear view and glance ahead every two seconds
 8. Plan your escape. Be ready to move up or swerve into open space (if the vehicle behind you cannot stop and is about to hit you)
 9. Creep forward as vehicle approaches to make it easier to escape
 10. As 1 or 2 vehicles slowly approach behind you, creep forward to 2 vehicle lengths back with 3 or more vehicles safely stopping, creep up to a min of 1 vehicle length.

4. SPOT & SOLVE THE PROBLEM

Spot & solve

- Think 360 degrees
- Predict outcomes of other road users (motor vehicles, buses, SMV, trucks, bicycles, pedestrians)
- Road constructions
- Large animals
- Trains
- Predict how other road users will solve their own problems
- Think like a driver
- Approaching a turn very slowly, or if stopped before turning, check outside mirror and blind for an overtaking bicycle, vehicle or pedestrian

Avoid

- Avoid backing to spot problems more easily
- Where backing is unavoidable, back in rather than out
- It's illegal to back out due to visibility, creeping out too much, speed, snowbanks, boosting issues (easier if facing out)

Use the point of no return at all stale green lights

- PoNR determined at a green light
- Determining PoNR depends on traffic flow, your speed, and the road surface
- Always check your mirror first
- Point of no return = you can no longer safely stop if green light changes
- If light changes before your point of no return, you must stop
- If you reach PoNR before the light changes do not try to stop

Position

- When waiting to make a turn, wait with your wheels straight
- Use the 'S' approach when waiting to make a left at a large, offset intersection
- When slowing or stopping in traffic keep to the appropriate side of the lane
- Enter intersections only when there is room to exit

React

- React to emergencies by mirror-stop or honk-move immediately into available spaces
- Do not jeopardize human life to avoid small animals

Proper lane change:

11. Rear view
12. Adjust speed
13. Signal
14. Side mirror
15. Blind spot
16. Look well ahead into new lane
17. Signal off as your body goes over the line

Left residential turn

18. Signal 1/2 block away
19. Move close to centre of new road
20. Brake, look well ahead to keep parallel
21. Turn at edge of new road
22. Look at centre of new road
23. Recovery at 45 (?), eyes up, recover hand over hand, gas

Right residential turn

24. Signal 1/2 block away
25. Move 1 meter from right curve
26. Brake, look well ahead to keep parallel
27. Turn with curb
28. Look at curb, keep 1 meter distance as you go around
29. Turn two hand over hand
30. Eyes up, recover hand over hand, gas

HANDLING EMERGENCIES

Brakes fail

31. Pump break
32. Use other break (emergency)
33. Find other source of friction
34. Sideswipe other parked vehicles
35. Turn car off (check rear)

Steering fails

36. Break firmly

Tire blows out

37. Look where you want to go, good grip, maintain speed
38. Steer where you want to go
39. Ease off accelerator
40. park, e-break, 4 was

Accelerator sticks

41. Break (don't wait too long doing this)
42. Turn off ignition (check mirror)

Headlights fail

43. Look where you want to go
44. Ease off gas
45. Turn on other lights (headlights, 4 ways, etc.)
46. Drift right and feel for shoulder

Hood files open

47. Look where you want to go
48. Break gently

Engine stalls (speed plummets)

49. Look where you want to go
50. Keep steering
51. Select neutral and start engine
52. Select drive

Bee/bird/bat attack in car

53. Look where you want to go
54. Open both front windows
55. Brake gently, pull over, stop
56. Deal with it

HTA = Highway Traffic Act

BAC = Blood alcohol concentration

MTO = Ministry of Transportation

SMV = Slow moving vehicle

HOV = Highway occupancy vehicle (2 people min)

Diamond symbol = carpool, taxi, bus, bicycles, motorcycles, \$150 fine if in this lane unless turning

Tires behind white line if white line

If no white line, tires behind sidewalk or edge of new road if no sidewalk

STOP = 3 FULL SECONDS

Standard road fines \$110, 3 demerits

(eg. No signal, etc.)

'S' maneuver

Protected arrow/green

Yield doesn't require stop - slow, scan, go

13% of all collisions are lane changes

Airbag has a combined impact of 35 KMPH

Costs \$2K to repack deployed airbag

Rear crash holds highest percentage of crashes but lowest death rate

Most accidents happen at fresh green light

Park near a street lamp to avoid theft, pull through space and avoid corners (might get hit)

If you've worked for 45 hours, you're technically impaired

Friday 5-6pm = most dangerous time to drive

Sunday = safest day to drive

5-6am - safest time to drive

G1 = 0.00

G2 = 0.00

G = 0.05

Don't roll right on red

Do legal stop, creep until you know

You should be able to see three fingers above steering wheel

Blind diagram: