“Pre-travel Consultation Without Injury Prevention is Incomplete”*

*Wadhwaniya S, Hyder AA.
Risk profile of travel and travellers changing

• In 2011 ≈ one billion international travellers
  – ≈ 50% travelling to low and middle income countries (LMICs)
  – Infectious Diseases (ID)
    • <2% all deaths during travel
  – US citizens abroad are 10x more likely to die from injuries than ID

Injuries

- Intentional
  - Muggings
  - Homicides
  - Suicides

- Un-intentional
  - Road Traffic Injuries (RTIs)
    - Cars
    - Motorised 2 wheel
  - Drownings
  - Natural disasters
  - Aviation accidents
  - Drugs/Alcohol
  - Terrorism
  - Poisoning
  - Falls
  - Burns
Why so many accidents and deaths?

• RTI:
  – Traveller unfamiliar
    • Language/Signage
    • Different road rules
    • Driving on opposite side of the road
  – Environment more risky
    • Poor signage
    • Lack of road rules/enforcement
    • Crowded roads
    • Poor road surface
    • Share the road with many users
      – Bicycles, pedestrians, animals
Why so many accidents and deaths?

- RTI:
  - Lower safety standards
    - Especially motor vehicles
  - Traveller taking more risks
    - No choice
    - In “holiday mode”
    - Influenced by alcohol and drugs

- And if DO have an accident
  - Access to local medical care may be delayed
  - Once accessed may be of poor quality
About 25% of deaths in US travellers due to injury

Figure 2-1. Leading causes of injury death for US citizens in foreign countries, 2009–2011
Road Traffic Injuries (RTIs)

- World wide: 8th leading causes of death
- LMICs account for 90% fatal RTIs (but 50% of all vehicles)
- RTIs leading cause of both fatal and non-fatal severe injuries in travellers
- Europe: fatal RTI 12/100000 vs Africa:28/100000

Road Traffic Injuries (RTIs)

- RTI fatality rates higher in tourists than locals
- Risk factors in travellers
  - Male
  - Business travellers
  - VFRs?

## Number of Traffic accident in Bali 2011

<table>
<thead>
<tr>
<th>District</th>
<th>Accident</th>
<th>Die</th>
<th>Major trauma</th>
<th>Minor Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jembrana</td>
<td>252</td>
<td>71</td>
<td>7</td>
<td>387</td>
</tr>
<tr>
<td>Tabanan</td>
<td>326</td>
<td>57</td>
<td>176</td>
<td>370</td>
</tr>
<tr>
<td>Badung</td>
<td>205</td>
<td>61</td>
<td>176</td>
<td>115</td>
</tr>
<tr>
<td>Gianyar</td>
<td>404</td>
<td>96</td>
<td>258</td>
<td>367</td>
</tr>
<tr>
<td>Klungkung</td>
<td>123</td>
<td>29</td>
<td>10</td>
<td>188</td>
</tr>
<tr>
<td>Bangli</td>
<td>41</td>
<td>26</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Karangasem</td>
<td>185</td>
<td>65</td>
<td>121</td>
<td>169</td>
</tr>
<tr>
<td>Buleleng</td>
<td>635</td>
<td>79</td>
<td>191</td>
<td>906</td>
</tr>
<tr>
<td>Denpasar</td>
<td>832</td>
<td>126</td>
<td>612</td>
<td>738</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Accident</th>
<th>Die</th>
<th>Major trauma</th>
<th>Minor Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3003</td>
<td>601</td>
<td>1555</td>
<td>3278</td>
</tr>
<tr>
<td>2010</td>
<td>2441</td>
<td>606</td>
<td>1370</td>
<td>2449</td>
</tr>
<tr>
<td>2009</td>
<td>1793</td>
<td>569</td>
<td>1012</td>
<td>1768</td>
</tr>
<tr>
<td>2008</td>
<td>1469</td>
<td>545</td>
<td>933</td>
<td>1177</td>
</tr>
<tr>
<td>2007</td>
<td>1419</td>
<td>589</td>
<td>901</td>
<td>1153</td>
</tr>
</tbody>
</table>

Source: Bali Dalam Angka 2012
<table>
<thead>
<tr>
<th></th>
<th>Road Deaths</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bali</td>
<td>601</td>
<td>4 million</td>
</tr>
<tr>
<td>New Zealand</td>
<td>285</td>
<td>4.4 million</td>
</tr>
</tbody>
</table>
Figure 10. **Road fatalities per 100 000 population in 2012**

Source: IRTAD.

New Zealand

Road deaths per 10,000 vehicles and per 100,000 population 1936 to 2013
Table 1  Countries with highest burden of road traffic injuries

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Estimated number of road traffic deaths</th>
<th>Country</th>
<th>Estimated road traffic death rate (per 100,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>220,783</td>
<td>Eritrea</td>
<td>48.4</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>196,445</td>
<td>Cook Islands</td>
<td>45.0</td>
</tr>
<tr>
<td>3</td>
<td>Nigeria</td>
<td>47,865</td>
<td>Egypt</td>
<td>41.6</td>
</tr>
<tr>
<td>4</td>
<td>United States</td>
<td>42,642</td>
<td>Libya</td>
<td>40.5</td>
</tr>
<tr>
<td>5</td>
<td>Pakistan</td>
<td>41,494</td>
<td>Afghanistan</td>
<td>39.0</td>
</tr>
<tr>
<td>6</td>
<td>Indonesia</td>
<td>37,438</td>
<td>Iraq</td>
<td>38.1</td>
</tr>
<tr>
<td>7</td>
<td>Russian Federation</td>
<td>35,972</td>
<td>Angola</td>
<td>37.7</td>
</tr>
<tr>
<td>8</td>
<td>Brazil</td>
<td>35,155</td>
<td>Niger</td>
<td>37.7</td>
</tr>
<tr>
<td>9</td>
<td>Egypt</td>
<td>31,439</td>
<td>United Arab Emirates</td>
<td>37.1</td>
</tr>
<tr>
<td>10</td>
<td>Ethiopia</td>
<td>29,114</td>
<td>Gambia</td>
<td>36.6</td>
</tr>
<tr>
<td>11</td>
<td>Iran</td>
<td>25,491</td>
<td>Iran</td>
<td>35.8</td>
</tr>
<tr>
<td>12</td>
<td>Mexico</td>
<td>22,103</td>
<td>Mauritania</td>
<td>35.5</td>
</tr>
<tr>
<td>13</td>
<td>Democratic Republic of Congo</td>
<td>20,183</td>
<td>Ethiopia</td>
<td>35.0</td>
</tr>
<tr>
<td>14</td>
<td>Bangladesh</td>
<td>20,038</td>
<td>Mozambique</td>
<td>34.7</td>
</tr>
<tr>
<td>15</td>
<td>Philippines</td>
<td>17,557</td>
<td>Sudan</td>
<td>34.7</td>
</tr>
<tr>
<td>16</td>
<td>Thailand</td>
<td>16,240</td>
<td>Tunisia</td>
<td>34.5</td>
</tr>
<tr>
<td>17</td>
<td>South Africa</td>
<td>16,113</td>
<td>Guinea-Bissau</td>
<td>34.4</td>
</tr>
<tr>
<td>18</td>
<td>Vietnam</td>
<td>14,104</td>
<td>Kenya</td>
<td>34.4</td>
</tr>
<tr>
<td>19</td>
<td>Tanzania</td>
<td>13,886</td>
<td>Chad</td>
<td>34.3</td>
</tr>
<tr>
<td>20</td>
<td>Sudan</td>
<td>13,362</td>
<td>Tanzania</td>
<td>34.3</td>
</tr>
</tbody>
</table>


*Wadhwaniya S, Hyder AA.
Table 2  Examples of pre-travel consultation advice and resources for road travel

As driver:
  • Get familiarized with local traffic and signs before driving
  • Avoid driving after dark
  • Avoid driving or riding motorized two-wheelers
  • Always use helmet when riding a bicycle or motorcycle
  • Do not drink and drive
  • Follow traffic rules
  • Always use seatbelts and child restraints
  • Do not drive when jetlagged or exhausted

As passenger:
  • Use registered vehicles only
  • Choose safe modes of transportation
  • Communicate to the driver if you are uncomfortable with the driving situation or road conditions

As pedestrian:
  • Look on both sides before crossing the road
  • Follow traffic rules
  • Use pavement/sidewalk

Other safety measures:
  • Keep charged cell-phone
  • Keep local emergency phone numbers handy

Resources for more information:
  • Association for Safe International Road Travel http://www.asirt.org
  • Centers for Disease Control and Prevention http://www.cdc.gov
  • World Health Organization http://www.who.int/en/
  • US Department of State http://travel.state.gov

Every year, 1.24 million die and 50 million are injured on the roads of the world.

ASIRT provides travelers with information to minimize road risks.

THE DECADE OF ACTION

On March 2, 2010, the United Nations General Assembly unanimously passed a historic resolution (A/64/L.44/Rev.1) declaring 2011–2020 to be the

2015 GALA FOCUSES ON DISTRACTION

ASIRT’s extraordinary honorees represent the important victories in the war against road crashes, remarked Rochelle Sobel at the ASIRT annual event held June 9 in Washington, DC. Read the news release.

ROAD SAFETY FIRST CONSORTIUM

ASIRT is assembling a consortium of organizations that re committed to improving global road safety and fostering a sustainable reduction in road injuries and fatalities worldwide. The Road Safety FIRST Consortium’s goal is to provide all travelers with the tools they need to make safe, informed decisions while traveling on the roads, thereby minimizing their risk of being injured or killed in a road crash. To read more about the Road Safety FIRST Consortium, click here.

TRAVELER RESOURCES

Road Travel Reports contain comprehensive information, on road travel for U.S. travelers.

NOVEMBER 19, 2014:
ROAD TRAVEL REPORT PREVIEW: BRAZIL

The following is an excerpt from the ASIRT Road Travel Report for Brazil. ASIRT’s Road Travel Reports (RTRs) are comprehensive, country road safety guides for all travelers, whether they drive themselves or use local transport. Reports are available for over 100 countries and include information that describes unfamiliar and potentially dangerous conditions. RTRs detail specific road conditions, common road practices, risky driver behaviors, traffic laws, best routes to popular tourist sites, safest modes of travel, seasonal hazards, cycling safety and availability, and emergency contacts.

To see a sample of a full report, obtain a complete report for Brazil (11 pages) and view a full list of available country reports please visit www.asirt.org.

Complete RTRs contain sections describing:

KNOW BEFORE YOU GO
- Variety of road conditions throughout the country
- Common driver behaviors that may affect unprepared travelers

GENERAL ROAD CONDITIONS
- Percentage and location of paved roads, information about federal interstate highways, state highways, farm to market roads, and motorways; pedestrian and non-motorized vehicle usage of highways
- Detailed road and traffic conditions, signage, speed limits, reconstructed roads with provisions for pedestrians, construction zones, sand tracks
- Rush hour tips and bike paths

CITY TRAVEL, POPULAR VACATION DESTINATIONS, REGIONS AND SPECIFIC ROADS
- Travel conditions to and in Rio de Janeiro, Sao Paulo, Curitiba, Recife, Fortaleza, Brasilia, Anhanguera, Castello Branco, Imigrantes, Porto Alegre, Barreiras, Teresina, Parmaiba, Ceara State and Salvador
- Sites and times of greatest traffic congestion; parking spots; public transport options; safety records of buses, minibuses, taxis, radintaxis, and metro; airport access

RURAL, NIGHT AND SEASONAL TRAVEL
- Road conditions, access to remote areas, seasonal closings
- Availability and safety of public transportation
- Pedestrian and driver guide to night travel
- Winter fog, extreme conditions in the Amazon, holiday travel

ROAD REGULATIONS AND POLICE ENFORCEMENT
- International Driving Permit (IDP), seatbelt regulations, speed limits, alcohol use (BAC level), and other traffic rules and violations, level of police enforcement

PEDESTRIAN TRAVEL
- Pedestrian safety tips, ways to avoid aggressive drivers and how best to navigate crowded crosswalks
- Right of way in “zebra” crossings
- Transportation to and from airports

TRANSPORTATION OPTIONS
- Detailed listing of availability and safety of buses, taxis, rental cars, motorcycles, and bicycles
- Public transportation routes, schedules and service

EMERGENCY INFORMATION, CRIME AND SECURITY, AND TOURIST ASSISTANCE
- Emergency numbers when involved in a road crash or crime, availability of roadside assistance
- Tourist police forces
- Embassy and consulate locations and contact information
- Directions on how best to receive updates on current safety or security concerns

MEDICAL CARE
- Standard of care, payment options, insurance availability, hospitals, and other emergency services

FOR MORE INFORMATION:
Association for Safe International Road Travel (ASIRT)
12345 Park Drive, Rockville, MD, USA
Telephone (541) 256-4123 Fax: (916) 256-4111
Don’t forget: https://www.safetravel.govt.nz
Israel and the Occupied Palestinian Territories

Reviewed: 23 June 2016, 16:05 NZST  Still current at: 7 July 2016

Get updates by RSS  Get updates by email

⚠️ Extreme Risk

There is extreme risk to your security in the occupied Palestinian territory of Gaza (including the waters off Gaza). We advise against all travel due to the unpredictable security situation, threat of kidnapping and potential for retaliatory military operations.

New Zealanders currently in Gaza are advised to depart as soon as it is safe to do so. The New Zealand government has an extremely limited ability to provide assistance to New Zealand nationals in Gaza.

There is extreme risk to your security in Sheba’a Farms and Ghajar located along the border with Lebanon (the “Blue Line”). We advise against all travel due to the possibility of rocket fire, militant activity and military operations.

There is extreme risk to your security within three kilometers of the border with Syria due to the possibility of rocket fire, militant activity and military operations and we advise against all travel to the border area.

⚠️ High Risk

There is high risk to your security in the occupied Palestinian territory of the West Bank. We advise against all tourist and other non-essential travel due to the unpredictable security situation and the potential for acts of violence and violent civil unrest.

⚠️ Some Risk

There is some risk to your security in Israel due to the threat of terrorism and the potential for civil unrest and we advise caution. New Zealanders in Israel should also be aware that the on-going conflict in the Occupied Palestinian Territories can at times spill over into Israel.
Sexually Transmitted Infections & Travel

- Significant STI risk gradients between more developed & less developed countries
  - HIV
  - Syphilis
  - Gonorrhoea
  - Chlamydia
  - Herpes
  - "Tropical" STIs
    - Granuloma inguinale (Donovanosis)
    - Lymphogranuloma venereum
    - Chancroid
New partners abroad: 20.4%
[Range : 5.6%-62.0%]
Unprotected IC 49.4%
Risk of Sexually Transmitted Infections & Travel

- Travellers have sex while travelling
- Studies record
  - high rates of casual sexual contact
  - multiple partners
  - low condom use
  - travellers paying for sex
Why do travellers have (often unsafe) sex?

• They would be anyway!
• They are on holiday
  – Away from usual social norms & constraints
  – Situational disinhibition
• Isolation
• Anonymity
• Desire for unique experience
• Alcohol & Drugs

• Sex is available
  – Peru: *bricheros/bricheras*
  – Cuba: *jineteros/jineteras*
  – Gambia: *bombas/bumsters*
  – Greece: *kamaki*
  – Sri Lankan *beach boys*
  – Jamaica: *Rent-a-dread*

Risk Factors for having casual sex while travelling

- Younger age
- Male gender
- Intention to have sex
- Packing condoms
- Being single
- Working for commercial organisation/business travel
- Travelling alone or with same-sex group
- MSM or Bisexual orientation
- History of
  - casual sex
  - multiple partners
  - having paid for sex
- Previous STIs or SHC visit
- Higher social status
- Repeat visits to same area
- Business travellers
- VFR traveller
Prevention-Barriers

• Traveller diversity
  – As the clinician can I “pick” the high risk traveller?

• Difficulties of affecting behavioural change

• Travel industry ambivalence
  – Many still use the allure of “sex to sell”

• Host country ambivalence
STI prevention in Travellers

• “Travellers often smile, listen with disbelief, or feel that their moral integrity has been impugned when clinicians offer advice on sexual risks (especially the recommendation to carry condoms).”

Pre-Travel Advice

• Educate
  – STIs are a risk
  – STI prevalence higher
  – The availability of sex
  – Role of alcohol, drugs, date-rape drugs
  – Sexual assault
  – Prevention
    • Condoms
    • Vaccination
      – Hepatitis A
      – Hepatitis B
      – HPV
    • HIV pre-exposure prophylaxis?
  – Post exposure
    • Sexual health check
      – Early identification & treatment
    • HIV Post exposure prophylaxis

• Consider baseline pre-travel STI screen
Pre-Travel Advice

• Education
  – Target specific groups?
  – All travellers?

• Introducing it into the conversation
  – Discuss Hepatitis B with all
  – Include **condoms** in your recommended contents for medical kit list
  – Include a section in all written material
Now you can kiss your hangovers goodbye.

ONLY THB 110 PER PACK

PRODUCT OF USA

3 TABLETSH (1200mg/tablet)
Sex Tourism

• Travellers who travel for the specific purpose of having sex with locals
  – Usually from high income to low income countries
• Both men and women
  – Society less damning of women who do this*?
    • “Travel Romance” vs “Sex Tourism”
• Most countries outlaw tour packages that specifically facilitate/promote sex as a tour activity
• *Bauer IL. Romance tourism or female sex tourism? Travel Medicine and Infectious Disease. 2013.
Sex with Minors

- NZ is signatory to legislation which can prosecute a NZer in NZ for having sex with a minor overseas. See http://www.reportchildsex.com/site/page.aspx?id=9
Insurance

• Make sure
  – Fit for purpose
    • Activities
    • Covers pre-existing medical conditions
    • Any exclusions?
  – Includes
    • Medical Evacuation
    • Repatriation
  – Includes in-country care
  – If do have pre-existing medical condition then online options probably not best
Any evidence that receiving/reading advice translates into action?

• Overall: very few studies

• Travellers diarrhoea
  – Lots of studies show advice has little impact on TD rates

• STIs
  – Brief motivational interview had no impact (*Senn et al. BMC Inf Dis. 2011:* )
  – Recollection of an STI discussion had no impact on safe sex, but **reading** info on STI risk was associated with more consistent condom use (OR 3) (*Croughs et al J Trav Med 2014:* )

• Altitude & Kilimanjaro study (*Croughs et al J Trav Med 2014*)
  – Visiting travel clinic: no impact on AMS rates
  – But if AMS was discussed, then 1/3rd lower AMS rates