Travelers’ Diarrhea
Learning Objectives

Students should be able to:

✓ Define who is affected by Travelers’ Diarrhea
✓ Identify some of the risk factors
✓ Identify the risk groups
✓ Identify ways to prevent Travelers’ Diarrhea
**Definition**

**What:** Microbial contamination of ingested food and/or water

**When:** It occurs during or shortly after travel

**Who:** Affects most travelers’ that come from a highly developed hygiene and sanitation infrastructure to a less developed one.

**What else:** Vomiting and diarrhea may predominate, and symptoms usually go away within 12-18 hours.
Risk Factors

• There are regional differences (travel destination) in both the risk and etiology (type) of diarrhea.
• The world map divides the regions into three grades of risk: high, intermediate, and low.
• **Low-risk** countries include the USA, Canada, Australia, New Zealand, Japan, and countries in Northern and Western Europe.
• **Intermediate-risk** countries include those in Eastern Europe, South Africa, and some of the Caribbean islands.
Risk Factors, continued

- **High-risk** areas include most of Asia, the Middle East, Africa, and Central and South America.
- Some destinations that *were* considered high-risk have now been classified as low or intermediate risk, including parts of Southern Europe and some of the Caribbean islands.
- On average, 30%-50% of travelers to high-risk areas will develop TD during a 1-to-2 week stay.
Risk Factors, continued

• Based on the annual figure of 50 million travelers to developing countries, this equals to approximately 50,000 cases of TD each day.
• In more moderate regions, there may be seasonal variations in diarrhea risk.
• In South Asia, for example, during the hot months preceding the monsoon, much higher TD attack rates are commonly reported.
Risk Groups

- Travelers’ diarrhea occurs equally in males and females
- Is more common in young adults than older people
- In short-term travelers, bouts of TD do not appear to protect against future attacks.
- More than one episode of TD may occur during a single trip.
For travelers to high-risk areas, several approaches may be recommended, which can lower but never completely eliminate the risk of TD.

- Eat foods that are freshly cooked and served piping hot.
- Avoid water and beverages diluted with water (example: ice, milk, fruit juice, and bottled water) and foods washed in water, such as salads.
Other risky foods include raw or undercooked meat and seafood, raw fruits, and vegetables.

Safe beverages include those that are bottled and sealed or carbonated. Including boiled beverages and those that are properly treated with iodine and chlorine.

What else: Studies of TD show that consumption of food and beverages from street vendors in high-risk destinations poses a higher-risk, including certain food items such as reheated prepared foods or buffet items.
According to the National Digestive Diseases Information Clearinghouse (NDDIC), infectious diarrhea diseases for the United States show the following:

- There were 16 million new cases in 1996.
- A count of 2,481 deaths in 2002.
- Hospitalization cases ranged from 375,000 to 777,000 in 2002.
- Doctor visits among 8 to 12 million in 1985.
- Prescribed patients ranged from 5 to 8 million in 1985.

Reference: [www.cdc.org](http://www.cdc.org)

*He who has health has hope; and he who has hope has everything.*

Arabian Proverb
1. Define Travelers’ Diarrhea.

2. Which country is not considered a low-risk country for Travelers’ Diarrhea? (circle one)
   - Canada
   - USA
   - Japan
   - Africa

3. Travelers’ Diarrhea occurs only in males.
   - T / F

4. Safe beverages include those that are ______ and ______ or carbonated.

5. Avoid eating risky foods that are _______ and ________.