

The background of the slide is a dark blue image featuring silhouettes of palm trees against a lighter blue sky and ocean. The text is overlaid on this background.

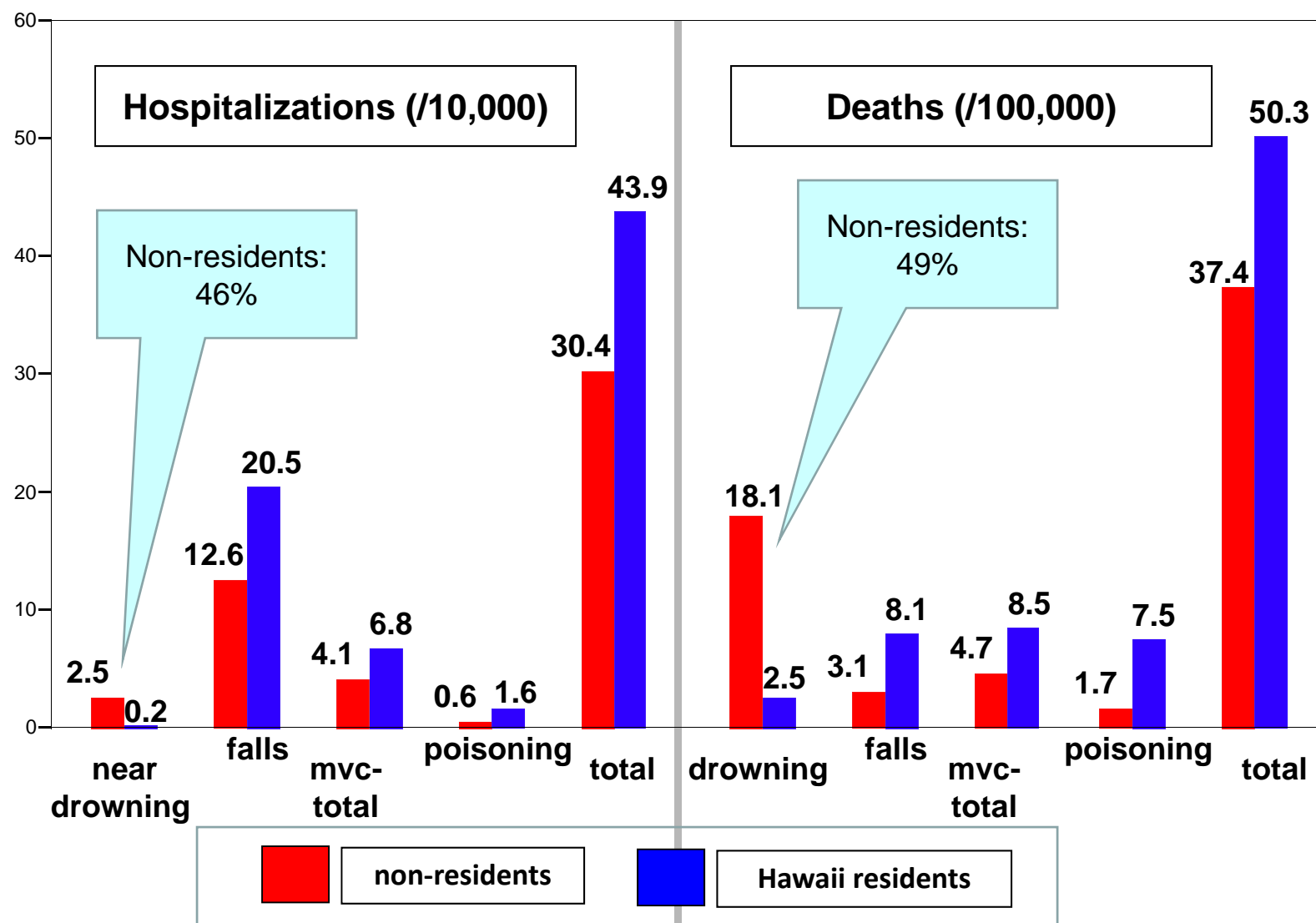
Visitor Safety: How Are We Doing?

***Dan Galanis
Injury Prevention and Control Section,
EMS & Injury Prevention Systems Branch,
Hawaii Department of Health***

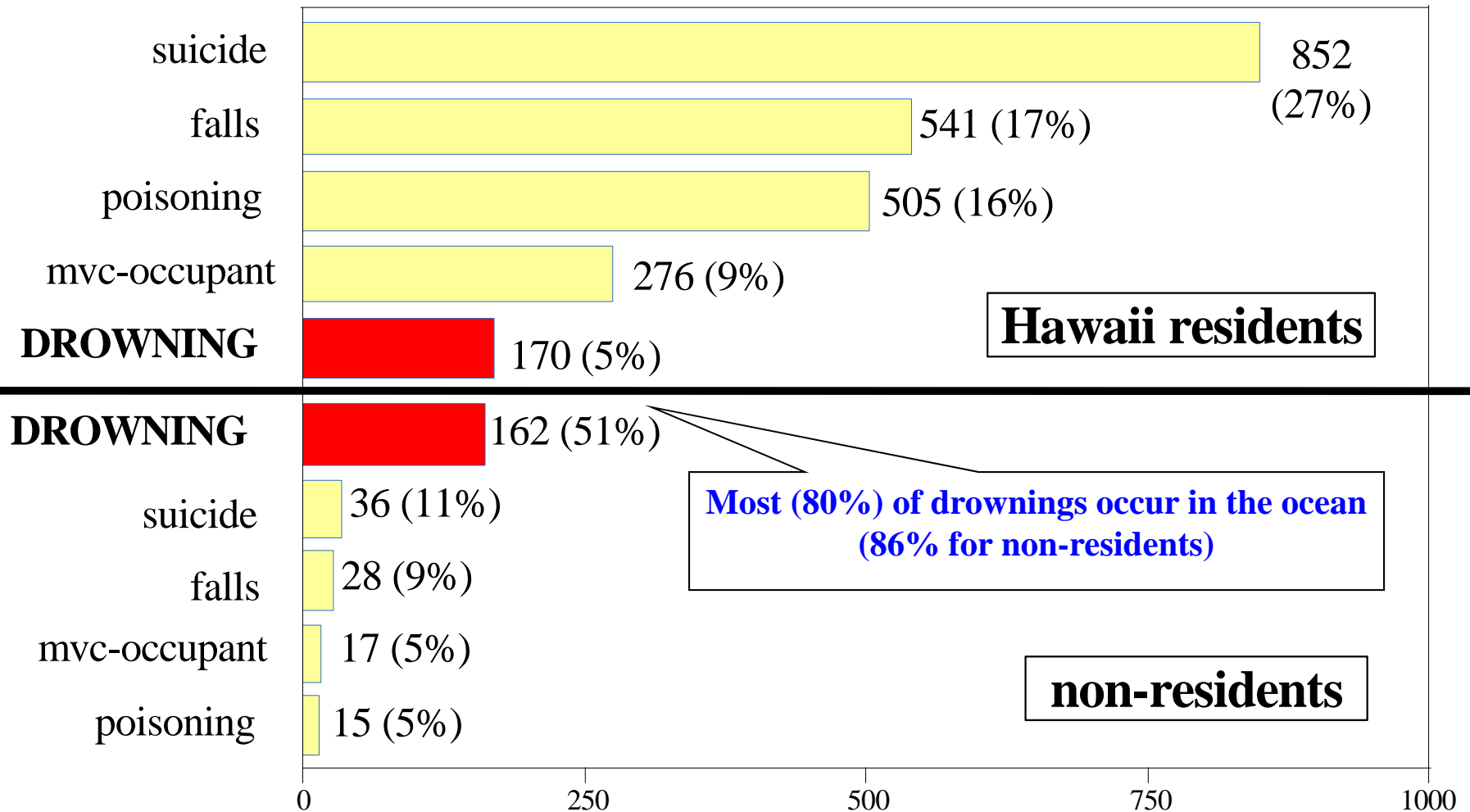
Overview of presentation

- **Part I: Visitor Safety: How are we doing?**
 - **Statewide data, 2003-2012**
 - *Injury rates: residents compared to visitors*
 - *Fatal and non-fatal injuries*
- **Part 2: County descriptions**
 - *Rate comparisons*
 - *County specific trends, data, and maps*
 - *Locations, victim residence, and seasonality (October-March vs. April-September)*

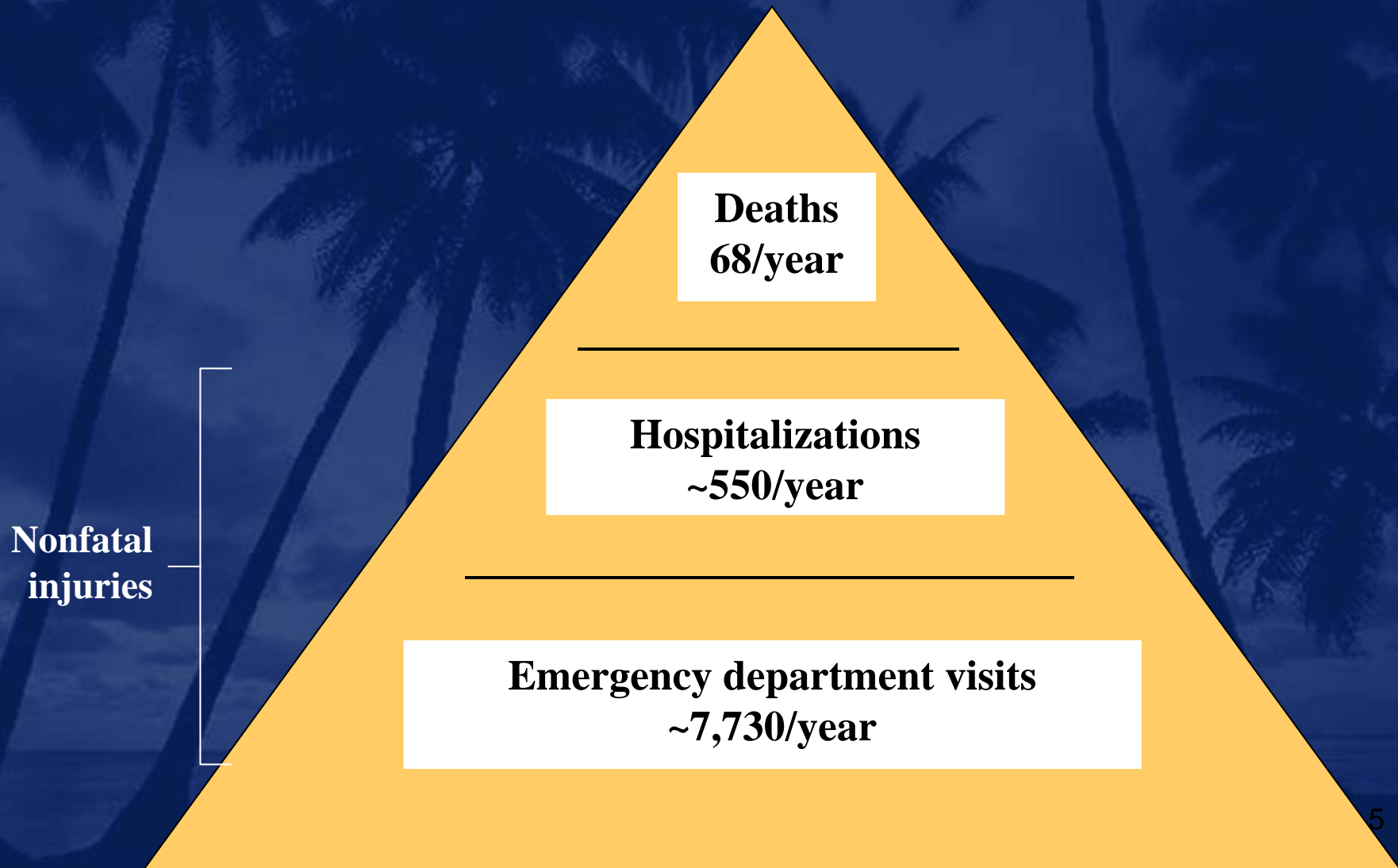
Annual rates of injury-related hospitalizations and deaths, by residence status, 2008-2012



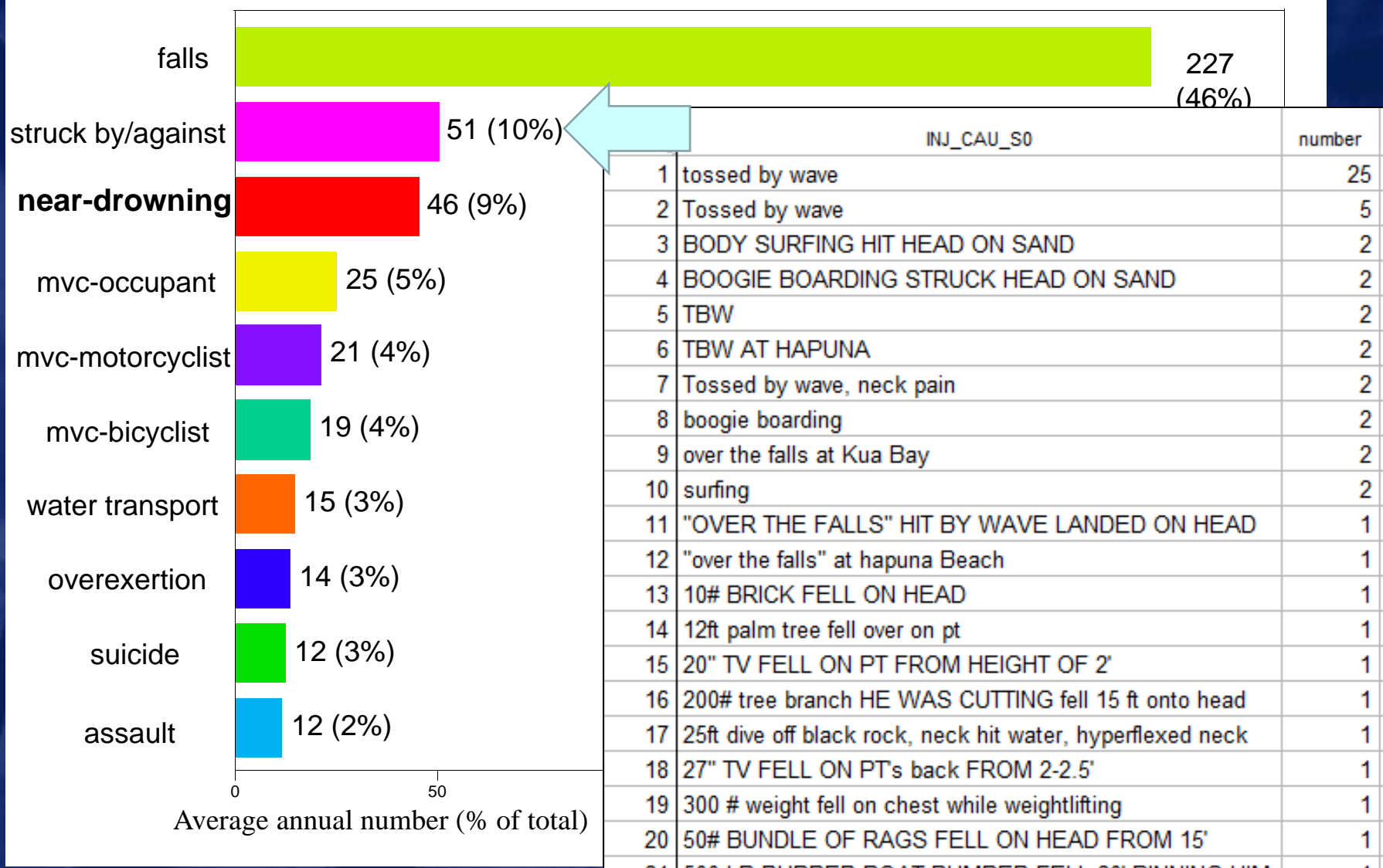
Leading causes of fatal injuries in Hawaii, 2008-2012



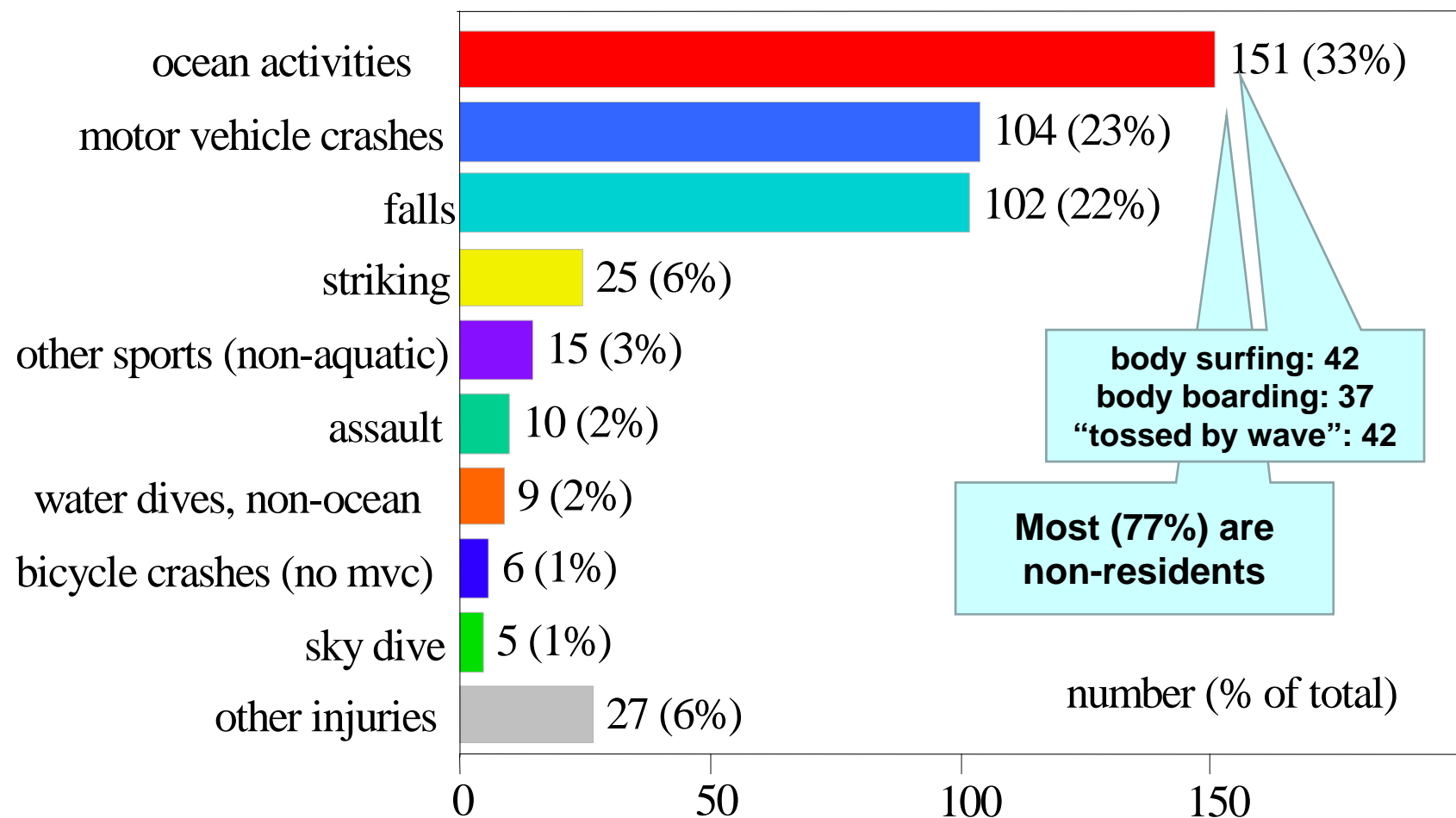
“Injury Pyramid” for injuries among non-residents in Hawaii



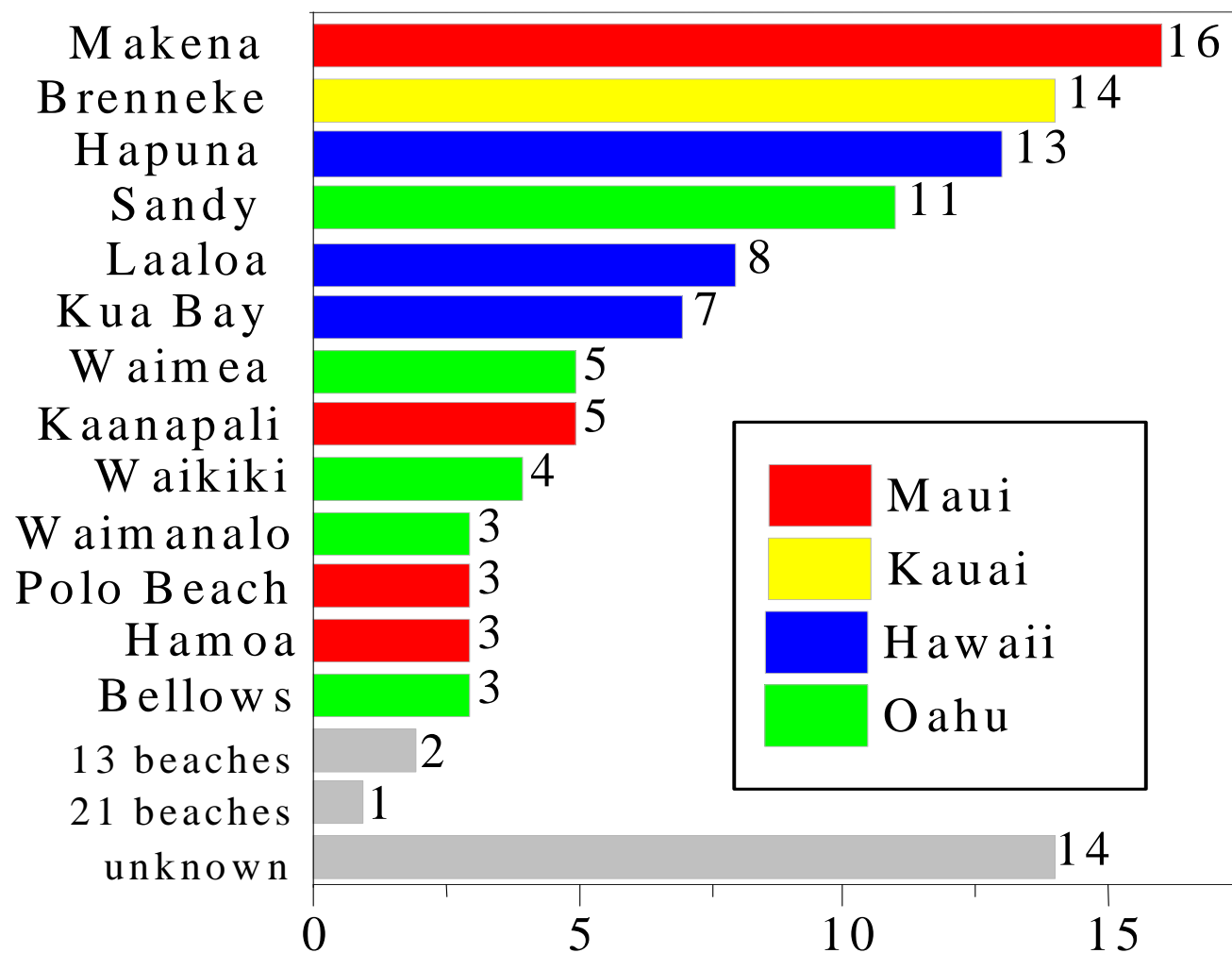
Leading causes of hospitalizations for non-fatal injuries among non-residents in Hawaii, 2008-2012



Leading causes of spinal cord injuries in Hawaii, 2009-2012



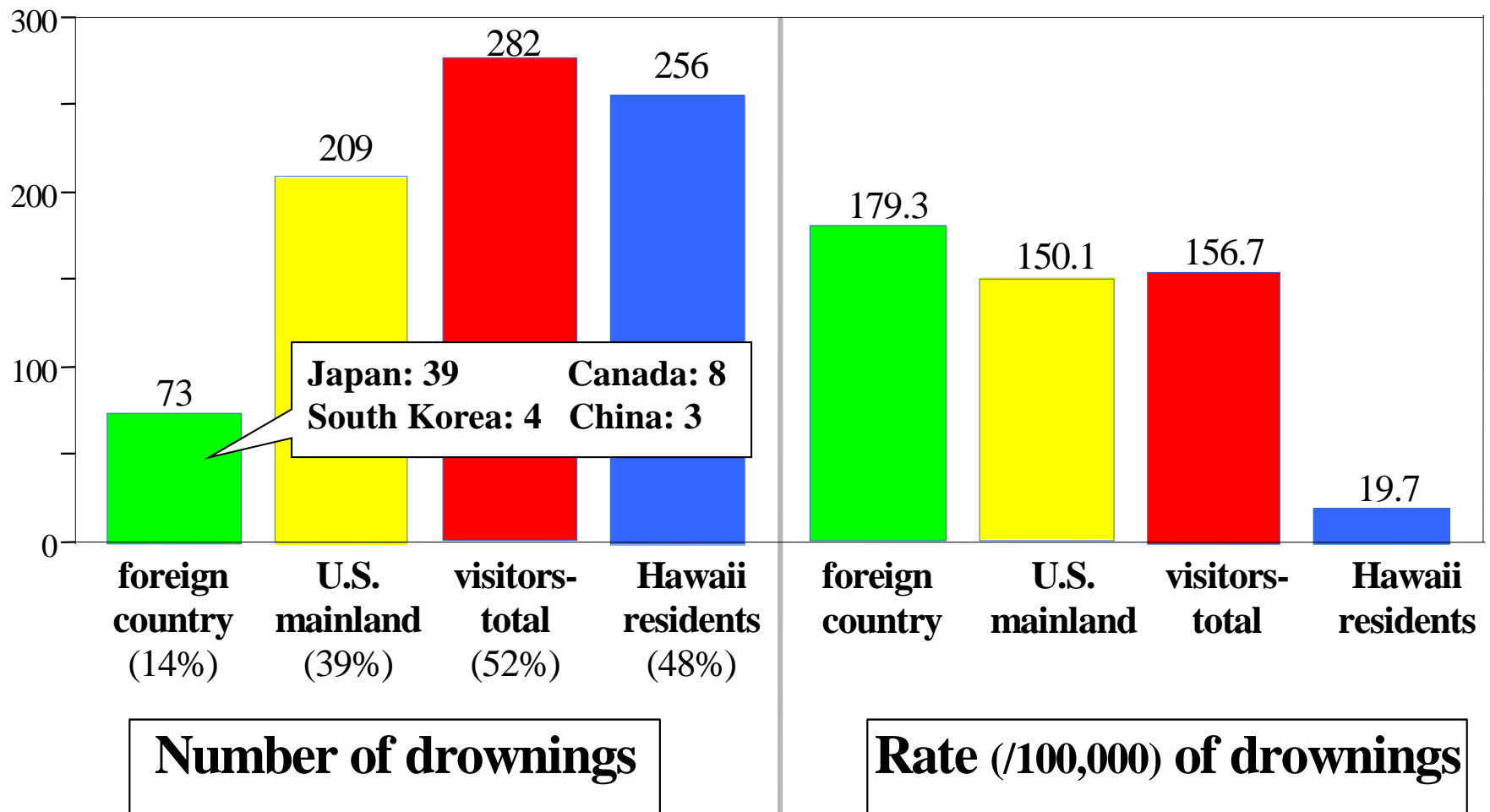
Location (beach) of spinal cord injuries from ocean activities in Hawaii, 2009-2012



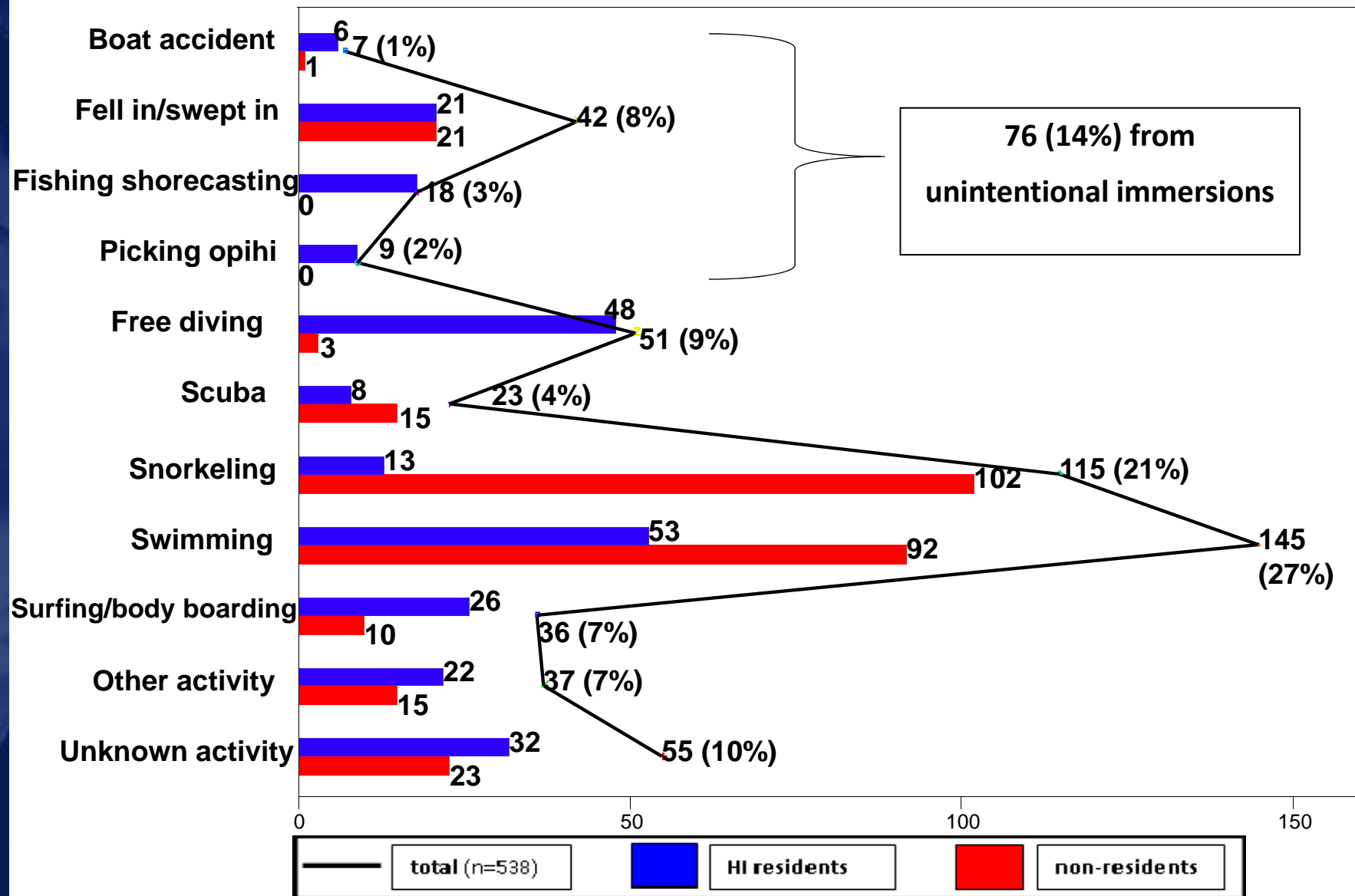
The background of the slide is a dark blue image featuring silhouettes of several palm trees leaning over a calm ocean under a cloudy sky. The text is overlaid on this background.

Ocean drownings, 2003-2012

Number and ten-year rate of ocean drownings in Hawaii, by residence of victim, 2003-2012



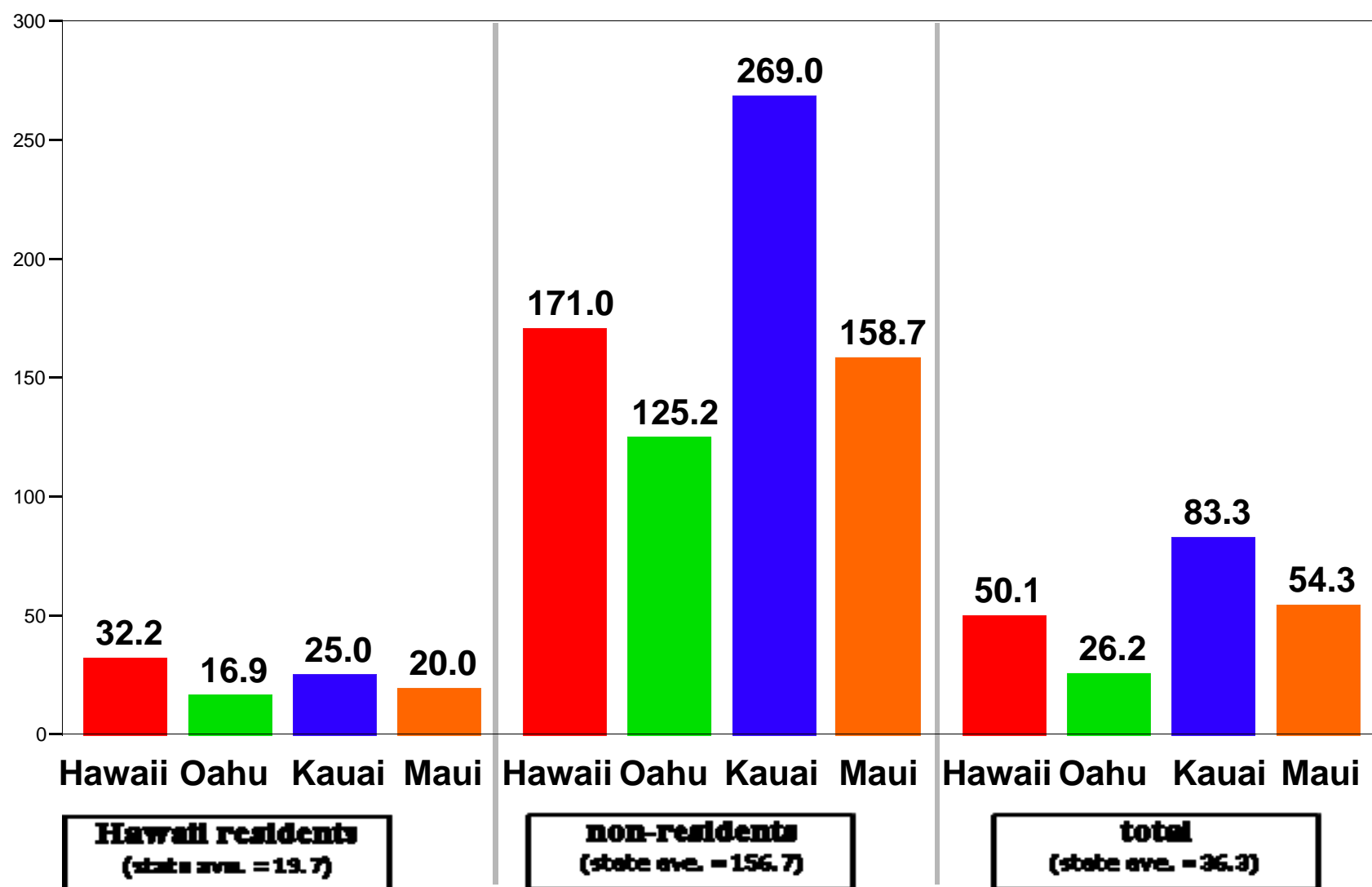
Ocean drownings in Hawaii, by residence and activity of victim, 2003-2012



The background of the slide is a dark blue, monochromatic image of a tropical beach at sunset or sunrise. Several palm trees are silhouetted against a lighter, hazy sky. The ocean is visible in the lower portion of the image.

County-specific data

Ten-year rate (/100,000) of ocean drownings in Hawaii, by residence status and county, 2003-2012

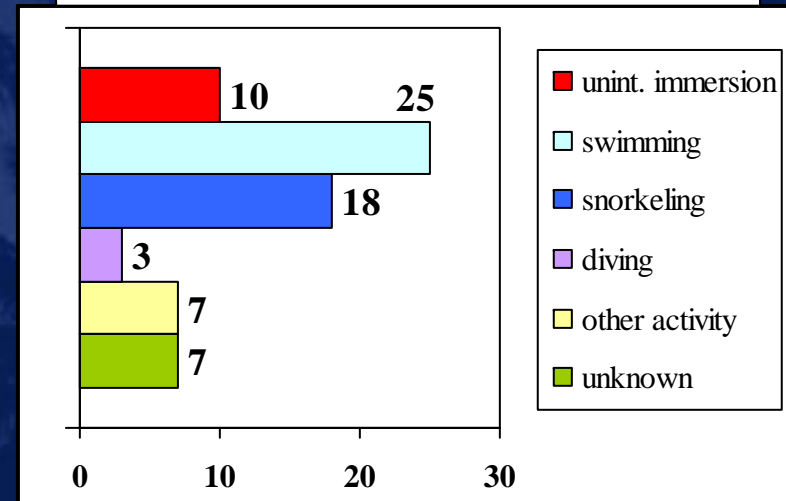


Ocean drownings on Kauai, 2003-2012

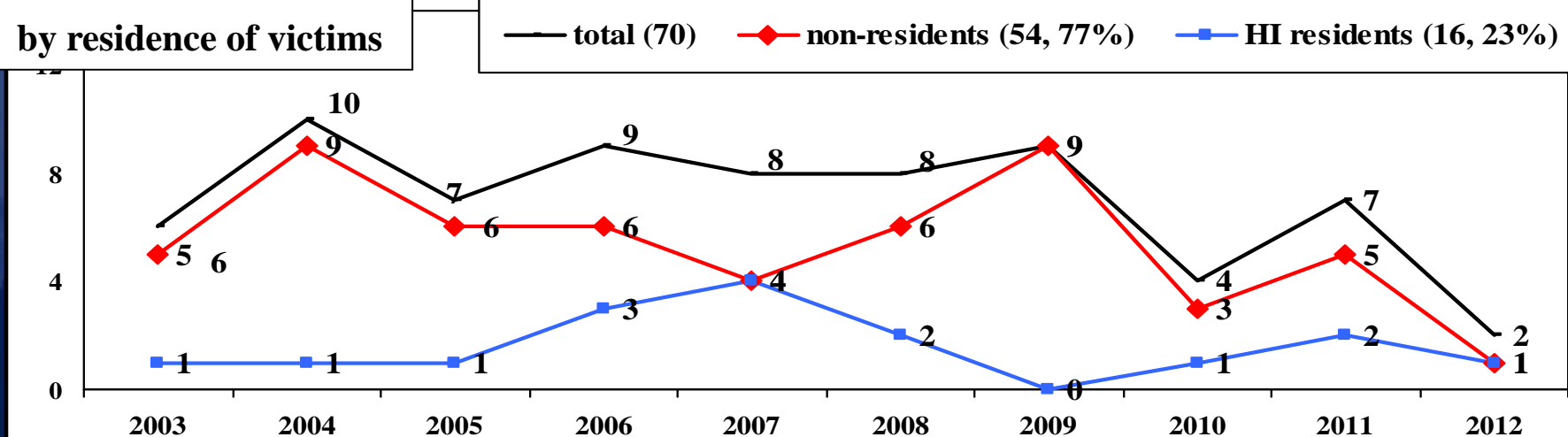
• Summary

- *70 total, 2 to 10 per year*
- *Somewhat decreasing trend*
- *Mostly (77%) non-residents*
- *Activity: Swimming (36%) and snorkeling (26%)*

Number of drownings, by activity



Annual trends,
by residence of victims



Napali Coast: 4 drownings:

- 3 non-residents
- all during Oct-March
- 3 swimmers

Kee-Princeville: 19 drownings:

- 17 non-residents (all US)
- no seasonality
- 5 at Queen's Bath, none since 2008

Poipu area: 15 drownings:

- 13 non-residents (all US)
- no seasonality
- 8 snorkelers, 5 swimmers

Seasonality

North Shore (Polihale-Lighthouse): 29
-20 (69%) from Oct-March

East Shore (Larsens - Lihue): 21
-13 (62%) from April-Sept.

South Shore (Kekaha-Poipu): 22
-13 (59%) from April-Sept.

Seasonality

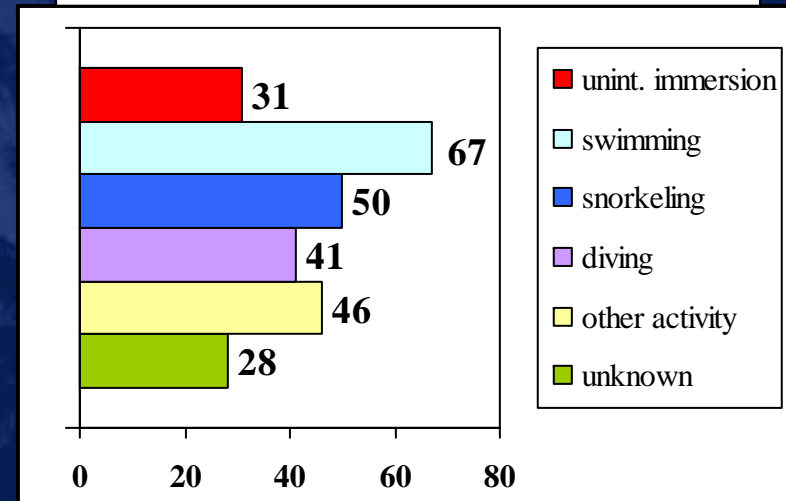
- April-Sept
- Oct-March

Ocean drownings on Oahu, 2003-2013

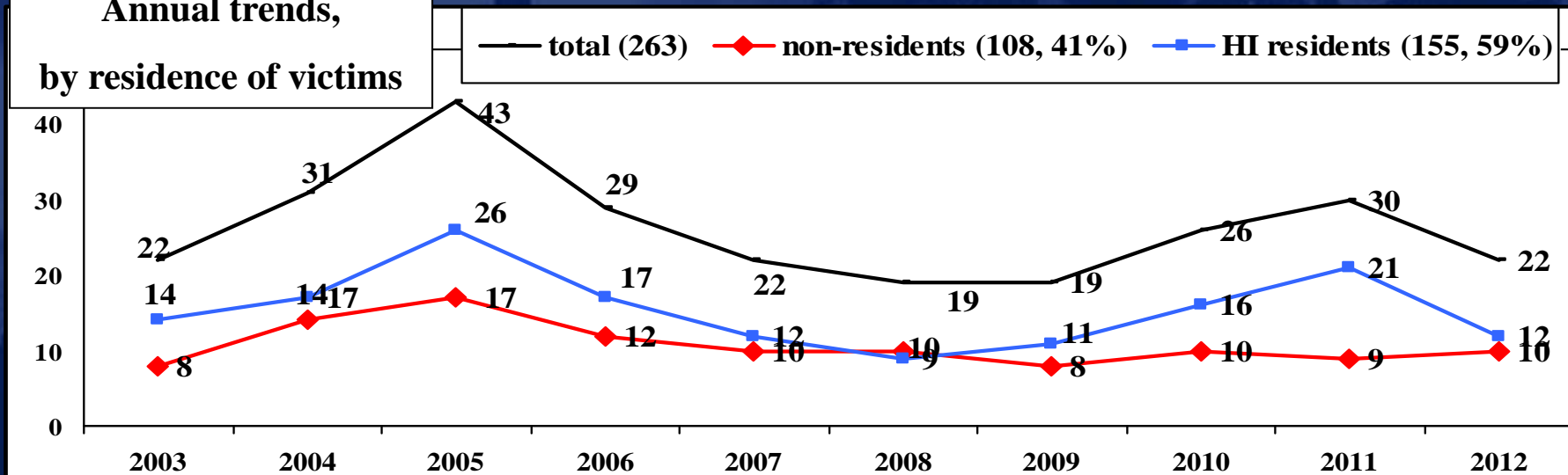
- **Summary**

- **263 total, 19 to 43 per year**
- **No consistent trend**
- **Slightly more residents (59%)**
-
- **Activity: wide distribution**

Number of drownings, by activity



Annual trends,
by residence of victims



Residence

Point Panic-Ala Wai marina: 25:
-21 residents

Residence status

- non-resident
- resident

Hilton Hawaiian-Kapahulu: 35:
-26 non-residents (10 US, 16 foreigners)

Hanauma: 20:
-19 non-residents
-7 US, 12 foreigners

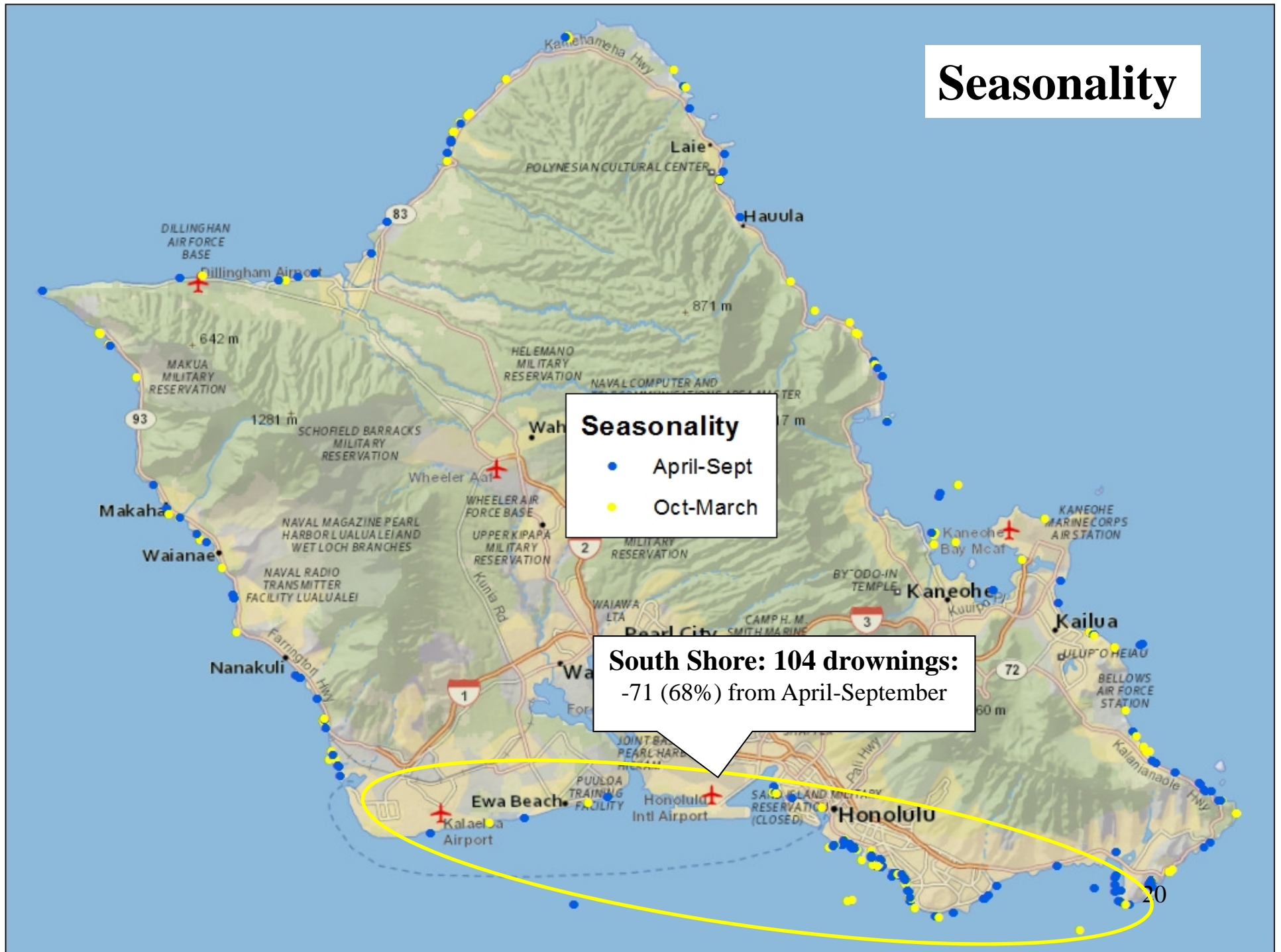
Kahala-Portlock: 23:
-17 residents

Seasonality

Seasonality

- April-Sept
- Oct-March

South Shore: 104 drownings:
-71 (68%) from April-September

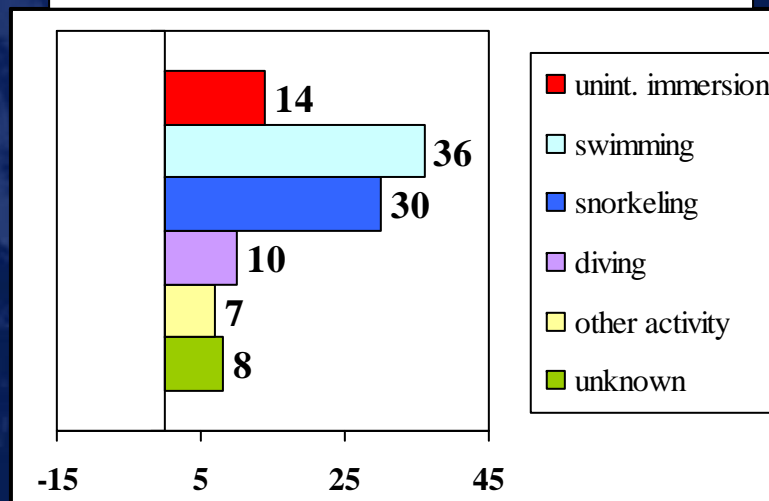


Ocean drownings on Maui County, 2003-2013

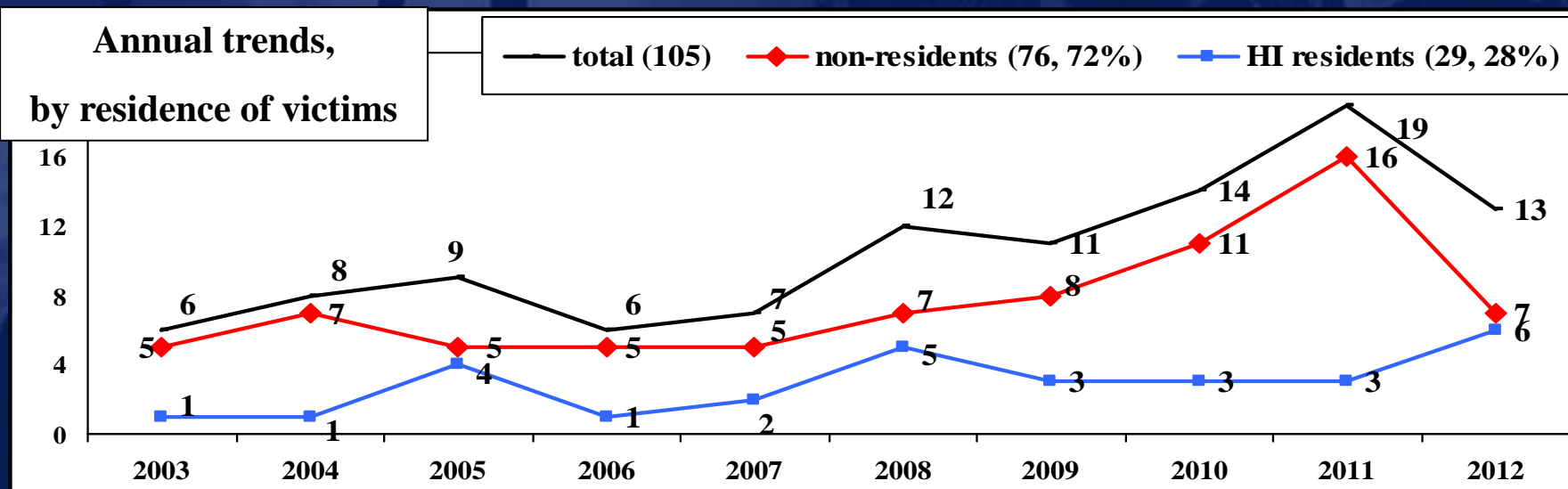
• Summary

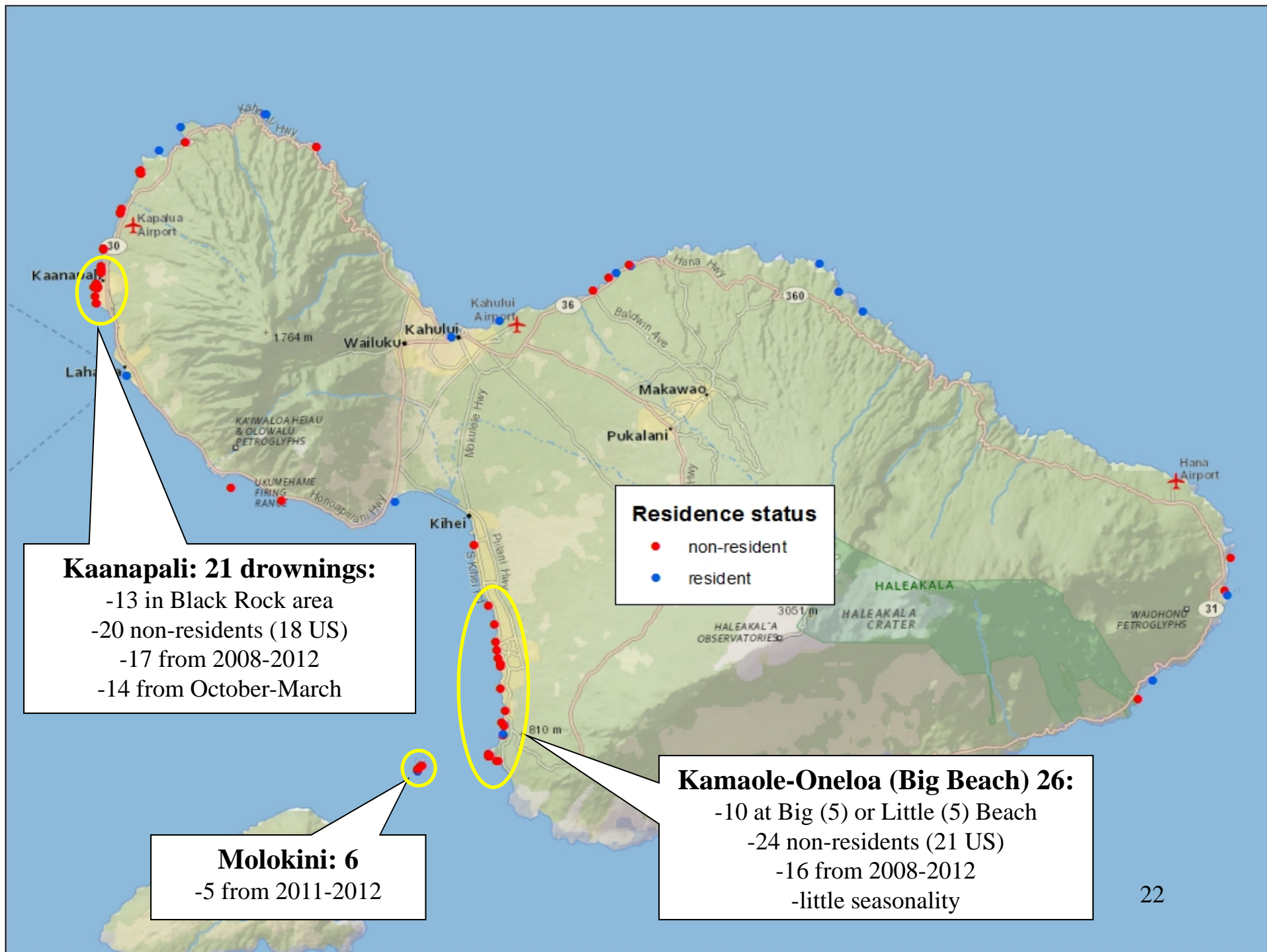
- **105 total, 6 to 19 per year**
 - (95 on Maui, 8 Molokai, 2 on Lanai)
- **Increasing trend**
- **Mostly (72%) non-residents**
-
- **Activity: Swimming (34%), snorkeling (29%), and unintentional immersions (13%)**

Number of drownings, by activity



Annual trends,
by residence of victims



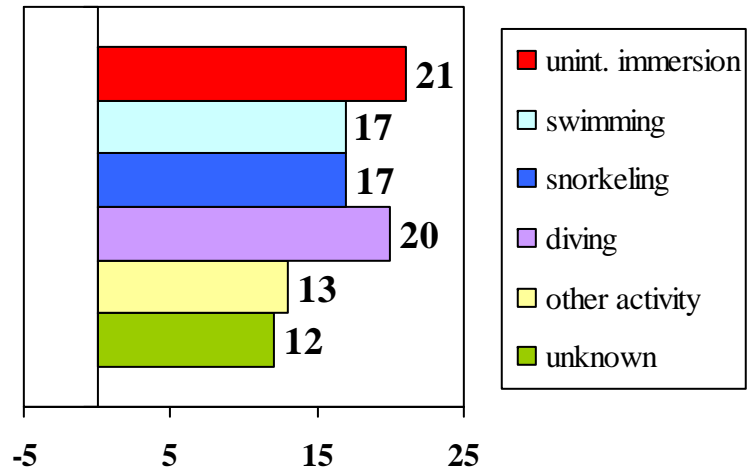


Ocean drownings on Hawaii County, 2003-2012

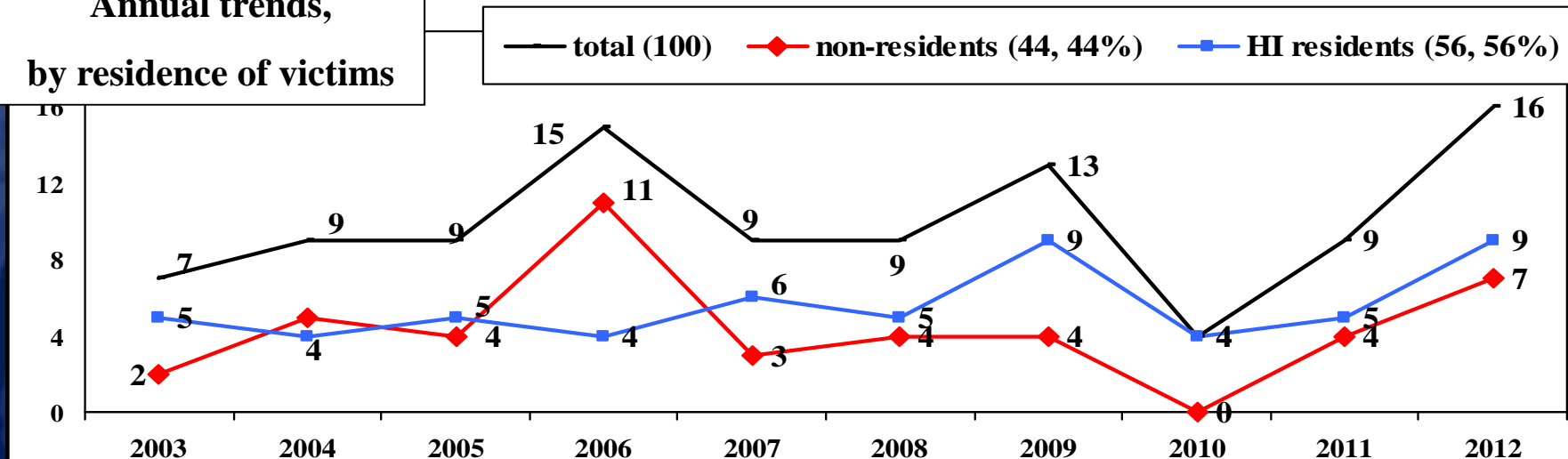
- **Summary**

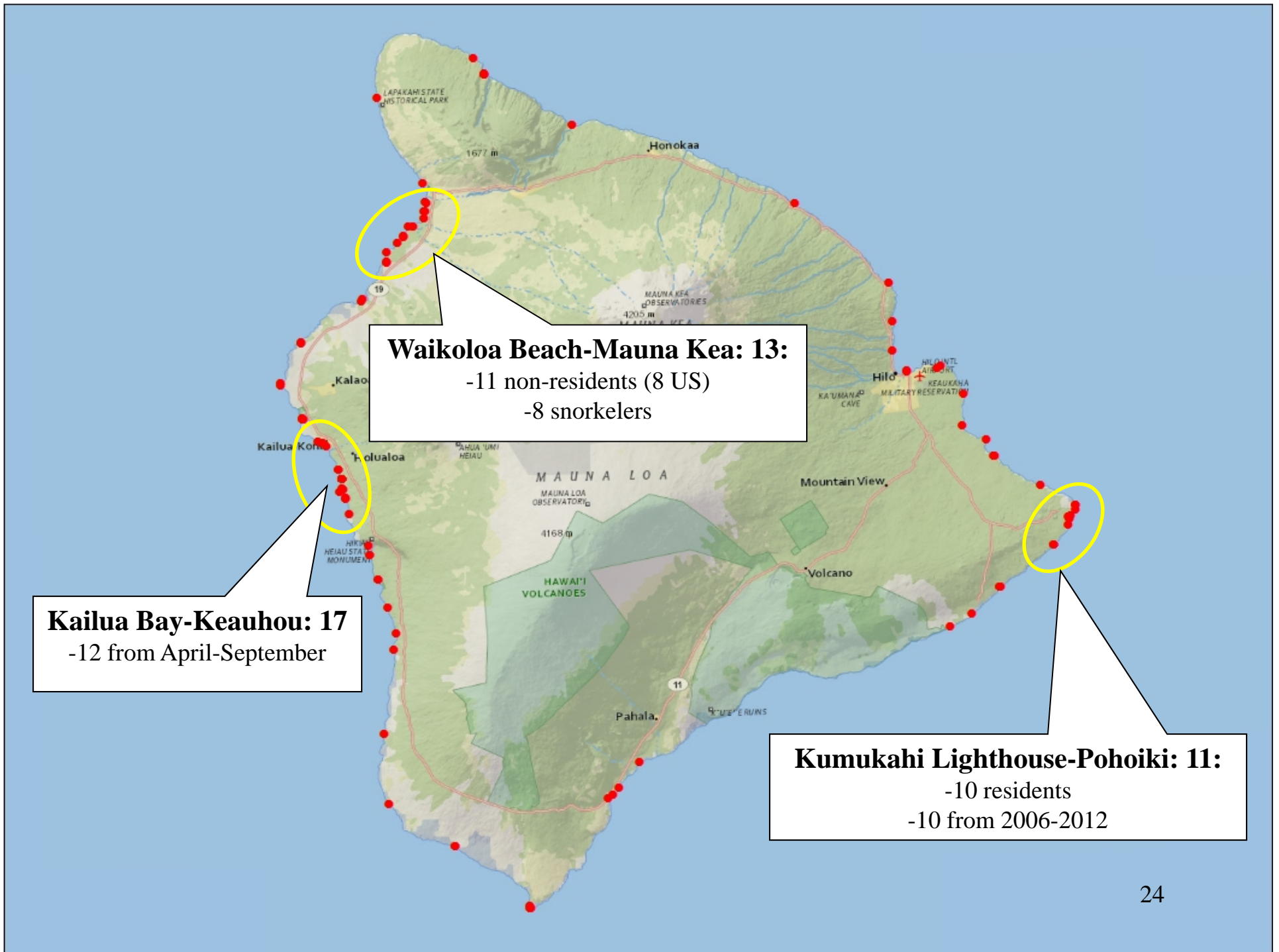
- *100 total, 4 to 16 per year*
- *No consistent trend*
- *Slightly more residents (56%)*
- *Activity: wide distribution*

Number of drownings, by activity



Annual trends,
by residence of victims





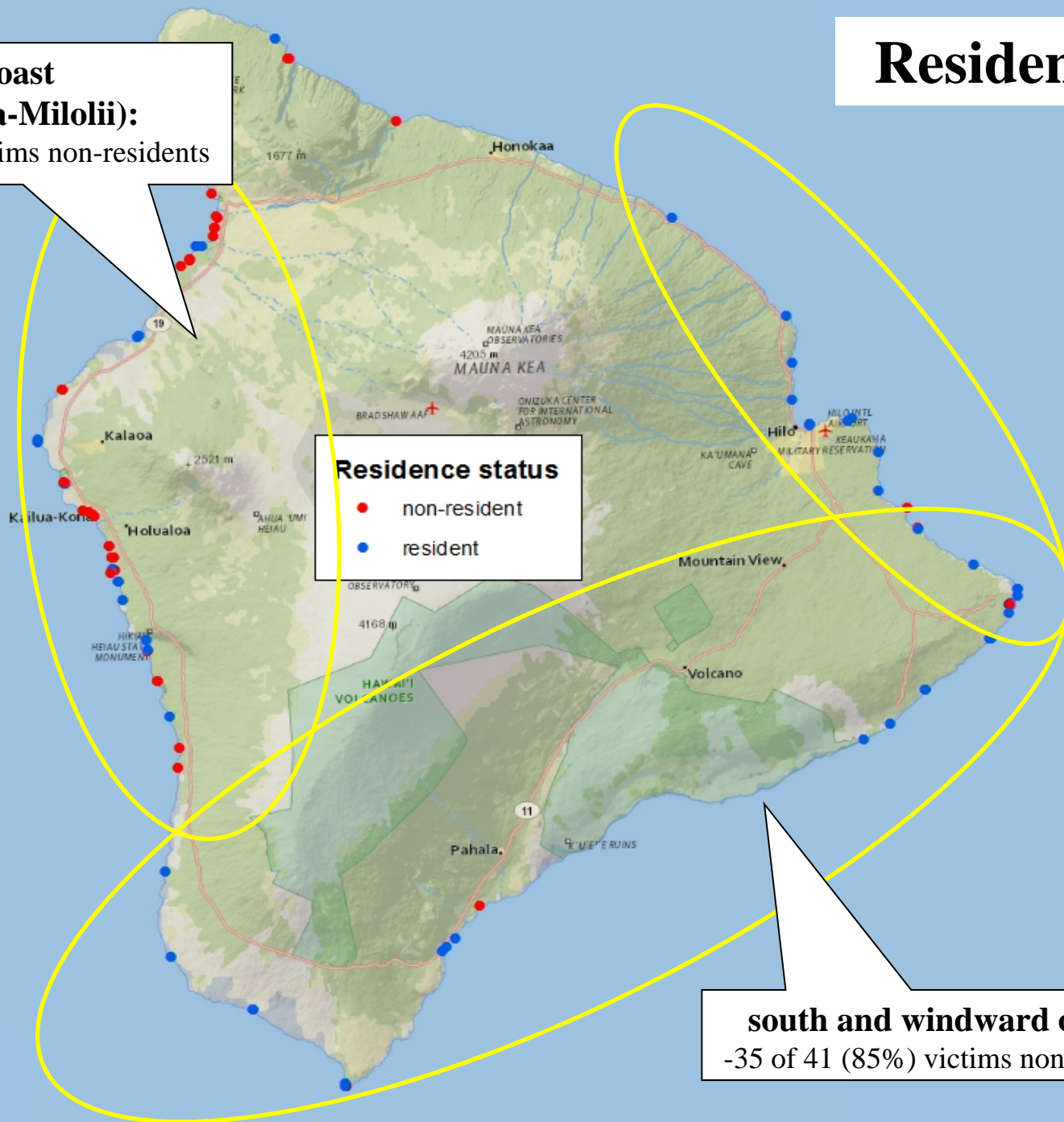
Residence

**west coast
(Mauna Kea-Milolii):**
-33 of 51 (65%) victims non-residents

Residence status

- non-resident
- resident

south and windward coasts:
-35 of 41 (85%) victims non-residents



Summary

- **Visitors have low risks (rates) of injury, with the exception of drowning, near-drowning and spinal cord injury**
 - **Comprise nearly half the drowning victims/patients**
 - *Mortality rates ~7 times higher, morbidity ~10 times higher*
 - **Comprise 77% of ocean-related SCI**
 - *Specific beaches on each island*
- **County data**
 - **Hawaii County highest drowning rate among residents**
 - **Kauai highest rate among non-residents and total**
 - **Descriptions (victim residence, activity, seasonality, trends) available for each county**