

## Comparison of Violent Crime Rates at Sea and on Shore

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Cruise Lines International Association (CLIA) requested that I update my previous analysis of allegations of serious crime statistics related to cruise lines sailing in and out of U.S. ports. Specifically, my task was to compare the cruise industry with the U.S. mainland in terms of the rates of homicide, sexual assault and assault resulting in serious bodily injury between January 2015 and December 2017. While I use the same general approach as in my earlier work, certain data limitations require slight modifications to the method for performing the calculations.

All reports of missing U.S. nationals and allegations of serious crimes that occur aboard cruise ships originating from or ending in U.S. ports are required to be reported to the Federal Bureau of Investigation (FBI) under the Cruise Vessel Security & Safety Act of 2010 (CVSSA). Pursuant to the CVSSA (Title 46 U.S.C section 3507(g)(4)(A)), quarterly statistical tabulations of incident categories (specifically, homicide, suspicious deaths, missing U.S. nationals, kidnapping, assault with serious bodily injury, firing or tampering with vessel, theft of over \$10,000 and sexual assault) are now published on the United States Department of Transportation website. **The quarterly reports through 2015 reflect only those incidents for which the investigation has been completed, while reports for 2016 and 2017 include all incidents regardless of investigation status.**

The specific crime categories of interest include homicide, sexual assault and an assault resulting in serious bodily harm (e.g., aggravated assault) because these three have exact or similar parallel measures in FBI crime statistics pertaining to law enforcement agencies within in the U.S. For calculating crime rates, eight cruise lines, which represent 90 percent of the cruising population were used:

- Five cruise lines that reported consistently for all 12 quarters between 2015 and 2017;
- Two cruise lines that reported consistently for all eight quarters of 2016 and 2017; and
- One cruise line that reported all four quarters in 2017 and four other quarters between 2015 and 2016.

For the present analysis, it was not possible to obtain data on passenger counts and crew figures directly from the cruise lines for the timeframe mentioned. As an alternative, published itinerary data from 2017 were employed and adjusted for changes in the industry since 2015. Total counts of passengers and crew across all sailings were adjusted by an estimated average cruise length of 6.38 days to annualize the overall cruise population. The final estimates of the annualized population of passengers and crew were very close to figures used in earlier years based on data obtained directly from the cruise lines, providing validation of the alternative approach employed here.

As with previous analyses, the FBI's Uniform Crime Reports were used to benchmark the calculated rates of violent crime aboard cruise ships. The aggregate rates of homicide, forcible rape and aggravated assault for U.S. cities with populations between 250,000 and 499,999 were used for the comparison. This population grouping was chosen, as before, so as roughly to match the overall annualized population for the cruise industry (of approximately 375,000 passengers and crew). The rates for 2015 and 2016 were drawn from the annual *Crime in the United States*. Although the final figures for 2017 have not been published, estimates were derived based on the preliminary report for the first half of 2017.

Whereas the CVSSA and FBI definitions for homicide and serious/aggravated assault are comparable, the CVSSA sexual assault classification is much broader than the FBI's forcible rape category. However, based on the analytic results below, the conclusions are unaffected by the misaligned definitions. In fact, if identical measures of sex crime were available, the gap between sea and land would only be widened.

The table below displays the cruise and mainland rates of homicide, sexual assault/forcible rape and aggravated assault by year. Clearly, the rates for the cruise industry are much lower than for land for all three offense categories. Note that the cruise crime figures increased from 2015 to 2016 (e.g., a fourfold jump in the rate of sexual assault and aggravated assaults) because of the move to include all reported incidents rather than just those for which the investigation had been completed. Even with this shift in approach, the rates of victimization on board cruise ships remains a small fraction of the counterpart statistic for land.

**Violent Crime Rates per 100,000 Population for the Cruise Industry and U.S. Mainland Cities**

Year	Homicide Rate		Sexual Assault Rate		Aggravated Assault Rate	
	Cruises	Land	Cruises	Land	Cruises	Land
2015	0.0	10.9	3.8	56.1	0.9	412.6
2016	0.0	12.3	16.5	61.6	3.7	431.6
2017	0.2	13.5	18.6	59.3	3.2	434.6
2015-17	0.1	12.2	13.4	59.0	2.7	426.3

**As demonstrated once again, travel by sea aboard commercial cruise ships is exceptionally safe in terms of the risks associated with violent criminal activity.** This level of safety is particularly noteworthy given the high density of passengers and crew in relatively small space, the large number of closed quarters and the consumption of alcohol, all elements that are ordinarily considered risk factors. It would appear, therefore, that the cruise lines do an exceptional job of securing and providing surveillance in addition to screening their populations and generally providing a high level of security aboard ships. Finally, the population of Americans who choose to vacation on cruise ships is demographically distinct, contributing to a safer environment on board ships. And, of course, the confined perimeter of a cruise ship, particularly when at sea, would make it difficult for an individual who is contemplating an aggressive act to make an escape. While no vacation destination is completely free of risk, cruising is clearly a relatively safe option.