

Comparison of Violent Crime Rates at Sea and on Shore, 2016-2019

James Alan Fox, Ph.D.
Northeastern University
September 2020

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 2016 and December 2019.

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 U.S. Department of Transportation website. **Whereas quarterly reports through 2015 had reflected only incidents for which the investigation has been completed, reports for 2016 through 2019 (the years covered by this analysis) include all incidents regardless of investigation status.**

The specific crime categories of interest are homicide, sexual assault, 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. Seven of the cruise lines reported consistently for all 16 quarters from 2016 and 2019, while one cruise line reported consistently for all 12 quarters from 2017 to 2019 but only three quarters in 2016. For this one cruise line, the 2016 counts were estimated by multiplying the three-quarters totals by 4/3. Given the consistent pattern of low rates of crime, there is virtually no chance that having data for one additional quarter from one of the eight cruise lines (i.e., 32 quarters of data rather than 31 in the aggregate for 2016, and 128 quarters of data rather than 127 in the aggregate for the four -ear time frame) would change the result in any appreciable way.

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, data from the FBI's Uniform Crime Reporting Program 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 2016 through 2018 were drawn from the annual *Crime in the United States*. Although the final figures for 2019 have not been published, estimates were derived based on the preliminary report for the first half of 2019. Specifically, the 2019 rates were estimated by applying the percentage changes from the first half of 2018 to the first half of 2019 to the rates for all of 2018.

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. 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	<i>Homicide Rate</i>			<i>Sexual Assault Rate</i>			<i>Aggravated Assault Rate</i>		
	Cruise	Cruise	U.S. Land	Cruise	Cruise	U.S. Land	Cruise	Cruise	U.S. Land
	passengers & crew	passengers only		passengers & crew	passengers only		passengers & crew	passengers only	
2016	0.0	0.0	12.3	16.6	18.5	61.6	3.8	3.8	431.6
2017	0.2	0.4	12.1	18.6	20.5	64.2	3.2	4.2	435.1
2018	0.0	0.0	11.4	18.5	19.6	65.7	1.4	2.0	429.9
2019	0.0	0.0	10.0	22.5	23.8	65.7	2.0	2.5	438.1
2016-19	0.1	0.1	11.9	19.2	20.7	63.8	2.6	3.1	432.2

Notes: The U.S. land rates are based on cities between 250,000 and 499,999 population. The 2019 land rate is estimated based on the FBI's 2019 half-year preliminary figures for percentage change 2018 to 2019.

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 volume of passengers on cruise ships, the number of private staterooms, the hours of free time, and the daily consumption of alcohol—elements that would ordinarily be considered risk factors. It appears, therefore, that the cruise lines do an exceptional job of surveillance in addition to pre-screening of passengers (and crew), screening for contraband at points of embarkation, 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.