

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

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All reports of missing persons 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 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) that are no longer under investigation by the FBI are published on the U.S. Coast Guard's website.

The present analysis of crime at sea and on shore focuses specifically on violent offenses for which there exists appropriate comparative benchmarks. For this purpose, I reviewed the worldwide number of alleged violent crime incidents aboard ships, regardless of vessel itinerary or passenger domicile (and not just those reportable under the CVSSA) which were provided by four major cruise companies (representing 90% of the industry based on the global passenger counts of all of CLIA's North American members).

A benchmark for assessing the relative safety (in terms of violent crime risk) aboard ship compared to that on shore within the U.S. is provided by the *Uniform Crime Reports* (UCR) collected by the FBI after aligning offense categories as closely as possible and matching populations at sea and on land by exposure time.

1. The total passenger population (or passenger head count) and all allegations of homicide, rape, and assaults with serious bodily injury aboard cruise ships from four major cruise companies over 10 quarters, from July 2012 through December 2014, were obtained from company websites. Other offense categories are not part of this comparative analysis because there was no comparable crime category within the FBI's tabulations.
2. Translating incident counts into rates (for comparison purposes) requires an accurate figure on the number of individuals (passengers and crew) who are at-risk for the years in question. Head counts of cruise populations cannot be used directly as an indicator of population at-risk because travelers are only aboard ship for a matter of days or weeks. Therefore, yearly passenger head counts provided by the four cruise companies were adjusted by the average cruise length in order to annualize the passenger count. The annualized figure reflects the number of passengers in full-year equivalent
3. A 32,086,918 passenger count for the four cruise companies combined over 913 days yields a yearly average of 12,834,767 passengers. This is then divided by the average cruise length (7.24 days) resulting in an annualized passenger count across

the four cruise companies of 254,586. Adding the daily crew count across the four cruise companies (86,563) to the passenger count gives a total annualized population of 323,833.

4. After the population adjustment, rates of homicide, rape, and assault with serious bodily injury aboard ship per 100,000 population (annualized passenger count plus crew size) were derived. These rates are shown in Table 1.
5. Based on FBI data, rates of homicide, forcible rape, and aggravated assault per 100,000 population for 2012 through 2014 (using preliminary figures to estimate the 2014 data) combined for all law enforcement agencies and various population groupings within the United States were used for comparison. These rates for the three crime categories are shown in Table 2.
6. Definitionally, the crimes of homicide, rape and sexual assault are the same for the two data sources, while assault with serious bodily injury for cruise lines and aggravated assault for the FBI reports are reasonably comparable.
7. Tables 1 and 2 can be compared in terms of crime rates at sea and on land. As should be clear, the rate of crime (and thus the risk) aboard cruise ships is appreciably lower than corresponding rates on land. There were no homicides aboard cruise ships from the four companies represented during the data window, compared to many on land. The rate of forcible rape on cruise ships (8.6 per 100,000) is 65% lower than that for U.S. overall (24.7 per 100,000). The rate of assault with serious bodily injury on cruises (3.4 per 100,000) is a tiny fraction of the aggravated assault rate in U.S. jurisdictions of all sizes (236.7 per 100,000).
8. By any measure, travel by sea aboard commercial cruise lines is exceptionally safe in terms of the risks associated with 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 pre-screening their crew and generally providing a high level of security aboard ships.



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**Table 1: Crime Rate Calculation for Four Cruise Companies Combined, July 2012 - December 2014**

Passenger head count	32,086,918
Reporting days	913
Average annual passenger head count	12,834,767
Average cruise length	7.24
Annualized passenger count	254,586
Crew size	91,563
Population	346,149
Homicides	0
Annualized count	0.0
Rate per 100,000	0.0
Rapes	74
Annualized count	29.6
Rate per 100,000	8.6
Assaults with serious bodily injury	29
Annualized count	11.6
Rate per 100,000	3.4

**Table 2: Offenses and Offense Rates, 2012-2014 Average**

	Total Population	Homicide Offenses	Homicide Rate	Forcible rape Offenses	Forcible rape Rate	Aggravated assault Offenses	Aggravated assault Rate
All agencies	291,676,240	13,443	4.6	50,753	24.7	690,955	236.7
All cities	199,216,695	10,389	5.2	39,357	27.2	536,403	269.7
Cities 1,000,000+	56,578,450	2,029	7.9	6,176	25.1	94,268	367.5
Cities 500,000 to 999,999	25,735,804	1,724	11.0	4,153	37.3	78,386	500.0
Cities 250,000 to 499,999	15,964,113	1,639	11.1	3,809	36.2	58,799	401.0
Cities 100,000 to 249,999	14,878,533	1,823	5.7	6,352	26.7	88,586	278.5
Cities 50,000 to 99,999	31,786,896	1,086	3.4	5,384	23.6	67,856	212.2
Cities 25,000 to 49,999	32,247,892	850	3.0	4,719	23.6	51,719	179.9
Cities 10,000 to 24,999	28,464,143	696	2.5	4,440	24.2	50,263	178.1
Cities under 10,000	28,127,503	556	2.5	4,220	32.7	47,216	212.8
Metropolitan counties	22,011,811	2,308	3.3	8,549	18.0	121,628	175.9
Non-metropolitan counties	68,954,749	723	3.0	2,808	19.4	32,198	135.3

Source: Adapted from Table 16, FBI Uniform Crime Reports 2012, 2013 and Table 1, FBI Preliminary report Jan-June 2014