Resident Death By Suicide Statistics

Just the Facts:

- Resident death by suicide is less frequent than the general population.
- Overall suicide is the #2 cause of resident death. It is the #1 cause of death in male residents and #2 cause of death in female residents.
- The greatest proportion of residents that died by suicide are PGY1s.
- Academic quarter 1 and 3 have the highest number of resident suicide deaths.

The ACGME Report on Resident Death from 2000-2014:
In 2017, the ACGME published an analysis of the cause of resident deaths between 2000 and 2014 and compared those to the age-matched general population by matching data from the Accreditation Data System maintained by the ACGME to the National Death Index.

- In the study period, there were 324 resident deaths. Of those, 311 causes of death were identified.
- Overall, the rates of death in resident populations are lower than the age-matched general population (19.96 deaths per 100,000 person years in residents versus 105.4 per 100,000 person years in the general population; 4.07 suicides per 100,000 person years in residents versus 13.07 per 100,000 person years in the general population).
- This data did not reflect the death rates in non-ACGME accredited programs, although the preliminary analysis showed no significant difference in the rate of resident deaths in ACGME accredited versus non-ACGME accredited programs.
- No trend in the rate of resident deaths (either positive or negative) or common cause of death was identified.

Overall Cause of Death

1. Cancer (80 deaths total, 42 in men, 38 in women)
   Most common cancers were those of the central nervous system and the breast.

2. Suicide (66 deaths total, 51 in men, 15 in women)
   Manner of dying by suicide: most common was by firearm or by overdose on drugs or other substance, followed by leaping from height, and asphyxia by hanging, strangulation, or inhalation.

3. Accidents (51 deaths total, 34 men, 17 women)
   The majority were due to motor vehicle collisions (33 deaths total) or pedestrian or bicycle accidents (5 deaths total).

There is no data to suggest whether resident fatigue contributed to fatal motor vehicle collisions in residents.
4. Medical or surgical illness (51 deaths total, 17 women, 34 men)  
   Majority due to complications from cardiovascular disease (22 men, 8 women).

5. Accidental poisoning (22 deaths total, 19 men, 3 women)  
   More than half (12) were anesthesiology residents

6. Unclear intent (11 deaths total, 5 by fall, 6 by poisoning).

7. Infectious Disease (8 deaths total, 3 women, 5 men)

8. Homicide (7 deaths total, 3 women, 4 men)

   These included causes of death that were unable to be identified and causes of death that were not clear.
Means of Suicide

The most common means were firearms and overdose on drugs or other substance, followed by leaping from height, and asphyxia.

Timing of Resident Suicides By Post Graduate Year:
The majority of resident suicides occurred in the first two years of post-graduate training.
Timing of Resident Suicides By Academic Quarter:
Resident suicides occurred most frequently in the months of July through September and January through March, possibly due to role transition stressors in the early part of the academic year, and the post-holiday mid-winter period in the latter part of the academic year.

![Bar Chart: Resident Suicide Deaths by Academic Quarter](image1)

Resident Suicides By Gender:
The suicide rate for male residents is over 2.5 times higher than female residents.

![Pie Chart: Resident Suicide Deaths by Gender](image2)
Resident Suicides By Age:
Older residents (those aged 35-44 and 45-54 years old) have higher rates of suicide than younger residents (aged 25-34 years old) and higher rates of suicide in comparison to their age-matched cohort in the general population.

Resident Suicides Compared to the General Population:
The odds ratio of resident cause of death compared to the general population was less in every category.

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Odd Ratio to the General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplastic Disease</td>
<td>0.44</td>
</tr>
<tr>
<td>Suicide</td>
<td>0.27</td>
</tr>
<tr>
<td>Accidents</td>
<td>0.34</td>
</tr>
<tr>
<td>Accidental Poisonings</td>
<td>0.10</td>
</tr>
<tr>
<td>Undetermined Cause</td>
<td>0.16</td>
</tr>
<tr>
<td>Undetermined Intent</td>
<td>0.34</td>
</tr>
</tbody>
</table>

In contrast to attending physicians, resident physicians were found less likely to died by suicide than members of the general population. It is likely that the general population’s deaths are subjected to the same lack of clarity in some cases as physicians. However, even if all the deaths from accidental poisonings, undetermined causes and undetermined intent were included as suicide, the odds ratio of suicide would still be below the general population.

Reference:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5483979/ (Full Free Text)