

## OEH Statistics Survey: IH responses

Thanks to all alumni who completed the 2017 survey on statistical methods and software you currently use.

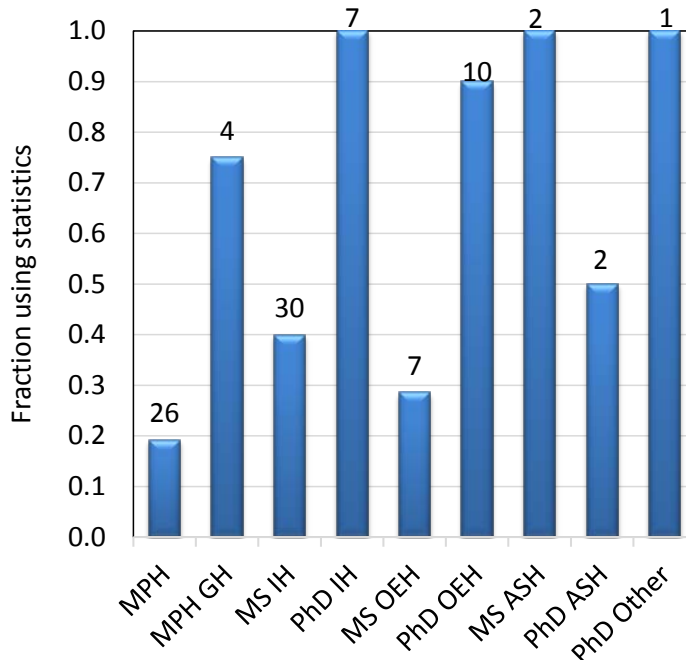
**Response:** Of the 145 alumni surveyed, 89 participated: 37 were alumni from the IH program.

**Use:** Of those responding, 40% of the MS IH alumni reported performing some statistical analyses on the job, and all of the seven PhD IH alumni did. Figure 1 illustrates the overall distribution, by degree.

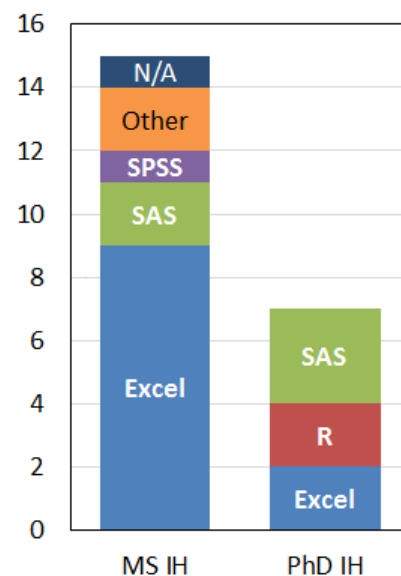
**Software:** Nearly 75% of MS IH alumni rely on Excel to perform analysis, with many commenting that IHStat (from AIHA's Exposure Assessment Strategies Committee) is useful. However, a few are using SAS and SPSS as well as other software packages. Figure 2 summarizes the software in use by IH alumni, for your perusal.

**Feedback:** Comments on improvements needed to the program by IH alumni included a request to have real IH applications and ways to use statistical concepts in practice. The good news is that we now have a class (Quantitative Exposure Assessment, QEA) that is structured to focus on using basic (excel, IHStat) and advanced (SAS) tools to analyze aggregated exposure data. Abbreviated comments provided by alumni are included in Table 1.

**Figure 1:** Fraction of alumni using statistics, with number indicating the number of respondents in each degree category



**Figure 2:** Software used by IH alumni



**Table 1:** Comments from IH Alumni

MS IH*	QEA was helpful
MS IH	Biostat is not as important as a good understanding of epidemiology
MS IH	Data analytics is becoming an increasingly high demand for all HSE professionals
MS IH	O'Shaughnessy's class was descent.
PhD IH*	Public Health students should be encouraged to take more stats classes than what are required
PhD IH*	I learned how to use SAS and R before coming to Iowa, but these should be incorporated into the curriculum

\*Reported currently performing statistical analyses

### Action Plan:

1. The College is considering curriculum revision to incorporate specific needs of graduates across programs. **Short courses on R and SAS** are being discussed.
2. Students are encouraged to take **QEA** (offered only every other year) to apply a wide range of analytical methods and software to analyze exposure data; this is required for PhD students.
3. SAS tutorials are imbedded in the QEA course, and **R programming** is being considered as well.
4. Short seminars/brownbag events are being considered to **advance Excel skills**.