



**Characteristics of Volunteer Compared to Paid EMS Professionals
in the United States**

Rebecca E. Cash, MPH, NRP; Madison K. Rivard, BS, NREMT;
Ashish R. Panchal, MD, PhD

*Poster Presentation at the annual meeting of the National Association of Emergency Medical
Services Physicians / January 10-12, 2019*

Background: In many areas in the US, emergency medical response is provided by volunteer emergency medical services (EMS) and Fire organizations. However, little is known about those who serves as volunteers in EMS, especially as a main EMS job. Understanding volunteerism can help drive recruitment and retention for this subset of EMS professionals. Our objective was to compare the characteristics of nationally-certified volunteer and paid EMS professionals in the US.

Methods: This was a cross-sectional evaluation of EMS professionals who recertified their National EMS Certification between October 1, 2017–March 31, 2018. Workforce demographics of the National EMS Certification recertification application were used to determine volunteer status, demographics, and EMS-related characteristics. We included currently-working EMS professionals aged 18-85 years. Volunteer was defined as receiving nominal or no compensation for the provision of EMS services at an agency. We compared EMS professionals whose main EMS job was a volunteer position to those with a non-volunteer/paid position. Descriptive and comparative statistics were calculated.

Results: We received 87,471 responses (response rate=82%). Of the 81,122 EMS professionals that met inclusion criteria, 10,139 (13%) volunteered at their main EMS job. The median ages (IQR) of volunteers and non-volunteers were 40 (30-52) and 36 years (29-45, $p<0.001$), respectively. More volunteers (38%) were female than non-volunteers (23%, $p<0.001$). Volunteers were mostly emergency medical technicians (EMTs) (83%), while only 48% of non-volunteers were EMTs ($p<0.001$). Three-quarters (74%) of volunteers reported working in rural (<25,000 people) communities compared to 31% of non-volunteers ($p<0.001$). More volunteers than non-volunteers provided primarily 911 response (81% vs. 65%, $p<0.001$). The states with the largest proportion of volunteers to any currently-working EMS professionals who recertified during the study period were Vermont ($n=380/783$, 49%) and North Dakota ($n=411/932$, 44%).

Conclusion: Volunteers comprised over 10% of the EMS workforce in a sample of nationally-certified EMS professionals. More volunteers were EMTs and from rural communities than their paid counterparts. Limitations include not assessing the paying occupation of volunteer EMS professionals nor their time spent volunteering in EMS. Future work is needed to understand the regulations and policy implications that promote volunteerism in the EMS profession.