

Risks of bloodborne pathogen transmission to Zambian healthcare workers (HCWs)



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Introduction

Preventing HCWs from exposure to bloodborne pathogens is critical to protecting the healthcare infrastructure and, ultimately, the public's health. Understanding their risk is fundamental to prevention.

Population Prevalence

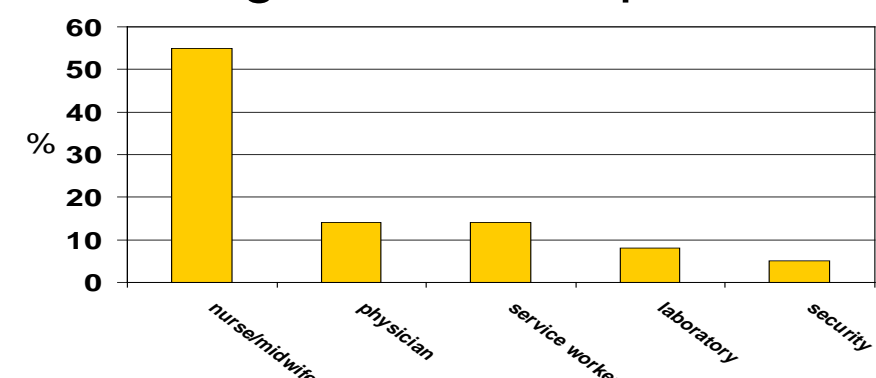
	HIV	HBV	HCV
Zambia	17%	30%	10%
U.S.	0.3%	5%	1.8%

Annual Zambian Health Report, Zambian Ministry of Health, 2006.
 Center for Diseases Prevention and Control, 2006.

Methods

HCWs in five Zambian healthcare facilities were surveyed regarding risk factors for bloodborne pathogen transmission risk. 442 workers responded.

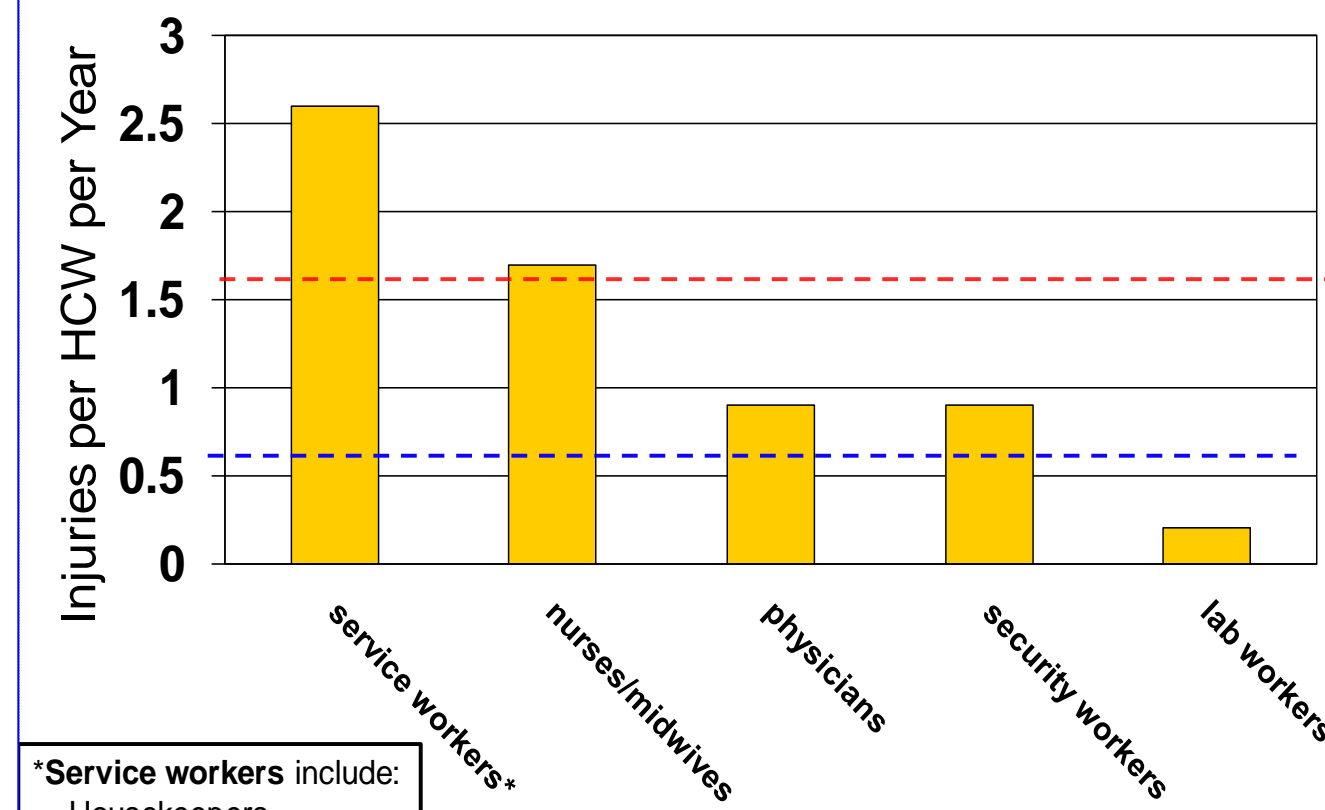
Job Categories of Respondents



* Service workers include housekeepers, laundry workers and ward assistants

Findings

Job Distribution of Injuries



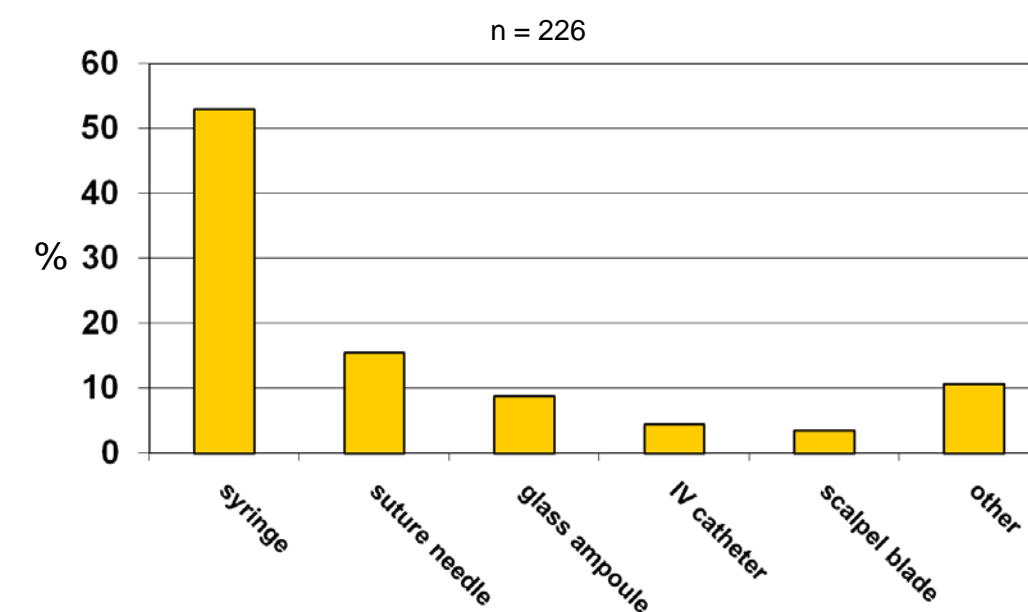
*Service workers include:
 - Housekeepers
 - Laundry workers
 - Ward assistants

Mean Rate Zambia 1.4

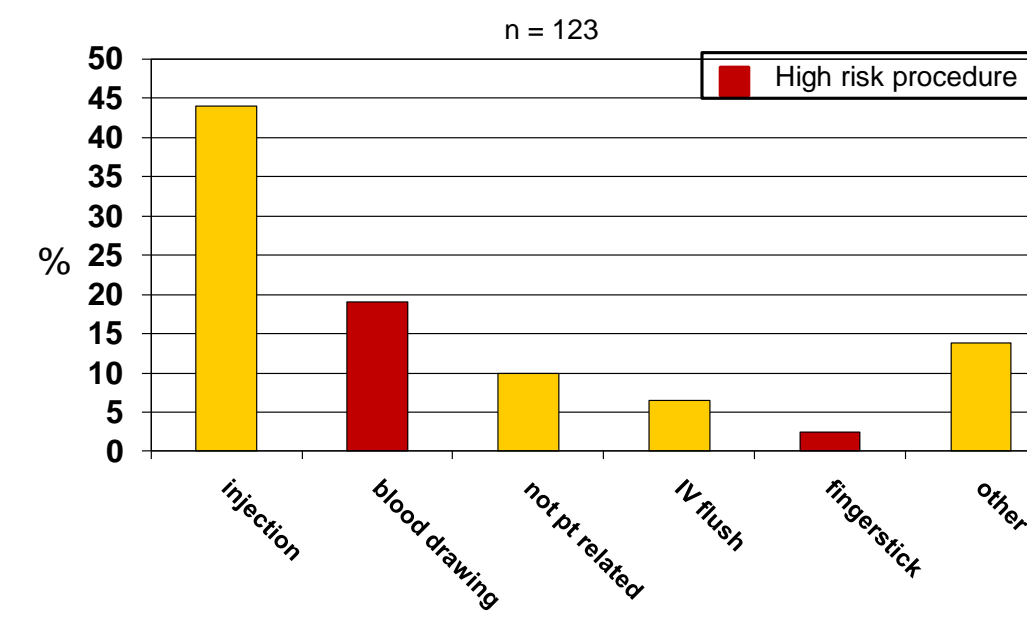
Mean Rate U.S. 0.17



Devices Causing Injuries



Use of Syringe During Injury



*Injuries sustained during cleaning and trash handling when the original use of the device could not be determined

Access to Protective Measures

Hb Fully Vaccinated: 8%

HIV PEP Available: 87%



Conclusions

- Zambian HCWs are at high risk of infection, especially service workers
- Syringes are the most common cause of injury. When used for drawing blood, they are especially risky.
- Vaccination rates among HCWs are extremely low.

Recommendations

- Safety-engineered devices for blood drawing & vascular access are a priority
- Existing puncture-resistant containers should be recycled as sharps disposal containers
- HCWs should routinely receive HBV vaccine free of charge