

# Sharps Injuries among Home Healthcare Workers Affiliated with Massachusetts Hospitals, 2001-2004

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# Introduction

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- Why sharps injuries?
- Why among home health care (HHC) workers?
- Why hospital affiliated?
- Why in Massachusetts?

# Data Source: Massachusetts Sharps Injury Surveillance System

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- **System type:** exposure surveillance
- **“Sharps injury” definition:** percutaneous injury from a contaminated (with blood or other potentially infectious materials) sharp device or item (sharps)
- **Population under surveillance:** health care workers affiliated with MDPH licensed hospitals

# Data elements of interest to this study:

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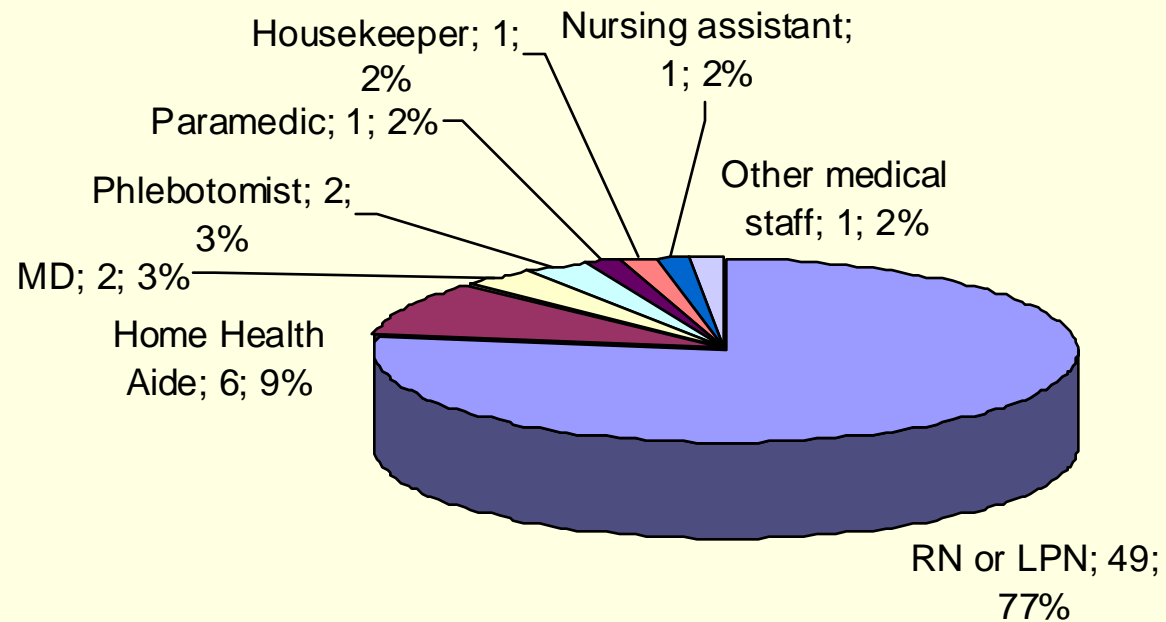
- Date of exposure incident
- Employment status
- Occupation
- Department or work area where exposure incident occurred
- Device or item that was involved in the injury
- Was it a safety device?
- Purpose or procedure for which the sharp was used or intended
- How did the injury occur?

# Methods

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- Sharps injury events selected for this study occurred
  - from the last quarter of 2001 to 2004
  - to healthcare workers in a patient's home or to home healthcare (HHC) workers elsewhere
- Descriptive statistics based on coded categorical data
- Content analysis of narratives

## Sharps injuries among HHC workers\* by occupation, N=63, 2001-2004\*\*

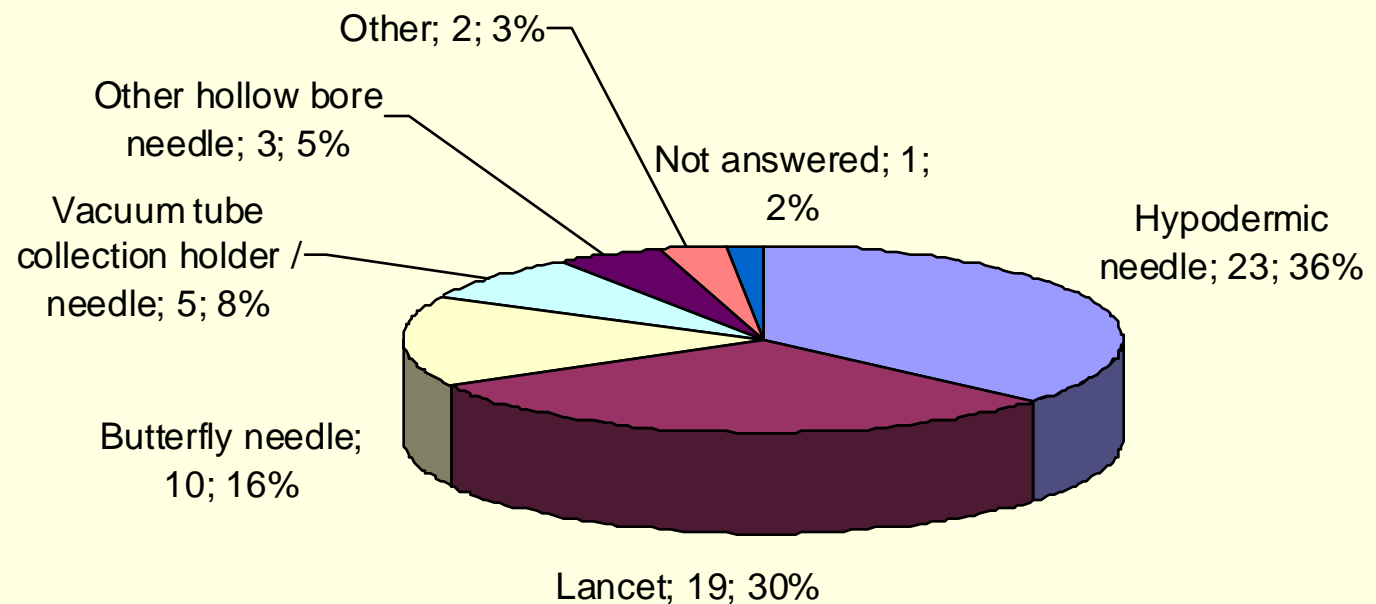


Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year

## Sharps injuries among HHC workers\* by device involved in the injury, N=63, 2001-2004\*\*

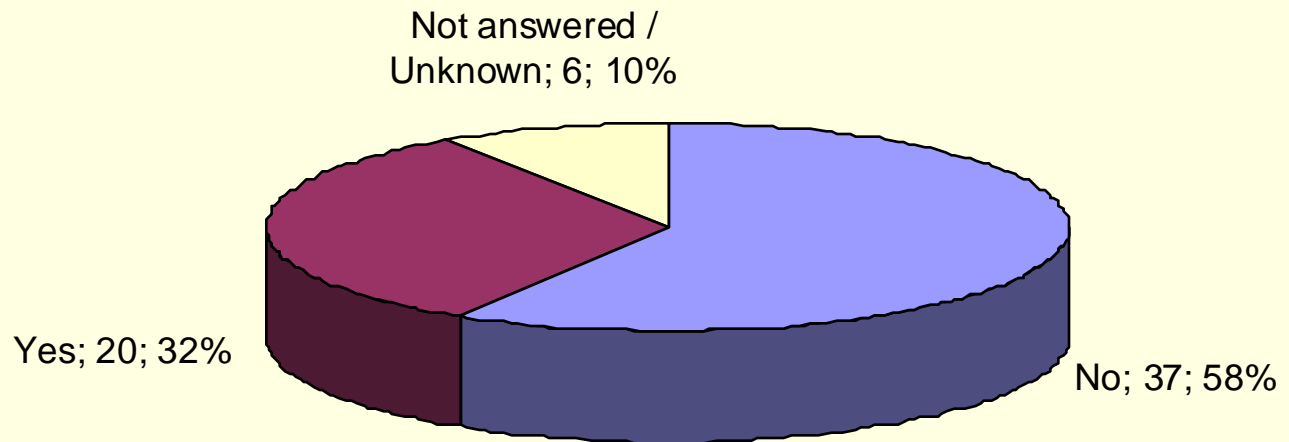


Data Source: Massachusetts Sharps Injury Surveillance System

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\*\* In 2001 data was collected only for the last quarter of the year

## Sharps injuries among HHC workers\* by safety devices, N=63, 2001-2004\*\*



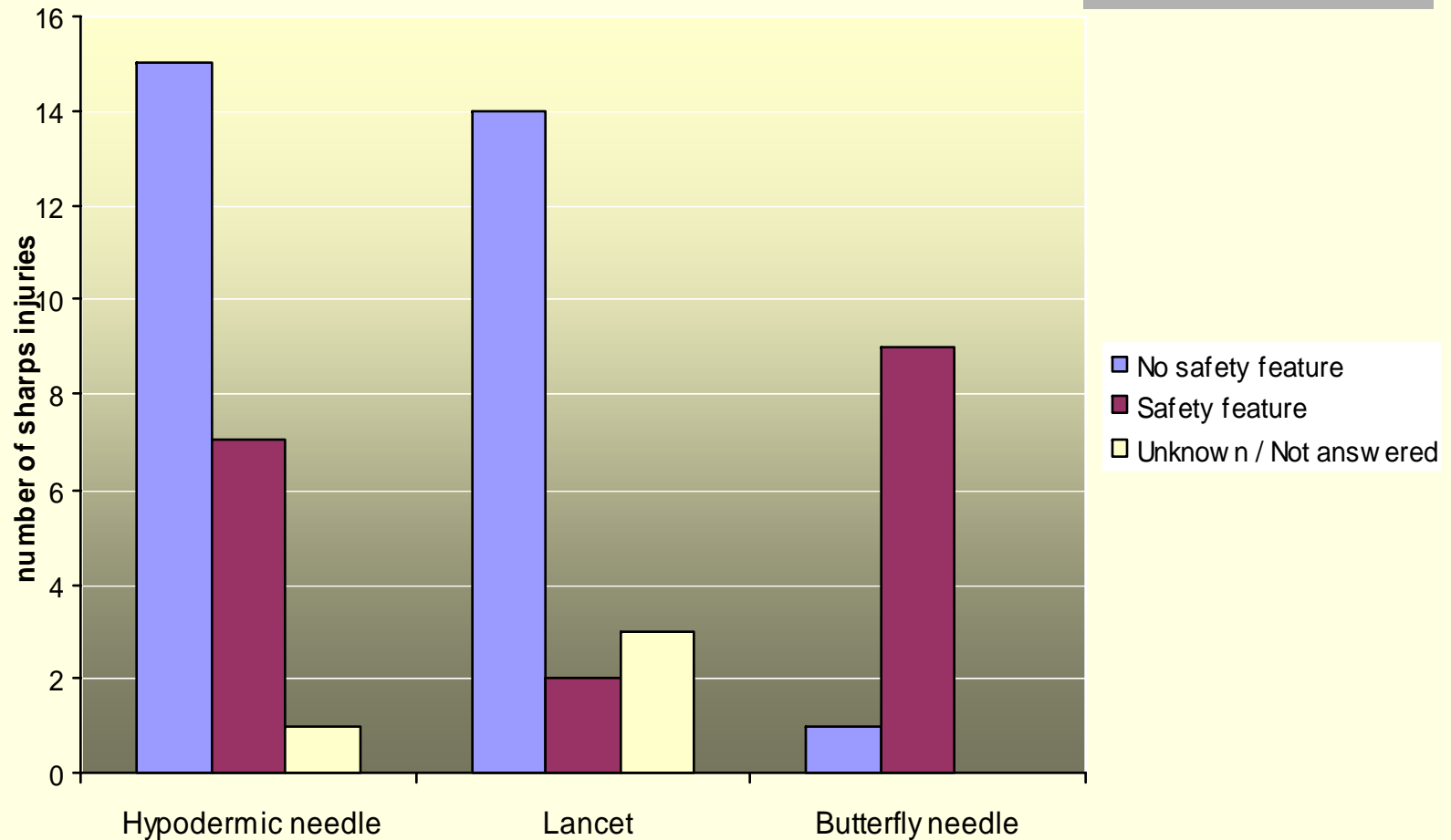
Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year



## Sharps injuries among HHC workers\* by selected devices and safety, N=63, 2001-2004\*\*

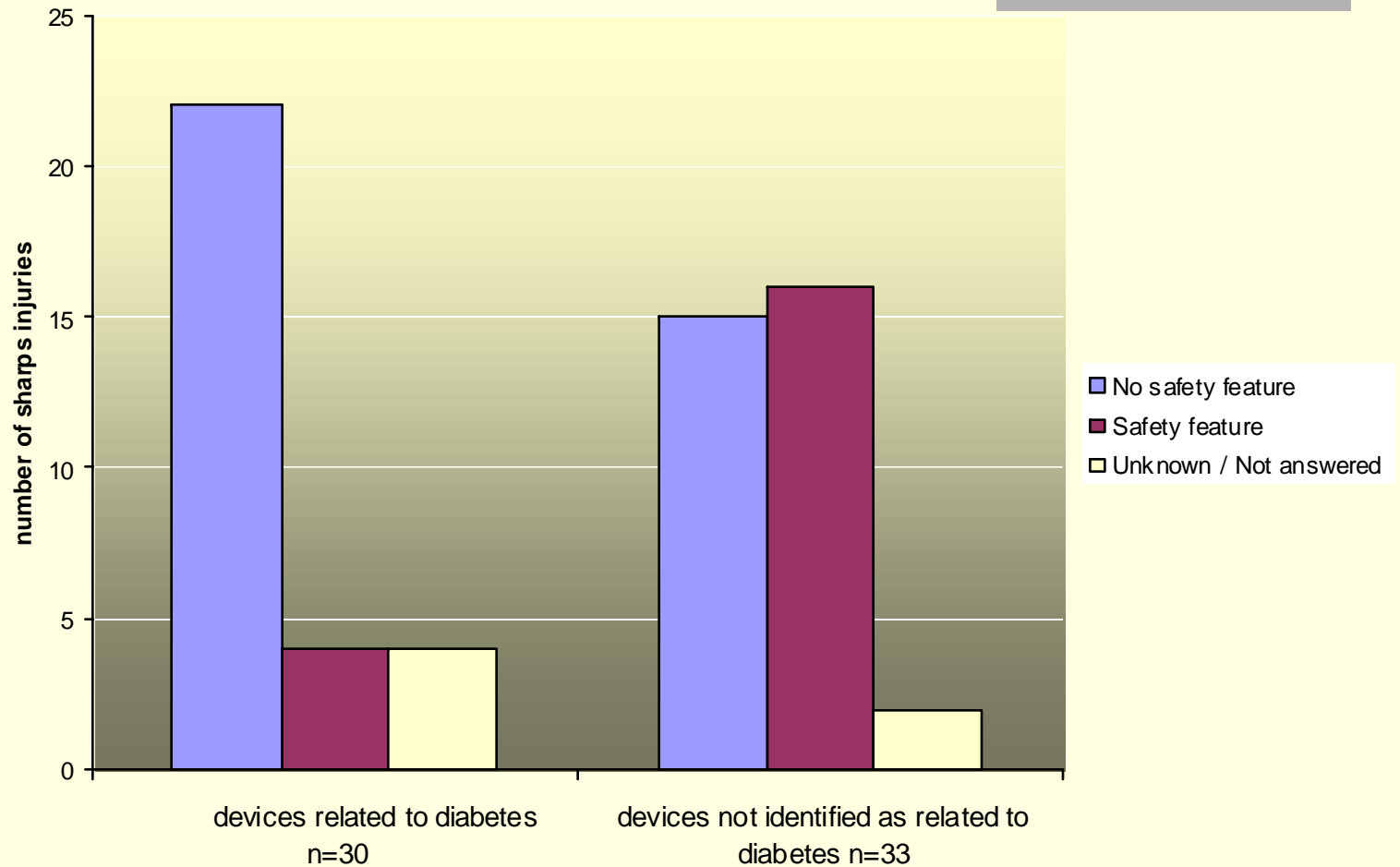


Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year

## Sharps injuries among HHC workers\* by safety devices, N=63, 2001-2004\*\*

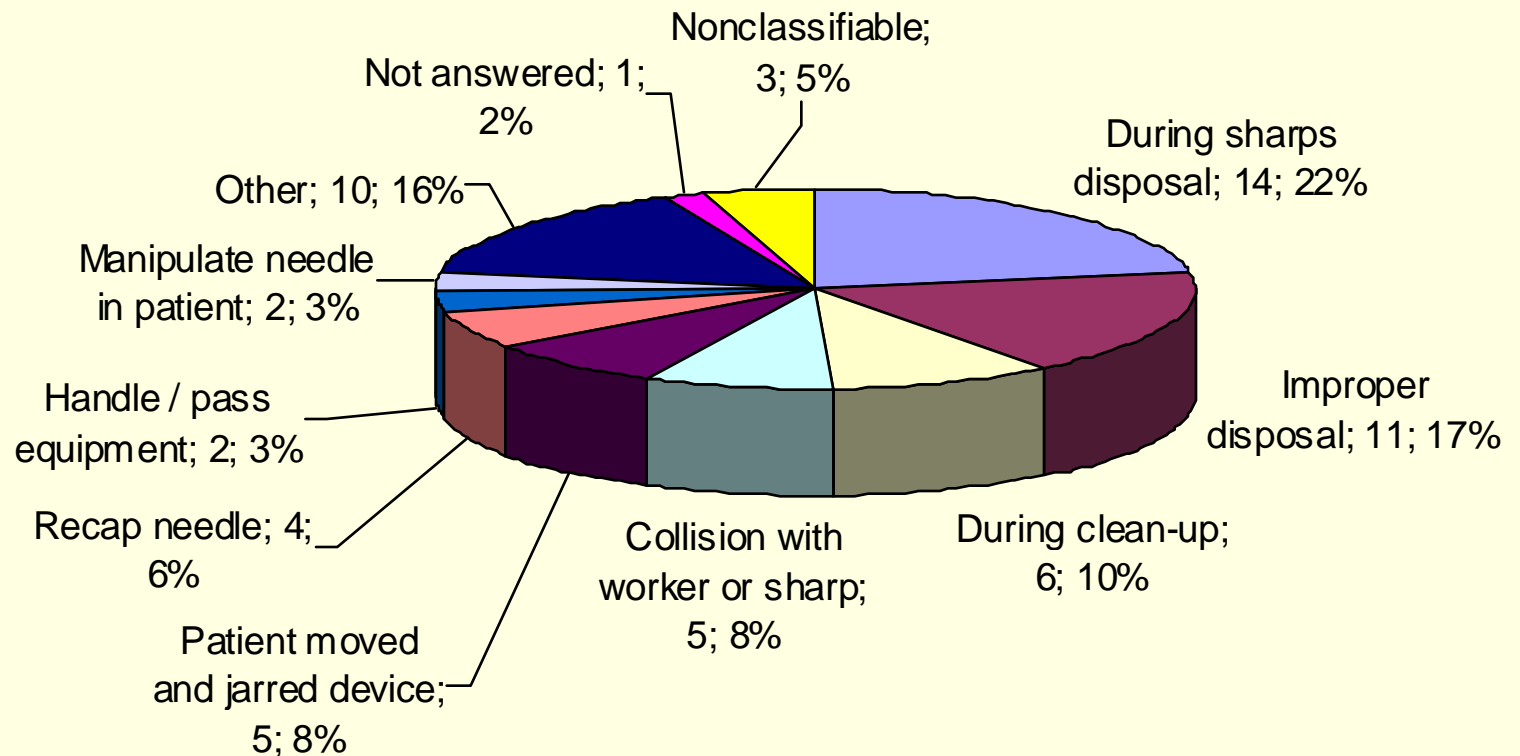


Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year

## Sharps injuries among HHC workers\* by how the injury occurred , N=63, 2001-2004\*\*

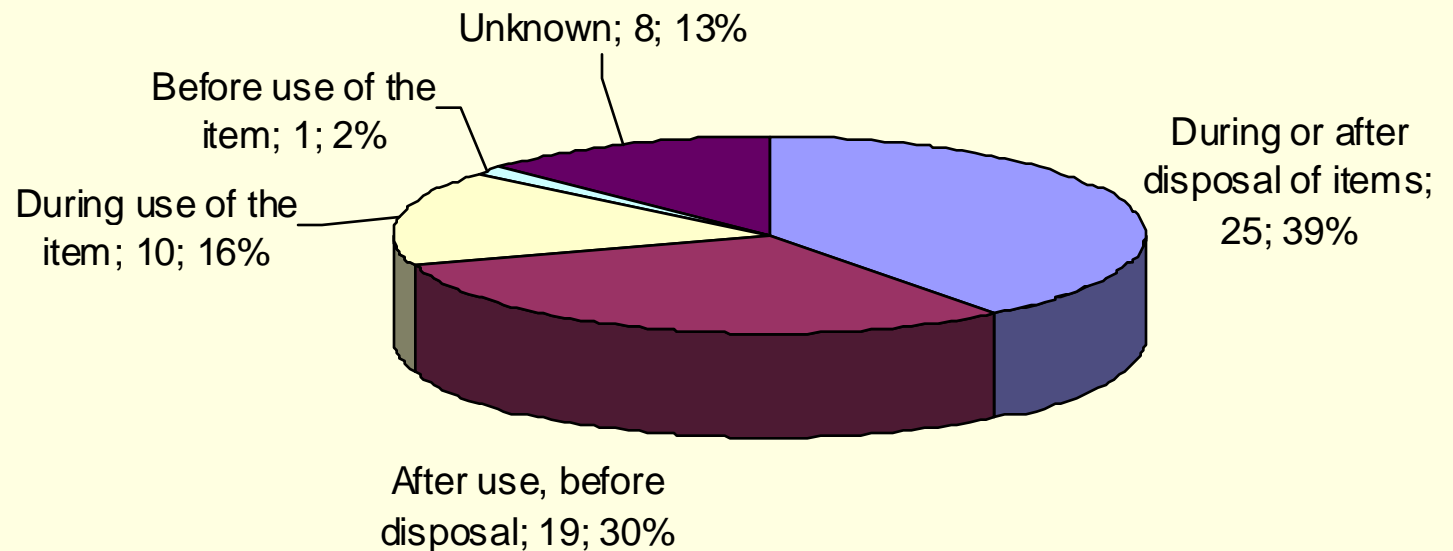


Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year

## Sharps injuries among HHC workers\* by when the injury occurred , N=63, 2001-2004\*\*



Data Source: Massachusetts Sharps Injury Surveillance System

\* affiliated with hospitals

\*\* In 2001 data was collected only for the last quarter of the year

# Limitations

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- Small number of observations
- Data collection instruments not tailored to HHC
- Unknown underreporting rates of sharps injuries specific to HHC
- Lack of denominator data

# Conclusions

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- HHC workers are at risk of sharps injury
- Majority of injuries are preventable by use of effective safety devices and proper disposal
- Possibility to focus efforts on special group of medical devices and patient population
- More work on efficacy of specific safety devices is needed

# Proposed data elements specific to HHC sharps injuries

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- Who made the determination which medical device to purchase
- Original user of the device
- Location where injury occurred (pick list of possible locations in the house and car)
- Pick list of circumstances of sharps injuries should be tailored to HHC industry (for example, lancet and insulin needle should be at the top of the pick list for devices)

# Policy recommendations

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- Consideration of HHC worker safety for coverage of devices by medical insurance
- Infrastructure for community disposal of sharps
- Education for patients on proper sharps disposal when infrastructure is in place
- Continuous monitoring by manufacturers of products' performance, including
  - engineered safety feature in medical devices
  - disposal containers



# Acknowledgements

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# Thank you!

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