

Sharps Injury Prevention: Safeguarding Worker's Health and Safety

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Worldwide Bloodborne Pathogen Infections Due to Occupational Exposures

Worldwide, 2.5% of HIV cases among health care workers and 40% of hepatitis B and C cases among health care workers are the result of occupational exposure.

Source: WHO, 2002

Bloodborne Pathogen Infections Due to Occupational Exposures in Developing Countries

- In some areas of the Eastern Mediterranean region over two-thirds of hepatitis B and C infections in health care workers are attributable to contaminated sharps.
- Over two-thirds of all hepatitis B in Central and South American are the result of occupational exposure

Source: [Prüss-Üstün, Rapiti, & Hutin, 2003](#)

The US Experience

- CDC (1999) estimates between 600,000 – 800,000 sharp injuries occur annually
- Nurses and physicians are the predominantly impacted occupational groups
- Dramatic reductions in occupational HBV infections with mass vaccination of workers (from 17,000 to < 20/yr)
- Approximately 1000 occupational blood-borne pathogen infections/year

One injury & its impact

Safer sharps device technology in 1999

- Available for more than two decades
- > 1000 products on market
- Range of designs: shield; sheath; retractable
- Poor market penetration (15%)
- Effectiveness varied (little data)
- Cost implications/benefit

Safer device technologies

- Active vs. passive devices
- Disposal systems and processes important
- Potential to prevent over 80% of injuries

1999-2000: New Era of Sharps Safety in US

- ANA commitment to health & safety reform key
- Coalition-building – stakeholders, legislators
- Outreach through media campaigns
- Political advocacy at state & federal level
- National strategic planning – Amend OSHA BBP Standard

2000 Needlestick Safety & Prevention Act (NSPA)

- Passed by unanimous consent in both House and Senate in one legislative session
- Amended OSHA BBP standard
- Signed in November 2000
- Enacted in April 2001

Key Components: NSPA

- Requires use of safer devices
- Direct care nurses/healthcare workers participate in device selection and evaluation
- Device/injury data collection and logs
- Require written exposure control plan and periodic update
- Education/training

Where we are today in US

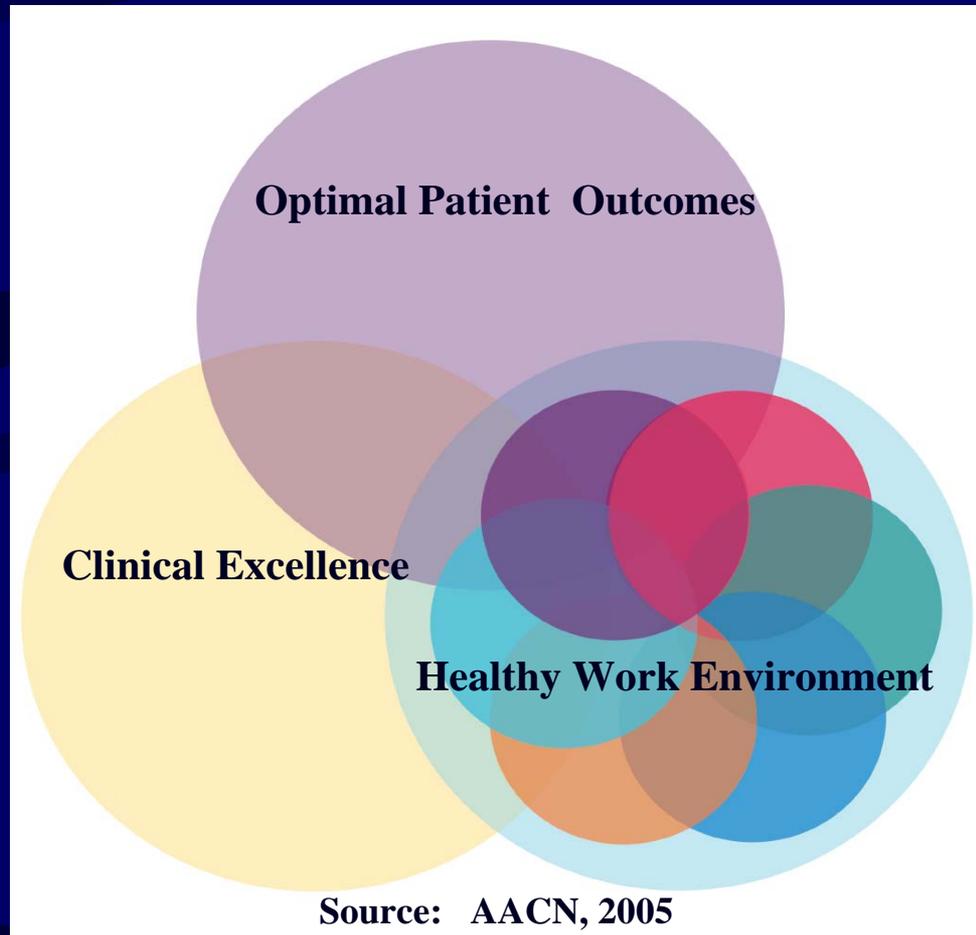
Indicators of progress:

- Market conversion to safety devices
- Increase in number of OSHA inspections
- Reduction in number of injuries due to conventional devices
- Overall decline in number of injuries

Ongoing Challenges

- Consistent implementation and compliance
- Education and training of workers
- Quality of safety devices on market
- Under-reporting of injuries
- Reduction in OR injuries
- Establishing national benchmarks for progress

Interdependence of Healthy Work Environment, Clinical Excellence and Optimal Patient Outcomes



Thank you!!!!