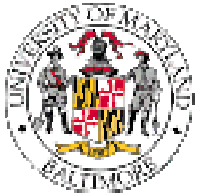




Preventing Blood Exposure in the Home Care Work Environment

A Collective Effort of the University of
Maryland & the University of Illinois

Photographs by Earl Dotter



Supported by NIOSH: R01OH008237



Project Partners

- Academy for Educational Development (DC)
- Addus Home Care (IL)
- Local 880 SEIU (IL) - 30,000 members
- Local 150 SEIU (WI) - 2,500 members
- University of Illinois School of Public Health
- University of Maryland, Work and Health Research Center







Specific Aims

- To compare and contrast blood exposure and available hazard controls among RNs and non-licensed, personal care assistants (PCAs) working in the home.
- To assess the relationship between organization of work (OOW) factors, blood exposure, and available hazard controls in the home care





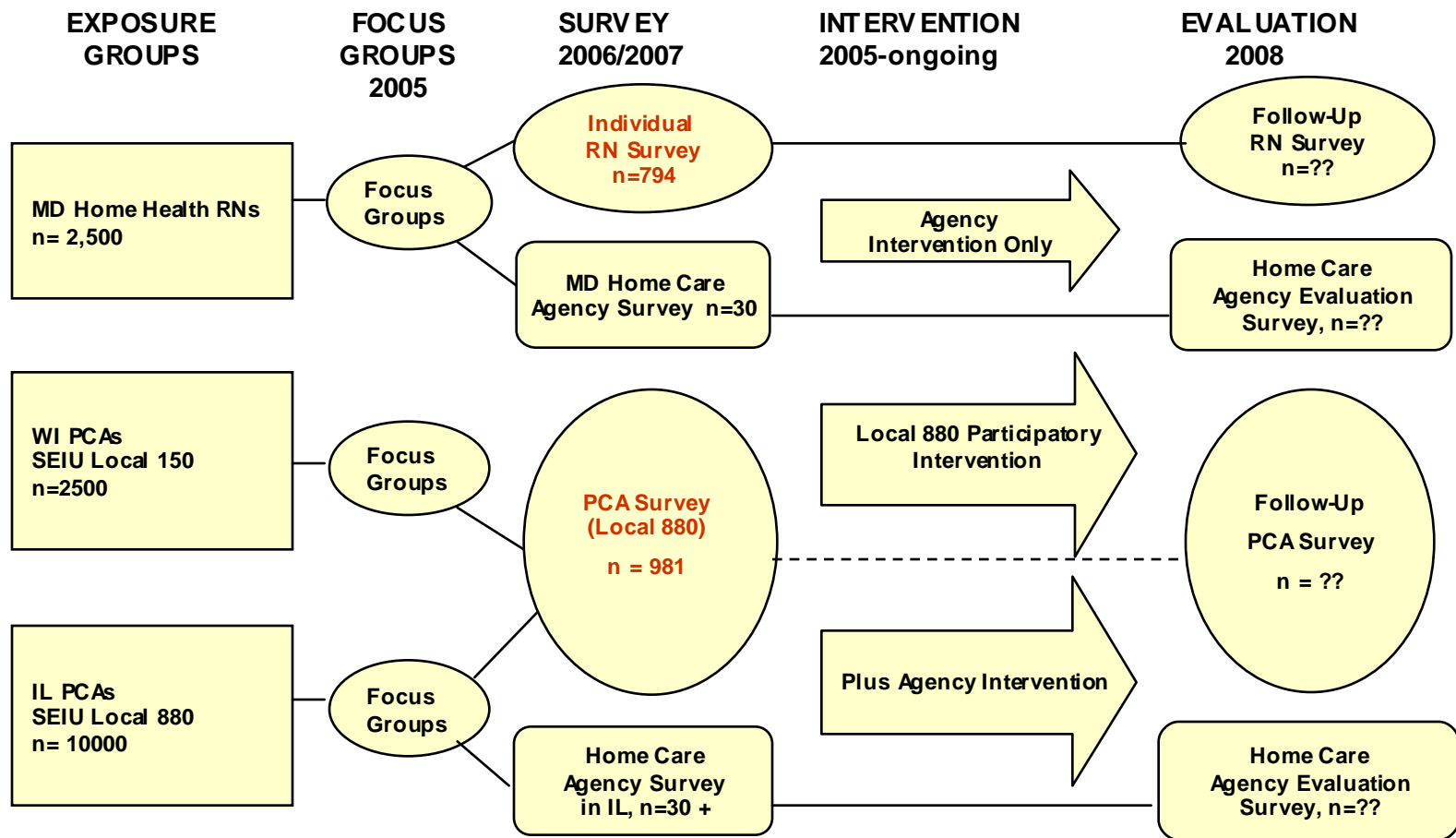
Specific Aims

- To describe home care agency Exposure Control Plans (as required by the 2000 federal Needlestick Safety and Prevention Act) in MD and IL home care agencies.
- To evaluate changes in home care agency Exposure Control Plans following receipt of bloodborne pathogen standard compliance assistance materials.





Study Design Diagram





Survey Methods

- 8 page (scanned) survey
 - Focus group generated questions
 - Standard OOW questions (COPSOQ)
 - Amalgam of existing blood exposure questions
- PCAs completed during 8 hour DOA training (mid-2006) – 85% response rate
- RNs completed mailed survey (2006) – 47% response rate





The Study Populations

- 981 PCAs (IL) & 794 RNs (MD)
- 81% (96%) Female
- 69% (16%) Black/African-American
- 7 (10) yrs (ave.) in home care
- 5 (5) yrs (ave.) with current employer
- 33% of PCAs held certifications (CNA)
- 33% of PCAs care for family members





Potential Blood Exposure Activities – PCAs (n=981)

- 4-6% reported performing colostomy, gastric tube, foley catheter, wound drain, tracheostomy care, bowel stimulation in work week
- 11% change wound dressing
- 13% disposal of sharps
- 74% change dirty linen





Potential Blood Exposure Activities – RNs (N=794)

- RNs report the following activities sometimes or often per day
 - 11% start IVs
 - 12% give injections
 - 31% draw blood
 - 50% change wound dressing















Personal Protective Equipment

- 84% of PCAs reported using correct sized gloves (43% provided by self)
- 87% of RNs reported employers provided the correct size gloves
- 5% of PCAs reported using sharps containers
- 88% of RNs reported employers provided sharp containers

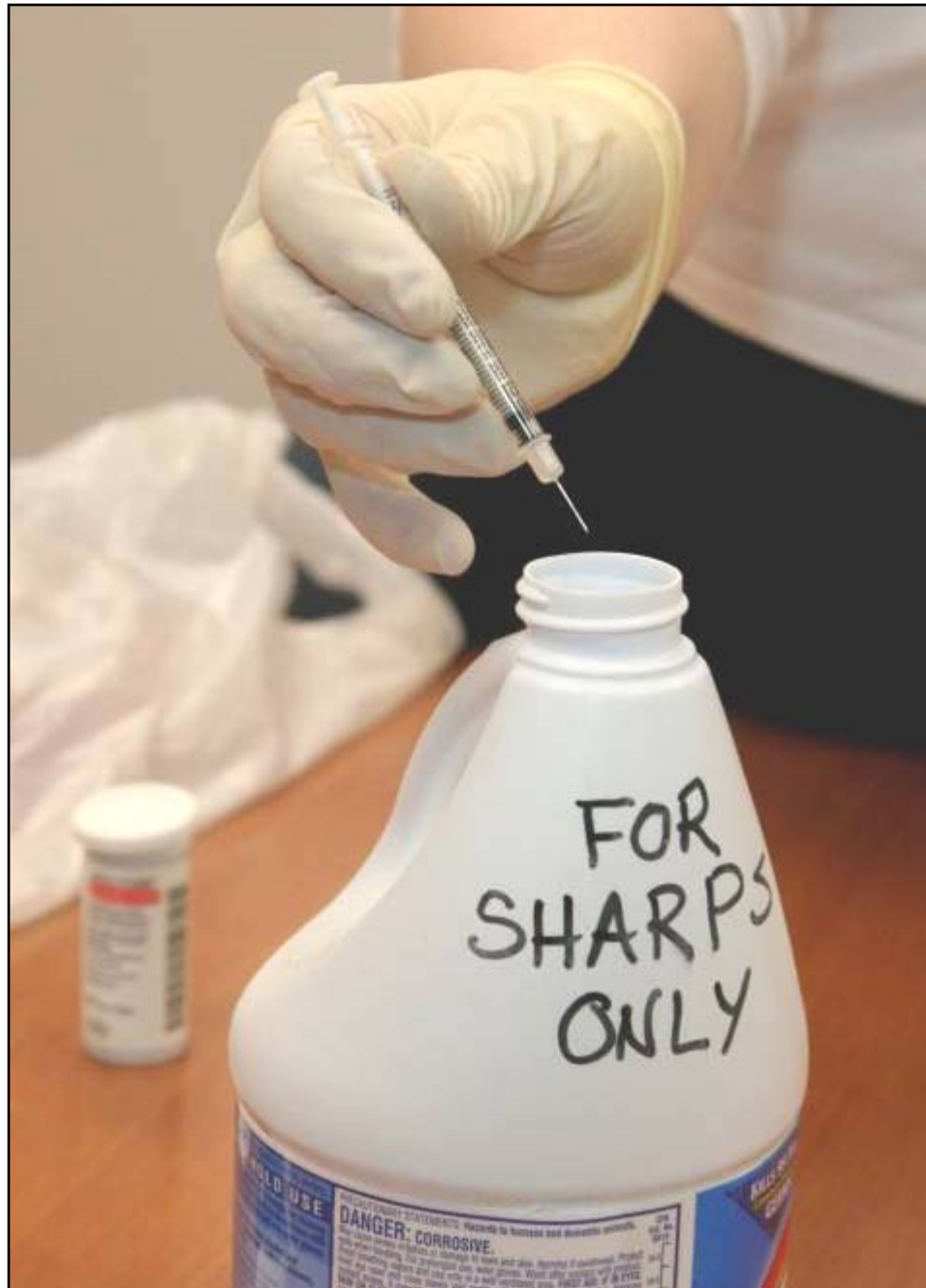




Sharps Disposal - PCAs (n=981)

- 7% reported disposing of sharps during a typical day
- 23% of homes that need a sharps container do not have one
- 67% reported disposing sharps container in the trash
- 13% reported that if client does not have a container, sharps are thrown in trash









Sharps Related Injury and Exposure – PCAs (N=981)

- 3% of PCAs reported past year sharps related injury
- 39% of these sharps injury involved use of a lancet/needle
- 18% of sharp injuries took place when disposing of a needle/lancet or taking out the trash



- ● ● | Non-sharps Related Injury and Exposure PCAs (n=981)

- 2% reported having a blood/body fluid contact to non-intact mucus membranes or skin in the past year
- Activity most frequently cited during blood/body fluid contact:
 - 8 during cleaning soiled clients
 - 6 during bandage change





PCA vs. RN Blood Exposure

- Non-sharps injury rate*
 - PCA rate of 8.4 per 100 FTE
 - RN rate of 37.6 per 100 FTE
- Sharps injury rate*
 - PCA rate of 10.1 per 100 FTE
 - RN rate of 42.4 per 100 FTE

* # events/per 2,000 field hours worked





Discussion/Summary

- Routine HBV of 0-18 yr olds (CDC).
- BBP standard “applies to all employers who have employees with reasonably anticipated exposure to blood and other potentially infectious materials” (U. S. DoL, OSHA, 2001).
- What about PCAs??



