


**Association between injection of new
psychoactive substance Alpha PVP ‘Snow
blow’ and HIV infections among
homeless people who inject drugs in
Dublin, Ireland, 2015**



**MARGARET CURTIN
DEPARTMENT OF EPIDEMIOLOGY AND PUBLIC
HEALTH,
UNIVERSITY COLLEGE CORK
AND**

IRISH FOCAL POINT, HEALTH RESEARCH BOARD

Background



February 2015

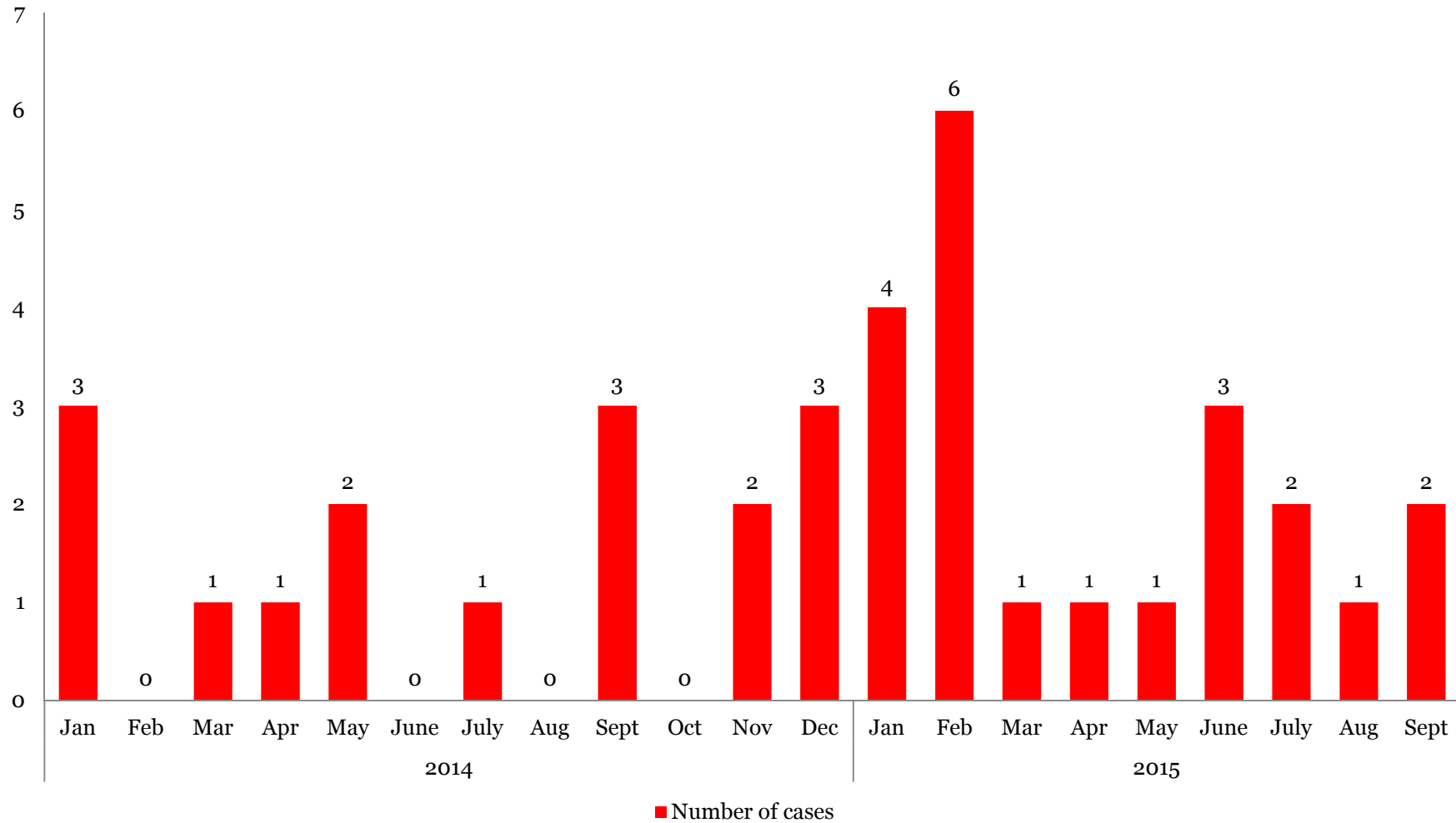
- Unexpected increase in acute HIV infection among PWID (p24 antigen positive)

And

- Increased use of a new psychoactive substance α -PVP (Snow blow) among chaotic PWID

Epidemiological investigation and case-control study instigated

Recent HIV infections with epidemiological link to PWID in Dublin, by month of first diagnosis, January 2014 to September 2015 (n = 38)



Demographic Characteristics



Of the 38 cases:

- Female: 16
- Median age: 35 years (range 24 – 51)
- Registered homeless: 29
- Reported injecting : 18 (out of 20 for whom information was available)
- Sex with PWID or HIV +ve partner: 20

Case control study



Cases: **15** HIV +ve, homeless, chaotic drug users

Controls: random sample from National Drug Treatment Centre of **39** HIV –ve, homeless, chaotic drug users

No difference between cases and controls in age, duration of injection or living circumstances.

Univariate analysis to identify factors associated with infection



Factors identified ($p > 0.2$) and entered into multiple regression model:

- Injecting methamphetamine
- Injecting α -PVP
- Using amphetamines
- Using other NPS
- Sex with PWID
- Use of used needles or syringes
- Use of used filters
- Use of used containers or spoons
- Sharing works with multiple people
- Polydrug use

Factors positively associated with recent HIV infection in multiple regression analysis



Factors positively associated with recent HIV infection	Adjusted odds ratio	95% Confidence Interval	P value
Injecting α -PVP	49	3.6 – 669	0.003
Reusing needles/ Syringes	13	1.01 – 177	0.049
Having sex with PWID	36	1.6 – 782	0.022
Female sex	3.5	0.27 - 44	0.34

Control measures implemented:



- Multi-disciplinary work to engage HIV positive PWID in HIV care
- HIV testing offered to PWID
- Awareness campaigns with clients, clinicians and networks of PWID about injecting NPS, sexual at-risk behaviours and availability of treatment services
- Enhanced contact tracing and active case finding
- Strengthening needle/syringe provision

References



Giese, C., D. Igoe, Z. Gibbons, C. Hurley, S. Stokes, S. McNamara, O. Ennis, K. O'Donnell, E. Keenan, C. De Gascun, F. Lyons, M. Ward, K. Danis, R. Glynn, A. Waters, and M. Fitzgerald (2015) **“Injection of new psychoactive substance snow blow associated with recently acquired HIV infections among homeless people who inject drugs in Dublin, Ireland, 2015.”** *Euro surveillance : bulletin Européen sur les maladies transmissibles = European communicable disease bulletin* 20(40): Euro Surveill.

Glynn, R., C. Giese, O. Ennis, Z. Gibbons, K. O'Donnell, C. Hurley, M. Ward, D. Igoe, M. Fitzgerald (2015) **Increase in diagnoses of recently acquired HIV in people who inject drugs**, *Epi Insight: Disease Surveillance Report of Health Protection and Surveillance Centre, Ireland*, Volume 16, Issue 7, July 2015