Evaluation of a Syphilis Outbreak Intervention among Men Who Have Sex with Men in Vancouver, British Columbia

Background:
In Vancouver from 2011 to 2013, the rate of venereal syphilis diagnoses tripled. Seventy-two percent of cases were among men self identified as MSM. In response, Vancouver Coastal Health (VCH) launched a syphilis education and testing campaign directed at health care providers and the MSM community.

Objective:
To evaluate the efficacy of the campaign to increase testing and diagnosis with the goal to curb the syphilis epidemic in Vancouver.

Methods:
The campaign was implemented between April 2013 and January 2014. MSM directed interventions included advertisements in MSM targeted media and establishments and syphilis testing resources on sexual health websites. Additionally, an urban health care clinic in Vancouver sent syphilis test requisitions by mail to all HIV negative patients in their clinic. To evaluate the campaign, syphilis testing volumes and yield were compared with an appropriate reference period. All syphilis diagnoses were analyzed by sociodemographic and clinical characteristics.

Results:
The overall testing volume increased 23.4% during the campaign period with a 30.3% increase in total diagnoses. With the increase in testing, the diagnostic yield remained stable at 1%. The highest proportion of tests was among men aged 20-29 years (25.7%), while the highest proportion of diagnoses was among men aged 40-49 years (30%). The mail-out campaign had a 7.5% testing return and no new diagnoses. The greatest proportion of tests from the mail-out campaign (28%) was conducted among men aged 50-59 years. A significantly higher proportion of new diagnoses were diagnosed at an earlier stage of infection during the campaign period.

Conclusions:
The syphilis campaign was effective at increasing syphilis testing among Vancouver men and yielding a greater proportion of earlier stage disease. Strategies that better target MSM aged 40-49 may provide greater impact in reducing the syphilis case rate.

Implications:
Further testing and outreach is needed to affect the epidemic.