Emergent Cigarette Smoking, Correlations with Depression and Interest in Cessation among Aboriginal Adolescents in British Columbia

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ABSTRACT

Objectives: To describe smoking rates, age of initiation, and smoking cessation efforts among Aboriginal adolescent girls and boys in British Columbia, and examine the relationships between cigarette smoking and socio-demographic characteristics, depression and domains of life satisfaction.

Methods: A secondary analysis was conducted of data collected from the British Columbia Youth Survey on Smoking and Health II measuring demographic and social factors, previous smoking experience, life satisfaction and depression. Data were analyzed from respondents who self-identified as Aboriginal, and by gender. Logistic regression models were used to identify risk factors for current cigarette smoking.

Results: The average age of respondents was 15 years (SD=1.7) and 51% were female. Current cigarette smoking was 31%, with a mean age of initiation to smoking of 11 years (SD=3). On average, smokers consumed 3.8 cigarettes each day (SD=5.7), with most smokers (78%) reporting that they had seriously thought about quitting. More girls smoked than boys but girls smoked fewer cigarettes. As depression scores (CESD) increased, so did smoking among respondents; and as life satisfaction decreased, smoking increased. Having a best friend who smokes was the most powerful predictor of current smoking, increasing the odds of being a smoker by a factor of 5.9.

Discussion: Although rates of tobacco smoking among respondents are high, there is considerable interest in cessation among current smokers. Recognizing that these youth are motivated to quit smoking, cessation programs may increase success by addressing peer smoking in prevention and cessation initiatives and including culturally appropriate strategies to promote mental health.

Key words: Indians, North American; adolescent; smoking; cross-sectional survey

La traduction du résumé se trouve à la fin de l'article.

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The health status of Aboriginal peoples in Canada (First Nations, Métis and Inuit) is consistently lower than that of the general population of Canada.¹ Among the leading causes of death for Aboriginal adults are chronic diseases associated with cigarette smoking,* and the highest reported medical conditions for Aboriginal youth are also associated with cigarette smoke.² In British Columbia (BC), smoking-attributed deaths account for an average of 8.5 potential years of life lost among Status Indians compared to 5.8 years for the general population.³

Despite elevated rates of cigarette smoking among Aboriginal people,^{1,4} knowledge of the risk factors for tobacco use during emerging (i.e., early) stages of use among Aboriginal youth is limited. More female (67%) than male (56%) Aboriginal youth smoke across all age groups, peaking at 17 years of age,⁵ however females tend to smoke fewer cigarettes than males.^{6,7} Prevalence rates of smoking among Aboriginal adolescents range from 41%⁵ to 54%,⁸ with the majority initiating smoking cigarettes between 12 and 15 years. Protective factors for smoking among Aboriginal youth and their interest in cessation and description of their quit attempts have not been reported.

Little research has been conducted on the degree to which indicators of mental health and well-being might explain cigarette smoking among Aboriginal youth. Depression and negative affect tend to be positively associated with smoking in Aboriginal adults.⁹ Researchers investigating the relationship between domains of life satisfaction and smoking have found strong correlations between adolescent adjustment and substance use in general,^{10,11} but few if any studies have examined these relationships among Aboriginal youth.

The purposes of this paper are to describe current smoking rates, age of initiation, and smoking cessation efforts among Aboriginal adolescents in BC; and to examine the relationships between cigarette smoking and socio-demographic characteristics, depression and domains of

* Within some Aboriginal cultures, tobacco is used in a traditional and spiritual context. This study and the survey it is derived from does not inquire into these practices or youths' use of tobacco in such circumstances. The survey was implicit about the use of cigarettes as recreational behaviour rather than the use of tobacco as it is used traditionally or spiritually.

TABLE I
Emergent Cigarette Smoking Behaviours by Gender

	Male (n=686)	Female (n=649)
Cigarette Smoking Behaviour		
Ever took a puff (%)	60	72
Age in years at first puff (SD)	11 (3.1)	11 (2.5)
Ever smoked a whole cigarette (%)	38	52
Age in years when first smoked whole cigarette (SD)	12 (3.0)	12 (2.3)
Lifetime number of cigarettes (%)		
None	42	29
Only a puff or a few puffs	17	15
1-5 cigarettes	7	10
6-15 cigarettes	6	9
16-25 cigarettes	4	6
26-99 cigarettes	5	9
More than 100 cigarettes	18	22
Current smoker* (%)	27	36
Average number of cigarettes smoked per day (SD)†	5.1 (7.5)	2.8 (3.5)
Quitting (n=417)†		
Seriously thought about quitting (%)	77	79
Smoke because it is hard to quit (%)	38	44
Quit at least once in the previous year (%)	60	65

* Defined as someone who smoked at least once in the past month.

† Considers only those smokers who have smoked at least once in the previous month.

life satisfaction. Because gender has been shown to influence smoking rates,^{12,13} we have also elected to explicitly incorporate gender into descriptive and inferential analyses.

METHOD

Study design

The study employed a secondary analysis of data collected from the BC Youth Survey on Smoking and Health II (BCYSOSH-II, 2004). This cross-sectional survey sampled adolescents in grades eight through twelve from regional school districts (i.e., districts located outside the densely populated area of Vancouver). Study methods are described elsewhere.¹⁴ Ethical approval was granted by the University of British Columbia Research Ethics Board.

Measures

Demographics

Participants reported their age, current grade, gender, and ethnicity. Aboriginal identity was reported by self-identification when students marked the category "First Nation/Aboriginal (e.g., North American Indian, Métis, Inuit)."¹⁵ Students were also asked if they were a member of a First Nation and to indicate which First Nation.

Smoking Status

Students were asked about their lifetime use of cigarettes, current smoking status and experiences associated with quitting

smoking. Current smokers, defined as those who had smoked at least once in the previous month, were also asked to report how often and how much they smoked and whether their best friend or someone in their home smoked. Because smoking patterns among youth are not well established, researchers frequently use smoking during the previous month to measure smoking status among youth.¹⁶

Depression

Depressive symptoms were measured using a 12-item version of the Centre for Epidemiological Studies Depression Scale (CES-D).¹⁷ These 12 items were the highest loading items in a factor analysis of the original CES-D conducted on data from a previous adolescent health survey.⁸

Life Satisfaction

The Multidimensional Students' Life Satisfaction Scale (MSLSS) assessed five dimensions of life satisfaction: family, friends, school, living environment, and self.¹⁸ Although a 40-item version of the MSLSS was included in the survey, a reduced set of 20 items (4 items per scale) was used to calculate MSLSS dimension scores based on the results of a confirmatory factor analysis.¹⁹

Statistical Analysis

Descriptive statistics were used to describe the sample and characterize emerging cigarette use, depression and life satisfaction. For ease of interpretation, CES-D and MSLSS scores were divided into quartiles.

Logistic regression models were run to determine how age, gender, having a best friend who smokes, presence of a smoker in the household, CES-D score, life satisfaction scores and being a member of a First Nation were associated with smoking.

RESULTS

Demographics

Of the 7,929 respondents (excluding 296 who left the Aboriginal identifier blank, 2 of whom indicated that they belonged to a First Nation in a separate question), 1,337 (16.9%) identified themselves as being Aboriginal or First Nations. Of these, 49% were male and the average age was 15 years (SD 1.7).

Emergent Cigarette Smoking

Approximately 20% of current smokers reported smoking their first whole cigarette at or under 10 years of age. There was no significant difference between boys and girls in age of first puff ($t_{(854)}=.12$, $p=0.9$), and a significant but small difference in age of first full cigarette ($t_{(589)}=2.8$, $p<0.01$), with girls smoking their first full cigarette approximately 7 months later than males (Table I). Additionally, a significantly greater proportion of girls reported having taken a puff ($\chi^2_{(1)}=21$, $p<0.01$), smoking a whole cigarette ($\chi^2_{(1)}=25$, $p<0.01$) and being a current smoker ($\chi^2_{(1)}=14$, $p<0.01$); however, boys had a greater average number of cigarettes smoked per day ($t_{(391)}=3.9$, $p<0.01$). The percentage of adolescents who reported seriously thinking about quitting ($\chi^2_{(1)}=.34$, $p=0.56$); having intentionally quit smoking (for a minimum of 24 hours) at least once in the previous year ($\chi^2_{(1)}=.86$, $p=0.35$); and smoking because it was hard to quit ($\chi^2_{(1)}=1.19$, $p=0.28$) did not differ between boys and girls.

The number of girls and boys who smoked in socio-demographic groups defined by school grade, presence of a smoker in the household, best friend's smoking status, CES-D quartile, Life Satisfaction quartile and being a member of a First Nation are presented in Table II. A greater percentage of respondents who reported being a member of a First Nation were current smokers, especially among females. Although girls and boys reported similar ages for first puff and first whole cigarette, the percentage of girls who

smoked is substantially higher than boys at grades 7, 8, 9 and 10. The percent of youth classified as current smokers also increased as score on the CES-D increased and decreased as scores on the dimensions of the MSLSS decreased.

Logistic Regression

The results of the logistic regression model predicting current smoking status are reported in Table III. No significant interactions with gender were found. Age, gender, having a best friend who smokes, and the presence of other smokers in the house were significant predictors of being a current smoker. The effect of having a best friend who smokes increased the odds of the respondent being a smoker by a factor of 5.9. Being in the highest CES-D quartile (i.e., quartile 4) was also associated with a significant increase in the odds of being a current smoker. Having low scores on the family dimension of the MSLSS was associated with increased odds of being a smoker while having low scores on the MSLSS friends dimension was associated with lower odds of being a current smoker.

DISCUSSION

The rate of smoking increased with the school grade of respondents and reached 43% and 50% among grade 12 girls and boys, respectively. Consistent with existing literature, we found that a greater percentage of girls smoked, but they reported smoking fewer cigarettes than boys. The transition to more frequent smoking appeared to start during grades 7 and 8. The shift from on-reserve elementary school to off-reserve schools typically occurs in grade 8 and may be a contributing factor, although many surveys of adolescent smoking note an acceleration of smoking uptake in grades 7 and 8 as youth start to adopt teenage identities.

The findings suggest there are opportunities for early cessation interventions which would increase the success of Aboriginal youth smoking quit attempts. Approximately 78% of current smokers thought about quitting and 63% reported that they had quit for 24 hours or more at least once in the previous year, even at these young ages. Having a best friend who smoked was the strongest predictor in our model and increased the odds of the

TABLE II

Emergent Cigarette Smoking Patterns in Selected Socio-demographic Groups within Gender

Socio-demographic Group	Percent of Boys Classified as Smokers*	Percent of Girls Classified as Smokers*
Aboriginal/First Nations		
Yes (n=922)	29 (n=133)	41 (n=188)
No (n=356)	21 (n=39)	23 (n=40)
School Grade		
Grade 7 (n=44)	0	16 (n=3)
Grade 8 (n=323)	15 (n=24)	27 (n=44)
Grade 9 (n=270)	23 (n=34)	30 (n=36)
Grade 10 (n=300)	26 (n=40)	45 (n=65)
Grade 11 (n=237)	41 (n=48)	39 (n=46)
Grade 12 (n=147)	43 (n=34)	50 (n=34)
Other (n=5)	0	50 (n=2)
Total (n=1335)	27 (n=180)	36 (n=230)
Smoker in the house*		
Yes (n=810)	33 (n=134)	43 (n=170)
No (n=521)	17 (n=47)	26 (n=64)
Best friend smokes		
Yes (n=481)	53 (n=118)	63 (n=164)
No† (n=735)	13 (n=52)	19 (n=65)
Categorized CES-D		
Quartile 1 (n=296)	16 (n=27)	23 (n=28)
Quartile 2 (n=323)	19 (n=34)	28 (n=40)
Quartile 3 (n=312)	26 (n=42)	34 (n=52)
Quartile 4 (n=305)	41 (n=45)	50 (n=96)
Categorized MSLSS		
Family		
Quartile 1 (n=335)	32 (n=45)	43 (n=85)
Quartile 2 (n=379)	27 (n=53)	37 (n=67)
Quartile 3 (n=264)	20 (n=29)	28 (n=33)
Quartile 4 (n=256)	16 (n=21)	25 (n=31)
Friends		
Quartile 1 (n=330)	28 (n=50)	42 (n=64)
Quartile 2 (n=382)	23 (n=49)	39 (n=67)
Quartile 3 (n=260)	21 (n=25)	24 (n=34)
Quartile 4 (n=262)	21 (n=24)	34 (n=51)
Living environment		
Quartile 1 (n=380)	30 (n=49)	44 (n=95)
Quartile 2 (n=289)	23 (n=42)	36 (n=66)
Quartile 3 (n=247)	25 (n=34)	23 (n=25)
Quartile 4 (n=244)	17 (n=23)	28 (n=30)
School		
Quartile 1 (n=329)	25 (n=38)	46 (n=82)
Quartile 2 (n=360)	25 (n=45)	36 (n=65)
Quartile 3 (n=240)	21 (n=25)	26 (n=32)
Quartile 4 (n=305)	23 (n=40)	28 (n=37)
Self		
Quartile 1 (n=302)	26 (n=33)	42 (n=73)
Quartile 2 (n=267)	23 (n=28)	38 (n=55)
Quartile 3 (n=213)	25 (n=29)	38 (n=37)
Quartile 4 (n=452)	23 (n=58)	26 (n=51)

* Defined as someone who smoked at least once in the past month.

† Includes responses No, Quit, Don't Know and Not Applicable.

respondent being a smoker almost sixfold (a factor of 5.9). This is similar to other research where peer smoking has been shown to be one of the most important risk factors associated with adolescent smoking.^{20,21} Although the impact of peer selection [i.e., smokers seeking out other smokers] versus peer influence [i.e., non-smokers being influenced by others to become smokers] cannot be disentangled using cross-sectional data, intervention strategists should seek to capitalize on smokers who report having best friends who also smoke.

Being in the top quartile of the family domain of life satisfaction had a protective

effect. However, low levels of satisfaction with friends (i.e., quartiles 1, 2 and 3) appeared to be associated with *lower* odds of being a smoker compared to respondents in the top quartile. One explanation for this finding may be related to the strong effect of peer smoking. Respondents with a high degree of life satisfaction in terms of friendships may have greater access to tobacco through their friends and may be exposed to the normalizing influence of having many friends who smoke.²² Respondents with the most depressive symptoms (i.e., in quartile 4 of CES-D scores) had increased odds of smoking, suggesting cigarette smoking may be a

TABLE III

Multivariate Logistic Regression of Smoking Status on Age, Gender, Best Friend Smokes, Member of a First Nation, Other Smokers in the House, Depression and Life Satisfaction (n=1188)

	Odds Ratio	95% CI
Age in years	1.30	1.19-1.43
Gender (male as ref.)	1.46	1.07-1.98
Best friend smokes (no as ref.)	5.86	4.34-7.92
Member of a First Nation (no as ref.)	1.34	0.94-1.90
Other smokers in the house (no as ref.)	1.79	1.31-2.45
CES-D* (Quartile 1 as ref.)		
Quartile 2	1.24	0.79-1.96
Quartile 3	1.42	0.90-2.25
Quartile 4	2.45	1.53-3.94
MSLSS†: Family (Quartile 4 as ref.)		
Quartile 1	1.85	1.06-3.21
Quartile 2	1.51	0.90-2.53
Quartile 3	1.35	0.80-2.30
MSLSS: Friends (Quartile 4 as ref.)		
Quartile 1	0.57	0.34-0.96
Quartile 2	0.65	0.40-1.04
Quartile 3	0.56	0.34-0.91
MSLSS: Living environment (Quartile 4 as ref.)		
Quartile 1	1.08	0.62-1.87
Quartile 2	1.06	0.64-1.78
Quartile 3	0.98	0.58-1.68
MSLSS: School (Quartile 4 as ref.)		
Quartile 1	1.33	0.84-2.09
Quartile 2	1.00	0.65-1.55
Quartile 3	0.85	0.53-1.38
MSLSS: Self (Quartile 4 as ref.)		
Quartile 1	1.03	0.64-1.68
Quartile 2	1.15	0.74-1.79
Quartile 3	1.23	0.77-1.96

* Center for Epidemiologic Studies Depression Scale.

† Multidimensional Students' Life Satisfaction Scale.

means of self-medicating depressive affect. Health promotion initiatives may benefit from including tailored smoking cessation interventions to include resources and strategies to promote mental health.

This analysis was limited to an examination of the emergence of cigarette smoking and did not consider long-term patterns of tobacco dependence. Since Aboriginal attendance in grades 8-12 remains lower than that of the general population, inclusion of Aboriginal youth not attending high school may have revealed additional variations. Aboriginal identity is very broad and diverse and was determined on the basis of self-report – a common strategy in surveys, including the Canadian census.¹⁵ Additionally, the MSLSS and CES-D used in this study have not been validated in populations of Aboriginal youth, an area of research which requires further investigation.

In conclusion, this is the first study to report interest in cessation among Canadian Aboriginal adolescents, while examining the influence of depression and life satisfaction on their smoking patterns. The disjuncture in cultural life associated with the transition from grade school to high school, and on-reserve to off-reserve

schools, tests adolescent resiliency. Strategies to facilitate these transitions may provide an opportunity to influence cigarette smoking among youth, and should be addressed in future research. Given the sizable impact of peer smoking found in this study, peer-organized community-wide initiatives may represent a particularly potent approach to cigarette use, especially if these initiatives are part of a broad plan for cultural rejuvenation in communities to promote resilience and cultural continuity.^{23,24} Cultural continuity in communities has been demonstrated to reduce suicidal ideation by enhancing youths' perception of themselves within their community/cultural context. Cultural continuity promotes resilience against depression because youth who are grounded in their culture and have strong family relationships have a solid basis for constructing their future self. It has been suggested that youth with positive, well-formed future selves are less likely to experience depression and engage in risk-taking behaviours. Further investigation is required to describe the roles of depression, life satisfaction, peer influence, residence and transition between on-reserve and off-reserve schools on the emergence of smoking

among Aboriginal youth. Research investigating this interplay is best conducted utilizing community-identified Indigenous methods.

REFERENCES

1. Frohlich K, Ross N, Richmond C. Health disparities in Canada today: Some evidence and a theoretical framework. *Health Policy* 2006;79:132-43.
2. Mody R, Smith M. Smoking status and health related quality of life: Findings from the 2001 behavioral risk factor surveillance system data. *Am J Health Promot* 2006;20(4):251-58.
3. Office of the Provincial Health Officer. The health and well-being of the Aboriginal population in British Columbia: Interim update, 2007. Available online at: http://www.health.gov.bc.ca/pho/pdf/Interim_report_Final.pdf (Accessed August 26, 2008).
4. Sibbald B. Off-reserve Aboriginal people face daunting health problems: Statscan. *CMAJ* 2002;167(8):912.
5. First Nations Centre. First Nations Regional Longitudinal Health Survey, 2005. Available online at: <http://rhs-ers.ca/english/pdf/rhs2002-03reports/rhs2002-03-technicalreport-afn.pdf> (Accessed August 26, 2008).
6. Pickering J, Lavallee C, Hanley J. Cigarette smoking in Cree Indian school children of the James Bay region. *Arctic Med Res* 1989;48(1):6-11.
7. Retnakaran R, Hanley A, Connelly P, Harris S, Zinman B. Cigarette smoking and cardiovascular risk factors among Aboriginal Canadian youths. *CMAJ* 2005;173(8):885-89.
8. Johnson J, Tucker R, Ratner P, Bottorff J, Prkachin K, Shoveller J, Zumbo B. Socio-demographic correlates of cigarette smoking among high school students: Results from the British Columbia youth survey on smoking and health. *Can J Public Health* 2004;95(4):268-71.
9. Daniel M, Cargo MD, Lifshay J, Green LW. Cigarette smoking, mental health and social support: Data from a northwestern First Nation. *Can J Public Health* 2004;95(1):45-49.
10. Zullig K, Valois R, Huebner E, Oeltmann J, Drane J. Relationship between perceived life satisfaction and adolescents' substance abuse. *J Adolesc Health* 2001;29:279-88.
11. Piko B, Luszczynska A, Gibbons F. A culture based study of personal and social influence of adolescent smoking. *Health Educ Res* 2005;15:393-98.
12. Ahijevych K. Nicotine metabolism variability and nicotine addiction. *Nicotine and Tobacco Res* 1999;1(2):s59-s62.
13. Perkins K, Jacobs L, Sanders M, Cagguila A. Sex differences in the subjective and reinforcing effects of cigarette nicotine dose. *Psychopharmacology* 2002;163(2):194-201.
14. Tu A, Ratner P, Johnson J. Gender differences in the correlates of adolescents' cannabis use. *Substance Use & Misuse* 2008;43(10):1438-63.
15. Statistics Canada. 2001 Census Dictionary, 2001. Available online at: <http://www.census2006.ca/english/census01/Products/Reference/dict/index.htm> (Accessed August 26, 2008).
16. Health Canada. Youth Smoking Survey, 1994: Technical Report. 1996; Catalogue No. H49-98/1-1994E.
17. Radloff L. The CES-D scale: A self-report depression scale for research in the general population. *Appl Psychol Measurement* 1977;1(3):385-401.
18. Huebner E. Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychol Assessment* 1994;6:149-58.
19. Sawatzky R. The measurement of quality of life and its relationship with perceived health status

- in adolescents [thesis]. Vancouver, BC: The University of British Columbia, 2007.
20. De Vries H, Engles R, Kremers S, Wetzel J, Mudde A. Parents' and friends' smoking status as predictors of smoking onset: Findings from six European countries. *Health Educ Res* 2003;18:627-36.
 21. West P, Sweeting H, Ecob R. Family and friends' influences on the uptake of regular smoking from mid-adolescents to early adulthood. *Addict* 1999;94:1397-412.
 22. Valente T, Unger J, Johnson C. Do popular students smoke? The association between popularity and smoking among middle school students. *J Adolesc Health* 2005;37(4):323-32.
 23. Kirmayer L, Simpson C, Cargo M. Healing traditions: Culture, community and mental health promotion with Canadian Aboriginal peoples. *Australasian Psychiatry* 2003;11(Suppl):s15-s23.
 24. Chandler M, Lalonde C, Sokol B, Hallett D. Personal persistence, identity development, and suicide: A study of native and non-native North American adolescents. *Monographs of the Society for Research in Child Development* 2003, Serial No. 273, 68(2).

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RÉSUMÉ

Objectifs : Décrire les taux de tabagisme, l'âge de début de l'usage du tabac et les efforts de renoncement au tabac chez les filles et les garçons adolescents autochtones en Colombie-Britannique, et examiner les rapports entre le tabagisme et le profil sociodémographique, la dépression et divers aspects de la satisfaction de vivre.

Méthode : Nous avons procédé à l'analyse secondaire des données de l'enquête « British Columbia Survey on Smoking and Health II », qui mesure des facteurs démographiques et sociaux, les antécédents de tabagisme, la satisfaction de vivre et la dépression. Nous avons analysé les données des répondants se définissant comme étant autochtones et les données selon le sexe. Des modèles logistiques de régression ont été employés pour repérer les facteurs de risque de tabagisme actuel.

Résultats : L'âge moyen des répondants était de 15 ans (déviation sensible [DS]=1,7), et 51 % étaient des femmes. Trente et un p. cent étaient des fumeurs actuels, et l'âge moyen de début de l'usage du tabac était de 11 ans (DS=3). En moyenne, les fumeurs fumaient 3,8 cigarettes par jour (DS=5,7), et la plupart des fumeurs (78 %) disaient avoir sérieusement pensé à abandonner le tabac. Plus de filles que de garçons fumaient, mais les filles fumaient moins de cigarettes. Le tabagisme des répondants augmentait avec l'augmentation du niveau de dépression (score CESD) et avec la baisse de la satisfaction de vivre. Le fait d'avoir un meilleur ami fumeur était le prédicteur le plus puissant du tabagisme actuel, augmentant la chance d'être fumeur par un facteur de 5,9.

Discussion : Bien que les taux de tabagisme des répondants soient élevés, on observe un intérêt considérable pour le renoncement au tabac parmi les fumeurs actuels. Sachant que les jeunes sont motivés à abandonner le tabac, les programmes de renoncement peuvent augmenter les taux de succès en s'attaquant au tabagisme des pairs dans les initiatives de prévention et de renoncement et en incluant des stratégies culturellement appropriées pour favoriser la santé mentale.

Mots clés : Amérindiens; adolescents; tabagisme; enquête transversale

Coming Events / Activités à venir

To be assured of publication in the next issue, announcements should be received by **September 30, 2008** and valid as of **October 31, 2008**. Announcements received after **September 30, 2008** will be inserted as time and space permit.

Pour être publiés dans le prochain numéro, les avis doivent parvenir à la rédaction avant le **30 septembre 2008** et être valables à compter du **31 octobre 2008**. Les avis reçus après le **30 septembre 2008** seront insérés si le temps et l'espace le permettent.

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Contact: Ms. Gerry Hansen, Conference Planner

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2009 CPHA Annual Conference/Conférence annuelle de l'ACSP 2009

Public Health in Canada: Strengthening Connections/ La santé publique au Canada : renforcer les liens

7-10 June/juin 2009 Winnipeg, MB

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14th International Congress on Circumpolar Health Health Canada and the Government of the Northwest Territories

11-16 July 2009

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