

SHE and HBSC collaboration: The potential for data driven health improvement

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Aims

- To outline the HBSC and the potential for collaboration with SHE
- To present a collaborative framework successfully implemented in Wales
- To highlight how data driven practice has been supported at multiple levels in the Welsh case study
- To consider opportunities for the development of further collaborations with SHE/HBSC



hbosc

**HEALTH BEHAVIOUR IN
SCHOOL-AGED CHILDREN**

WORLD HEALTH ORGANIZATION
COLLABORATIVE CROSS-NATIONAL STUDY

HBSC is an international alliance of over 400 child health experts based in 50 countries who collaborate to develop and execute the HBSC survey.

Every four years, the HBSC research network collects data on 11, 13 and 15 year olds' health and well-being, social environments and health behaviours.

Findings are used at both a national and international level to:

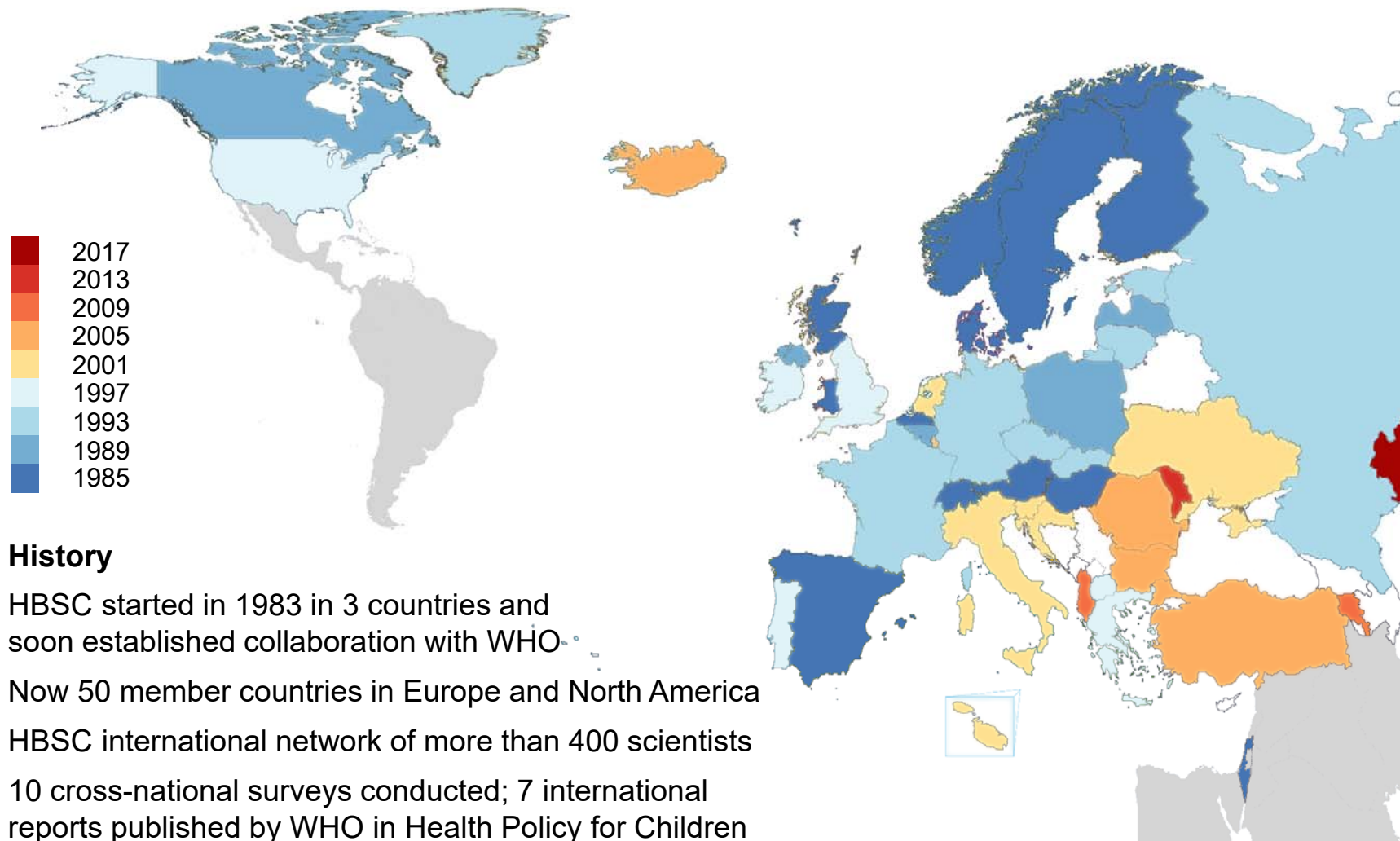
- gain new insight into young people's health and well-being
- understand the social determinants of health
- inform policy and practice to improve young people's lives

Aims of HBSC



- To advance scientific knowledge and raise awareness of adolescent health internationally
- To gather cross-nationally comparable data on adolescent health and wellbeing
- To promote the use of data in policy and practice at national and international level
- To build capacity in adolescent health research through the HBSC network
- To work with national and international partners to maximise impact of the study and effect change

HBSC study growth



History

HBSC started in 1983 in 3 countries and soon established collaboration with WHO

Now 50 member countries in Europe and North America

HBSC international network of more than 400 scientists

10 cross-national surveys conducted; 7 international reports published by WHO in Health Policy for Children and Adolescents series

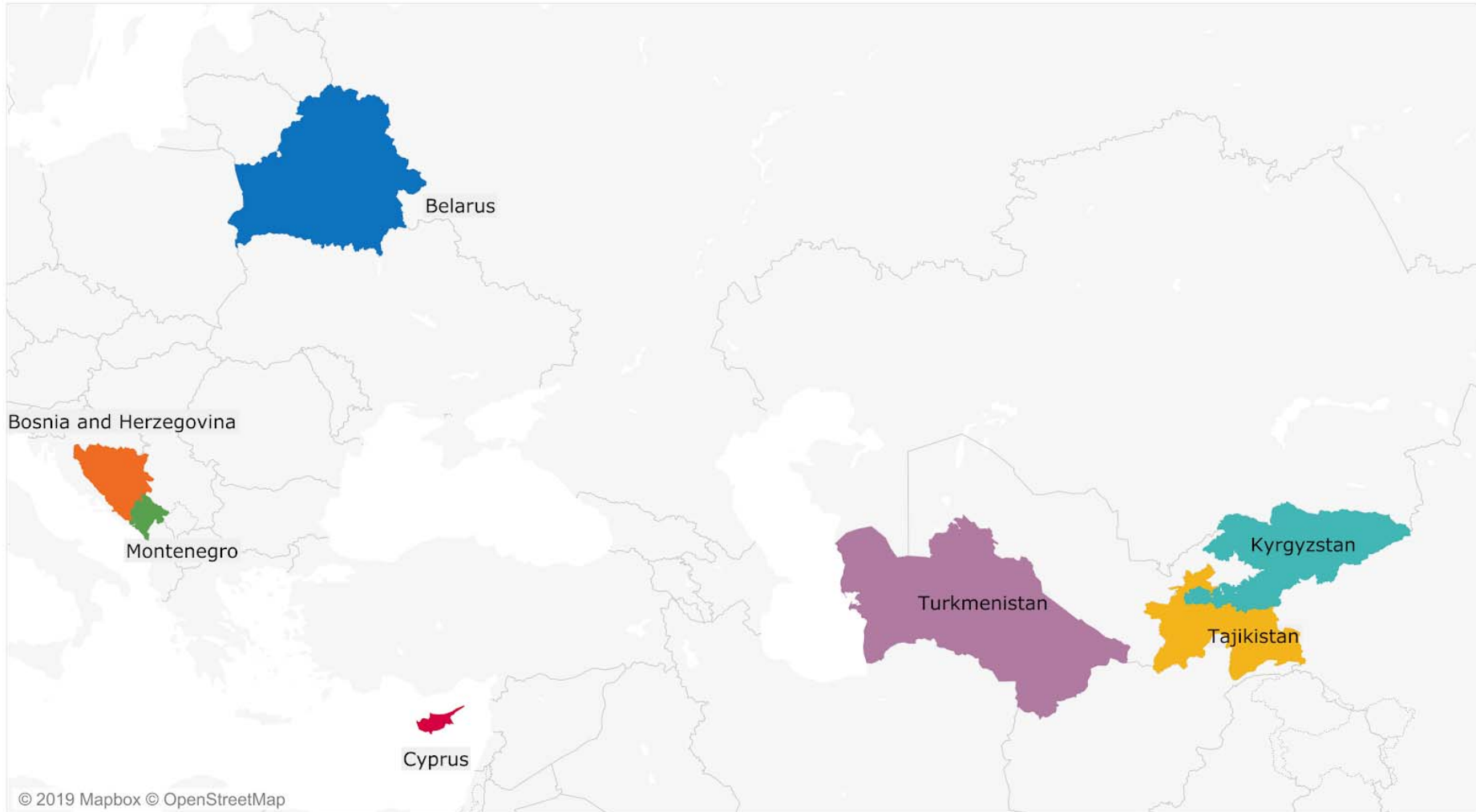
HBSC Membership



Albania	Estonia	Latvia	Serbia
Armenia	Finland	Lithuania	Slovakia
Austria	France	Luxembourg	Slovenia
Azerbaijan	Germany	Malta	Spain
Belgium (Flemish)	Georgia	Moldova	Sweden
Belgium (French)	Greece	Netherlands	Switzerland
Bulgaria	Greenland	North Macedonia	Turkey
Canada	Hungary	Norway	Ukraine
Croatia	Iceland	Poland	USA
Cyprus	Ireland	Portugal	Uzbekistan
Czechia	Israel	Romania	Wales
Denmark	Italy	Russian Federation	
England	Kazakhstan	Scotland	

More information at: <http://www.hbcs.org/membership/countries/index.html>

HBSC future growth



Specialist centres



International Coordinating Centre (ICC)

Child and Adolescent Health Research Unit

School of Medicine

University of St Andrews

info@hbsc.org

International Coordinator: Dr Jo Inchley

Deputy International Coordinator: Dorothy Currie



University of
St Andrews

Data Management Centre (DMC)

Research Centre for Health Promotion

University of Bergen

dmc@hbsc.org

International Data Manager: Prof Oddrun Samdal



Methodology



- School-based survey undertaken every 4 years: self-report questionnaire completed in classroom under 'exam' conditions
- 10 surveys completed to date, the most recent in 2017/18.
- Nationally representative samples of ~1500 11, 13 and 15 year olds
- Countries use standardised international protocol and survey instrument
- Questionnaire consists of mandatory items, optional packages and national items
- International School Level Questionnaire also available

HBSC scope



Physical, emotional and social health and wellbeing

Measures wide range of behaviours, both risk and protective factors

Focus on social determinants of health

Developmental perspectives

International comparisons

School-related variables (2017/18)



Mandatory

- Liking school
- School pressure
- Classmate support
- Teacher support
- Bullying at school

Optional Packages

- School-related competence/autonomy
- School-related reward
- Participation

Examples of national items

Perceived academic performance, health literacy, truancy, post-school aspirations, school facilities, schoolwork support, school climate, safety, risk for school drop-out.

Recent HBSC publications on school-related factors



- The role of school-based **health education** in adolescent spiritual moral, social and cultural development.
- Burden of Chronic Conditions and Subjective Complaints as Factors Modifying the Way Polish Students Are **Functioning at School**.
- Associations between Students' Perceptions of the **Psychosocial School Environment** and Indicators of Subjective Health in Finnish Comprehensive Schools.
- Gender-specific substance use patterns and associations with individual, family, peer, and **school factors** in 15-year-old Portuguese adolescents.
- The Impact of **School Bullying** on Physical Activity in Overweight Youth: Exploring Race and Ethnic Differences.
- The Role of **School-Related Well-Being** for Adolescent Subjective Health Complaints.
- Does Sleep Mediate the Association between **School Pressure**, Physical Activity, Screen Time, and Psychological Symptoms in Early Adolescents?
- **School start time** and the healthy weight of adolescents.
- **Education system stratification** and health complaints among school-aged children.
- **Food environments in and around post-primary schools** in Ireland: Associations with youth dietary habits.
- **Suicidal ideation and behaviors within the school context**: Perceived teacher, peer and parental support.

HBSC International Report 2016



Growing up unequal

Gender and socioeconomic differences in young people's health and wellbeing

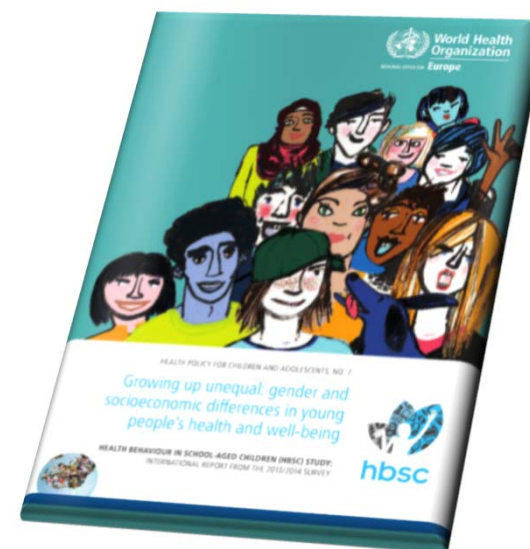
WHO report series: Health Policy for Children and Adolescents No.7, 2016

HBSC 2013/14 INTERNATIONAL REPORT: **DATA ACCESS**

All data presented in the International Report is accessible via:

- WHO European Health Information Gateway
- WHO European Health Statistics App

Additional maps and charts available
Customisable maps, charts and tables
Can all be downloaded



<http://portal.euro.who.int/en/data-sources/hbsc/>

European Health Information Gateway



Gateway > Country profiles > Luxembourg

European Health Information Gateway



Home

Countries

Themes

Data

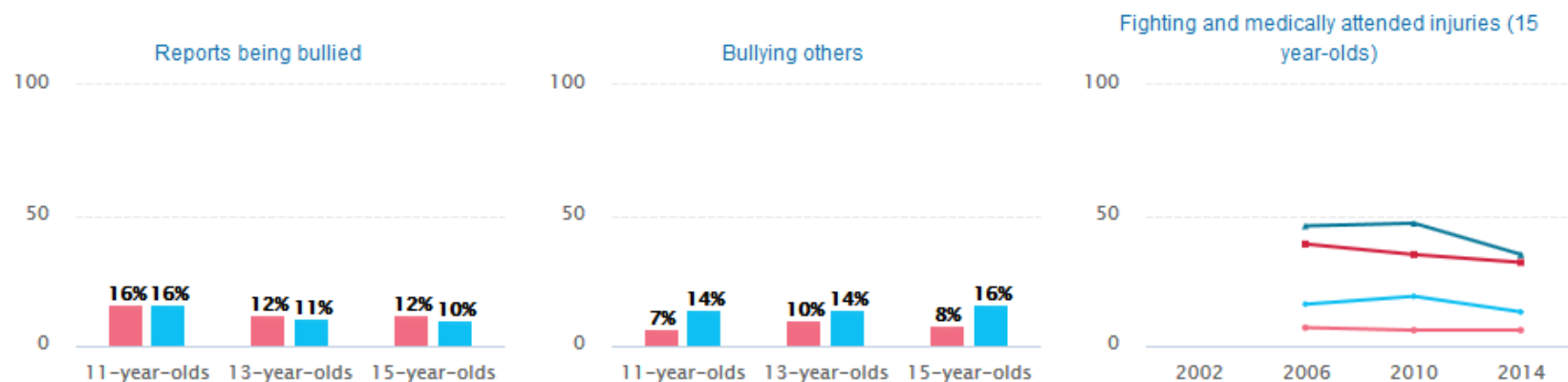
Sections

Luxembourg

Child and adolescent health

This section presents the current available information and status of child and adolescent health in the Member States of the WHO European Region. The indicators document progress in achieving the objectives of the "Investing in children: the European child and adolescent health strategy 2015–2020" (CAH strategy). Gaps in the tables and graphs are due to missing information, which WHO will try to fill through data collection from the countries, starting in second half of 2016.

Risk behaviour



Research outputs and dissemination activities



- International Reports
- Journal articles
- Policy briefings & factsheets
- Data visualisations
- Data access portal
— www.uib.no/en/hbscdata

www.hbsc.org

BULLYING & FIGHTING

Violence among school children in the form of bullying and physical fighting represents a topic of great concern for parents, school staff, researchers and policy makers, not only due to the high prevalence of these behaviours, but also due to their short and long term negative consequences on youth development. Young people involved in physical fighting are more likely to experience lower life satisfaction and lower psychological well-being as well as poorer family and peer relationships. Furthermore, there is growing evidence that school bullying affects children's health and well-being, with this effect lasting long into adulthood.

Physical fighting is the most visible form of violent behaviour among young people. It is considered a major behavioural concern due to the increased risk of injury and it is also correlated with various other problem behaviours, e.g., substance use. The increased likelihood of contact with health professionals as a result of these incidents, physical fighting has been proposed as one of the best markers for high-risk behaviours.

Children who are being bullied are more likely to experience a range of problems, such as anxiety, depression and low self-esteem, such as socially withdrawn behaviours, school difficulties, physical and mental health problems, and higher levels of substance use. The effects are acute and may in some cases also persist into later adolescence and adulthood. Recent studies suggest that victims of school bullying are at increased risk of poor health, as well as

lower levels of adult life satisfaction and well-being.

Within a physical fighting and bullies and victims are more likely to experience lower life satisfaction and lower psychological well-being as well as poorer family and peer relationships. Furthermore, there is growing evidence that school bullying affects children's health and well-being, with this effect lasting long into adulthood.

This fact sheet provides information on the health and well-being of children and young people who are involved in physical fighting. It also provides information on the health and well-being of children and young people who are being bullied.

Children who are being bullied are more likely to experience a range of problems, such as anxiety, depression and low self-esteem, such as socially withdrawn behaviours, school difficulties, physical and mental health problems, and higher levels of substance use. The effects are acute and may in some cases also persist into later adolescence and adulthood. Recent studies suggest that victims of school bullying are at increased risk of poor health, as well as

Articles

Socioeconomic Inequalities in adolescent health 2002-2010: a time-series analysis of 34 countries participating in the Health Behaviour in School-aged Children study

Frank J. L. T. de Graaf, Tineke G. J. P. van der Wal, Bart De Graaf, Gemma W. J. M. Swinnen, Caroleur Curie

Summary
Background Information about trends in adolescent health inequalities is scarce, especially in an international level. We examined secular trends in socioeconomic inequality in five domains of adolescent health and the association of socioeconomic inequality with national wealth and income inequality.

Methods We undertook a time-series analysis of data from the Health Behaviour in School-aged Children study, which cross-sectional surveys were done in 34 North American and European countries in 2002, 2006, and 2010 (pooled n 492 718). We used individual data for socioeconomic status (Health Behaviour in School-aged Children Family Affluence Scale) and health (days of physical activity per week, body-mass index Z score [BMI], frequency of psychological and physical symptoms on 0-5 scale, and life satisfaction score 0-10 on the Cantril ladder) to examine trends in health and socioeconomic inequalities in health. We also investigated whether international differences in health and health inequalities were associated with per person income and income inequality.

Findings From 2002 to 2010, average levels of physical activity (3.90 to 4.68 days per week; p<0.0001), body mass (BMI -0.08 to 0.03; p<0.0001), and physical symptoms (0.06 to 0.20; p<0.0001), and life satisfaction (7.58 to 7.41; p<0.0004) slightly increased. Inequalities between socioeconomic groups increased in physical activity (-0.79 to -0.83 days per week difference between most and least affluent groups; p<0.0008), BMI (0.15 to 0.18; p<0.0001), and psychological (0.53 to 0.47; p<0.0360) and physical (0.21 to 0.26; p<0.0003) symptoms. Only in life satisfaction did health inequality fall during this period (-0.98 to -0.95; p<0.0108). Interestingly, the higher the per person income, the lower and more equal health was in terms of physical activity (0.06 days per SD increase in income; p<0.0001), psychological symptoms (-0.09; p<0.0001), and life satisfaction (0.08; p<0.0001). However, higher income inequality uniquely related to lower days of physical activity (-0.05 days; p<0.0295), higher BMI (0.04; p<0.0001), more psychological (0.16; p<0.0001) and physical (0.16; p<0.0001) symptoms, and larger health inequalities between socioeconomic groups in psychological (0.13; p<0.0080) and physical (0.07; p<0.0022) symptoms, and life satisfaction (-0.10; p<0.0092).

Interpretation Socioeconomic inequality has increased in many domains of adolescent health. These trends coincide with unequal distribution of income between rich and poor people. Widening gaps in adolescent health could predict future inequalities in adult health and need urgent policy action.

Funding Canadian Institutes of Health Research.

Introduction
Adolescence is a formative life stage for adult health, but is often neglected in health policy.¹ Health and health behaviours track strongly from early adolescence to adulthood, and inequalities in health are typically established early in life.² Socioeconomic status (SES) is a major determinant of these inequalities.³ To grow up in impoverished and marginalised socioeconomic conditions shortens the lifespan and contributes to poor mental and physical health.⁴ Some research has suggested that socioeconomic differences in health emerge in early childhood and then diminish in early adolescence, only to re-emerge in adulthood.⁵ However, most of the evidence in this area shows social class gradients in health at every stage of the life course, including adolescence.^{6,7}

An understanding of trends in health inequalities and their social determinants is crucial so that policy can be developed to redress them.⁸ The available evidence in this area relies heavily on local and national samples of young children.^{9,10} International studies of social inequalities in adolescent health are scarce and, as a result, predictions about future inequalities in adult health are not based on robust information. Findings from the Health Behaviour in School-aged Children (HBSC) study,^{11,12} which surveys the health of adolescents in North America and Europe, has shown SES differences in health in most countries and health domains, including self-rated health, psychological and physical symptoms, and life satisfaction. However, this research has not focused on trends in health inequalities in adolescence, nor on structural

The School Health Research Network in Wales: Development and Implementation



Y RHWYDWAITH YMCHWIL
IECHYD MEWN YSGOLION

SCHOOL HEALTH
RESEARCH NETWORK



School Health Research Network Aims

- **Develop an infrastructure to provide timely and robust health and wellbeing data for national, regional and local stakeholders**
- **Co-produce high quality school-based health improvement research**
- **Increase the quality, quantity and relevance of school-based health improvement research and reduce research burden on schools**
- **Build capacity for evidence-informed practice and facilitate the translation of research evidence into practice**



Diffusion 2013 to 2018

Phase 1: 2013 Pilot

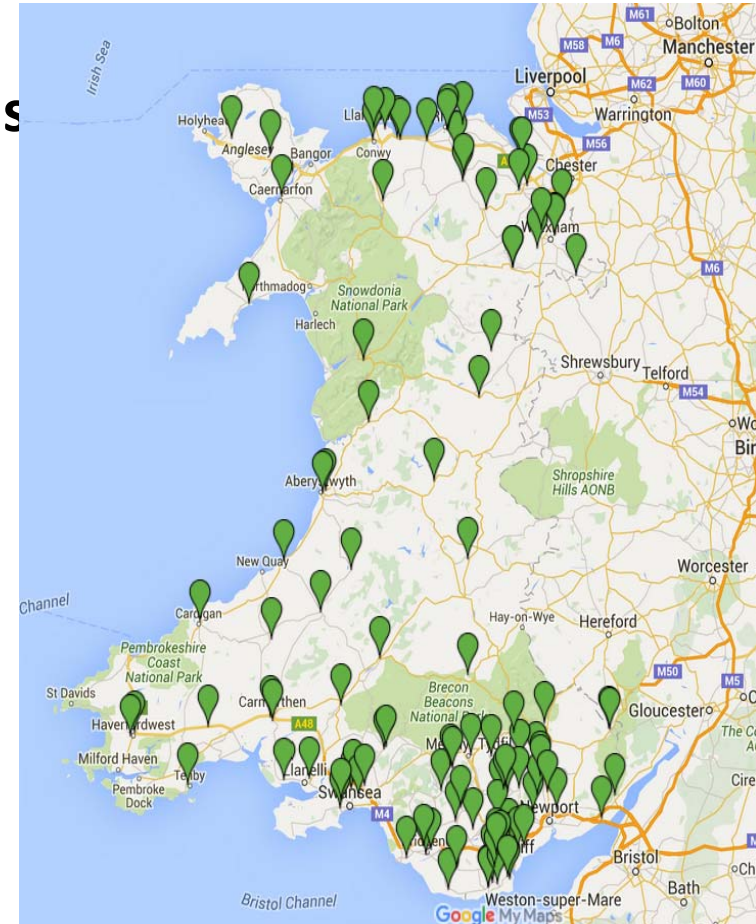
- Recruitment of 61 (of 82) HBSC schools

Phase 2 : 2015 Scalability

- 53% (N=115) of all maintained secondary and middle schools

Phase 3 : 2017 Diffusion

- 100% (N = 212) secondary schools recruited with WNHSS. HBSC conduct embedded
- Longitudinal and data linkage pilot - 50% consent

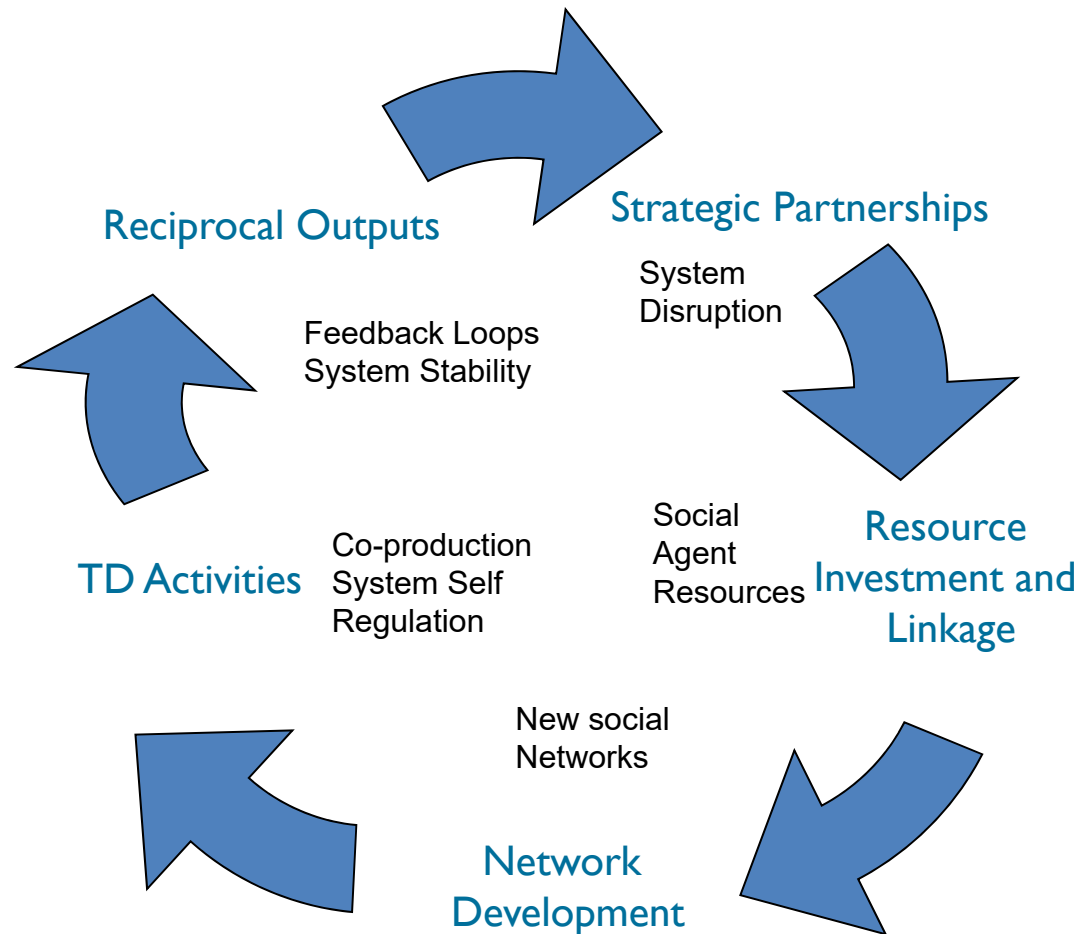


School Health Research Network Structures

- **Strategic partnerships established – Welsh Government (Health and Education) and Public Health Wales (Welsh Network off Healthy Schools Scheme)**
- **Established core SHRN team for cross academic/policy/practice working – network manager, survey researcher, co-ordinator, linked DECIPHer resources.**
- **Development of data infrastructure via HBSC survey 2013**
- **Network and capacity development activities**
- **Adoption process for SHRN supported studies – portfolio of 46 funded studies (c.£15 million)**
- **Reciprocal outputs for partners**

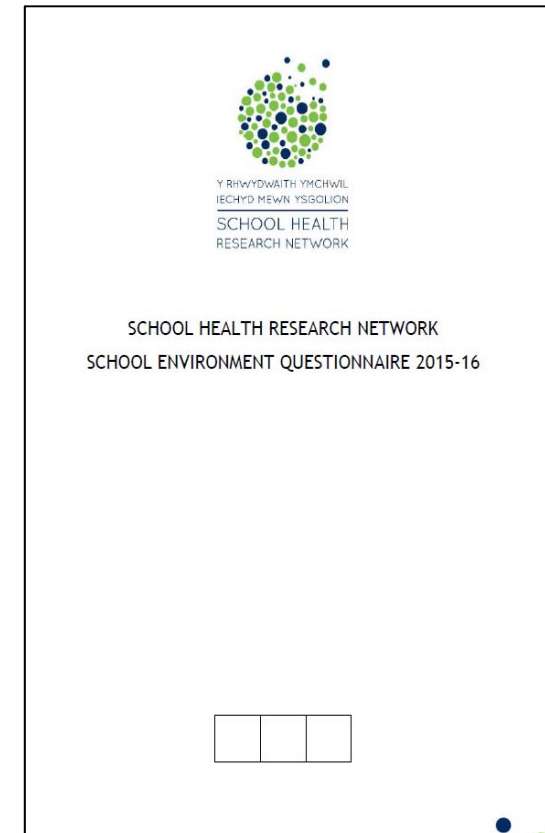
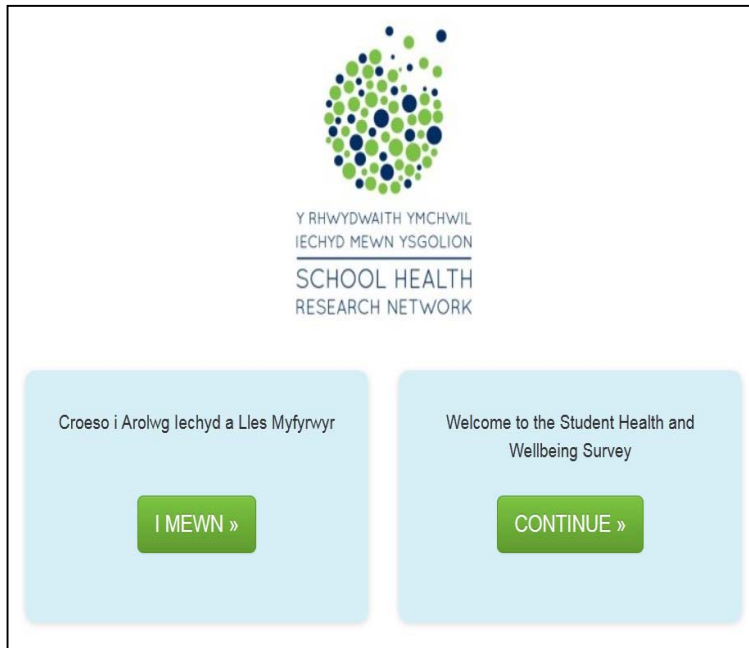


Transdisciplinary Action Research Interventions for Systems Change



Data Infrastructure - Network Surveys

- Biennial pupil/school survey – HBSC, scientific, policy, practice, public priorities
- 2017 2017 – 112,045 responses from 11 to 16 year olds in (over 60%). The largest dataset of its kind in Wales



Reciprocal Inputs

Summary of changes at Stage 2
February 2019

Introduction
This document sets out the key changes made to the Violence against Women, Domestic Abuse and Sexual Violence (Wales) Bill (The Bill) during Stage 2 proceedings. Note that any amendments to the Bill which were made during Stage 2 are shown in red in this document.

Background
Please note that section numbers refer to the Bill as amended, except where a new section has been added.

Violence against women and girls
Amendment 11 (Lightham) amended section 2 of the Bill to add a new section 2A which makes specific reference to violence against women and girls. The new section 2A requires those exercising relevant functions under the Bill to have regard to any other relevant matter in the need to prevent or reduce any factors which increase the risk of violence against women and girls or maintain the respect of such violence as victims.

Consolidating on a national strategy
Amendment 2 (Lightham) amended the original section 1 of the Bill. Section 2 places a duty on local authorities to publish a national strategy to support on how they are addressing gender based violence, domestic abuse

Statutory guidance to relevant authorities
Amendment 5 (and 7) (Lightham) amended section 12 of the Bill. Section 12 provides that relevant authorities must issue guidance on how relevant authorities should exercise their functions with a view to contributing to the pursuit of the purpose of the Bill.

Education information
Amendment 8 (Lightham) amended section 17 of the Bill. Section 17 requires relevant authorities to provide information about the purpose of the Bill to relevant authorities.

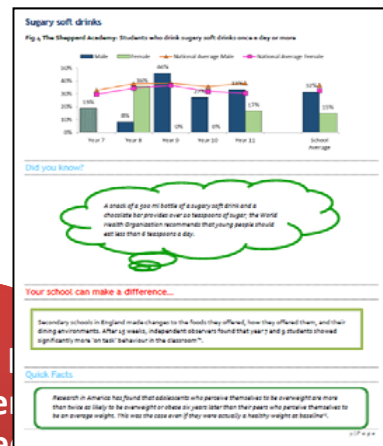
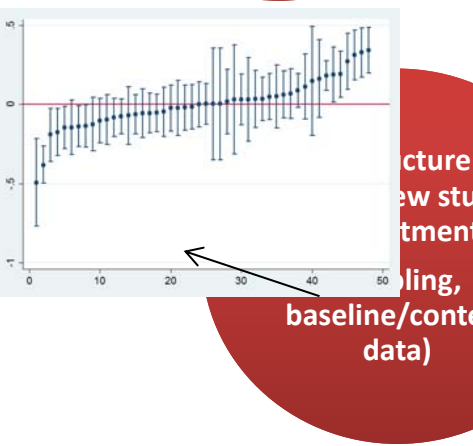
School and Regional level data for local action, evaluation and research ideas

Future to cultural experiments (Future Generations, Violence and Women, Curriculum Review)

Population data on trends health needs planning and international comparison

Pupil Survey School Survey

Practice level data to support WNHSS and system improvement science



BMJ Open Electronic-cigarette use among young people in Wales: evidence from two cross-sectional surveys

Graham Moore,¹ Gillian Hewitt,² John Evans,³ Hannah J Lintcoot,⁴ Jo Holiday,⁵ Talalul Ahmed,⁶ Laurence Moore,⁷ Simon Murphy,⁸ Adam Fletcher⁹

ABSTRACT
Objective: To examine the prevalence of electronic-cigarette use, prevalence of e-cigarette use by age, and associations of e-cigarette use with smoking and cessation, tobacco use and cessation in young people in Wales.
Design: Data from nationally representative cross-sectional surveys undertaken in 2015-2016 (e-cigarette register analysis, adding to school age e-cigarette use, and associations between e-cigarette use and cessation).
Setting: Primary and secondary schools in Wales.
Participants: Primary school children aged 10-11 (n=1007) and secondary school students aged 11-16 (n=2022).
Results: Primary school children were more likely to have used e-cigarettes (8.8%) than tobacco (1.8%). Use of an e-cigarette increased from a national level use of tobacco (average 14-15.5 years) to 12.2% of secondary school students aged 11-16 reported ever using e-cigarettes, with no difference according to gender, ethnicity or family affluence. The percentage of those students reporting having used an e-cigarette was 5.2% at age 10-11 and 8.8% at age 11-16. The proportion of children who had ever used an e-cigarette and reported currently smoking increased from 6.9% among 10-11 year olds to 39.2% in 10-16 year olds. Only 1.5% (n=22) of 10-16 year olds, including 0% of never smokers, reported regular e-cigarette use (one or more times a month). Current daily smokers use 108 times more likely than non-smokers to report regular e-cigarette use (median ratio odds (95% CI) 10.3, 3.9% CI 5.7 to 24.9). Regular e-cigarette use was also more likely among those who had smoked tobacco (OR 3.0, 95% CI 1.8 to 5.0).
Conclusions: Many young people (including non-smokers) have tried e-cigarettes. However, regular use is less common, and is associated with tobacco cigarette use. Longitudinal research is needed to understand age related trajectories of e-cigarette use, particularly in relation to the tobacco status of respondents between e-cigarettes and tobacco use.

BACKGROUND
Electronic cigarettes, or 'e-cigarettes', are hand-held devices that deliver nicotine




Student Health and Wellbeing Reports

Tailored benchmarked reports of student health and wellbeing (Gender/age) for each school for action planning and monitoring.


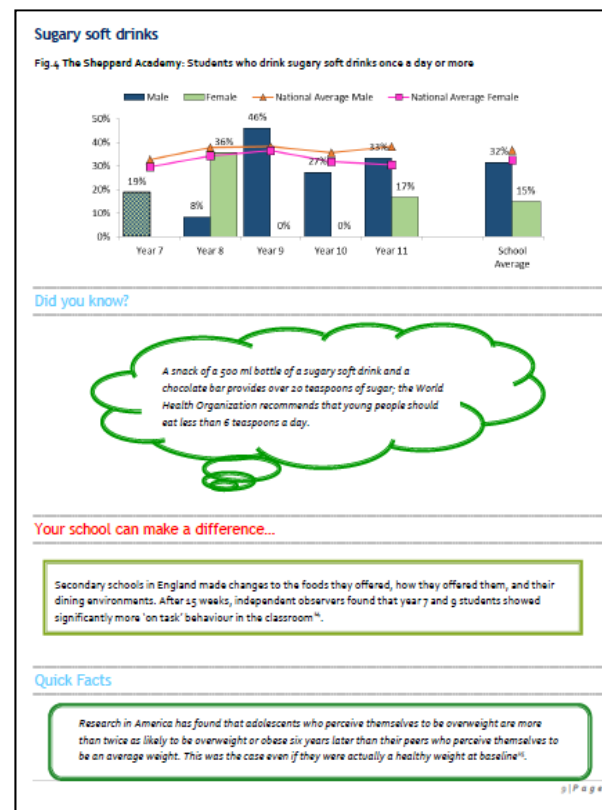
Regional and National reports

The Sheppard Academy
Students' Health and Wellbeing



Y RHWYDWAITH YMCHWIL
IECHYD MEWN YSGOLION

SCHOOL HEALTH
RESEARCH NETWORK

Ebbw Fawr PE @EFLC_PE Following

Y9 girls discussing results from 'Health and Wellbeing survey' @SHRNWales and the reasons why girls don't participate in sport out of Sch time compared with the rest of Wales. 🙄 #Wellbeing #PhysicalActivity

Ebbw Fawr 3-16 @ebbwfawr Following

Using our @SHRNWales data on energy drinks 🥤 to raise awareness in our learners in the restaurant today #learningtoachievetogether

Alun School @alunschool Following

Alun School Council members at @SHRNWales event. Working with, @CastellAlun, @hawardenhs, @flinhigh, @MaesGarmon, @stdavidschester, @theredcardwales and @TheProudTrust #FutureLeaders #DecisionMakers

St David's Chester @stdavidschester Follow

Some of our school council representatives are at a conference today analysing the data from our SHRN report. They are making some excellent contributions towards the Flintshire Schools SHRN action plan. Workshops this afternoon from @theredcardwales and @TheProudTrust

11:01 AM - 16 Nov 2018

3 Retweets 5 Likes

Tweet your reply

Nerys Davies @NerysDavies Following

Using our @SHRNWales data to inform our students over lunch about the importance of zzz 😴 sleep! #learningtoachievetogether

1:45 PM - 15 Nov 2018

7 Retweets 19 Likes

Ebbw Fawr PE @EFLC_PE Following

Y9 girls discussing results from 'Health and Wellbeing survey' @SHRNWales and the reasons why girls don't participate in sport out of Sch time compared with the rest of Wales. 🙄 #Wellbeing #PhysicalActivity

2:07 PM - 23 Nov 2018

2 Like

Evaluation of the Health Promoting School

Moore et al. BMC Public Health (2016) 16:138
DOI 10.1186/s12889-016-2763-0

BMC Public Health

RESEARCH ARTICLE

Open Access



Variations in schools' commitment to health and implementation of health improvement activities: a cross-sectional study of secondary schools in Wales

Graham F. Moore¹, Hannah J. Littlecott, Adam Fletcher, Gillian Hewitt and Simon Murphy

Abstract

Background: Interventions to improve young people's health are most commonly delivered via schools. While young people attending the lowest socioeconomic status (SES) schools report poorer health profiles, no previous studies have examined whether there is an 'inverse care law' in school health improvement activity (i.e., whether schools in more affluent areas deliver more health improvement). Nor have other factors that may explain variations, such as leadership of health improvement activities, been examined at a population level. This paper examines variability in delivery of health improvement actions among secondary schools in Wales, and whether variability is linked to organisational commitment to health, socioeconomic status and school size.

Methods: Of the 82 schools participating in the 2013/14 Health Behaviour in School-aged Children (HBSC) survey in Wales, 67 completed a questionnaire on school health improvement delivery structures and health improvement actions within their school. Correlational analyses explore associations of delivery of health improvement activity among schools in Wales with organisational commitment to health, socioeconomic context and school size.

Results: There is substantial variability among schools in organisational commitment to health, with pupil emotional health identified as a priority by 52 % of schools, and physical health by 43 %. Approximately half (49 %) report written action plans for pupil health. Based on composite measures, the quantity of school health improvement activity was greater in less affluent schools and schools reporting greater commitment to health. There was a consistent though non-significant trend toward more health improvement activity in larger schools. In multivariate analysis deprivation (OR = 1.06; 95 % CI = 1.01 to 1.12) and organisational commitment to health were significant independent predictors of the quantity of health improvement (OR = 1.60; 95 % CI = 1.15 to 2.22).

Conclusions: There is no evidence of an 'inverse care law' in school health, with some evidence of more comprehensive, multi-level health improvement activity in more deprived schools. This large-scale, quantitative analysis supports previous smaller scale, qualitative studies/process evaluations that suggest that senior management team commitment to delivering health improvement, and formulating and reviewing progress against written action plans, are important for facilitating the delivery of comprehensive interventions.

Keywords: Socioeconomic status, School, Adolescent, Child, Health behaviour, Inequality

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doi:10.1093/ejpub/ckw095

Do stronger school smoking policies make a difference? Analysis of the health behaviour in school-aged children survey

B. Hallingberg¹, A. Fletcher¹, S. Murphy¹, K. Morgan¹, H.J. Littlecott¹, C. Roberts², G.F. Moore¹

¹ Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement, School of Social Sciences, Cardiff University, Cardiff, United Kingdom
² Social Research and Information Division, Cathays Park, Cardiff, United Kingdom

Correspondence: Graham Moore, Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement, School of Social Sciences, 1-3 Museum Place, Cardiff University, Cardiff, CF10 3BQ, UK. Tel: +44 (0)29 2087 5360, Fax: +44 (0)29 2087 9050, email: mooreg@cardiff.ac.uk

Background: Associations of the strength of school smoking policies with cigarette, e-cigarette and cannabis use in Wales were examined. **Methods:** Nationally representative cross-sectional survey of pupils aged 11-16 years (W7376) in Wales. Senior management team members from 67 schools completed questionnaires about school smoking policies, substance use education and tobacco cessation initiatives. Multi-level, logistic regression analyses investigated self-reported cigarette, e-cigarette and cannabis use, for all students and those aged 15-16 years. **Results:** Prevalence of current smoking, e-cigarette use and cannabis use in the past month were 5.3%, 11.5% and 2.9%, respectively. Of schools that provided details about smoking policies (86/87), 39.4% were strong (written policy applied to everyone in all locations), 43.9% were moderate (written policy not applied to everyone in all locations) and 16.7% had no written policy. There was no evidence of an association of school smoking policies with pupils' tobacco or e-cigarette use. However, students from schools with a moderate policy (OR = 0.47; 95% confidence interval) CI 0.26-0.84) were less likely to have used cannabis in the past month compared to schools with no written policy. This trend was stronger for students aged 15-16 years (moderate policy; OR = 0.42; 95% CI: 0.22-0.80; strong policy; OR = 0.45; 95% CI: 0.23-0.87). **Conclusions:** School smoking policies may exert less influence on young people's smoking behaviours than they did during times of higher adolescent smoking prevalence. Longitudinal studies are needed to examine the potential influence of school smoking policies on cannabis use and mechanisms explaining this association.

Introduction

Tobacco use is commonly initiated during youth.¹ Hence, recent decades have seen growing emphasis on preventing uptake of smoking among young people.² Interventions to influence adolescent smoking are often delivered via schools because they provide opportunities to reach most young people, while the norms and environments of schools³ can influence risk behaviours.^{4,5} The 'Health Promoting Schools' framework, endorsed by the World Health Organization,⁶ consistent with Ottawa Charter principles emphasizing the need to go beyond simplistic health education and toward creating healthier environments,⁷ advocates multi-level approaches to health improvement, focused on integration of health into the curriculum alongside changes to the school's social and physical environment. Environmental change interventions have demonstrated significant positive effects on a range of outcomes, including tobacco use.⁸

One key strategy for changing school social environments is through written policies. These can play an important role in establishing and communicating a school's ethos, in terms of norms for acceptable and unacceptable ways for staff, students and others to behave within the school environment.⁹ Changing school policy has been described as low cost, realistic and easy to address¹⁰ and many schools have adopted formal written smoking policies.¹¹ Earlier studies investigating school substance use policies have shown that universal smoking bans and restrictions are associated with a lower likelihood of smoking behaviour and smoking prevalence among youth.¹¹ For example, Moore et al.¹² found that having a written smoking policy for all students, teachers and other adults on

school premises was associated with lower likelihood of daily and weekly smoking.

However, weaker associations between school smoking policies and tobacco use have been observed in more recent studies.¹³ In part this may be because school smoking policies have become more common and more consistent in their universality, perhaps limiting variance in practice between schools.^{14,15} However, national policies to 'denormalize' smoking, and limit its visibility to children, such as smoke-free legislation, may mean that schools operate within a macro-system in which smoking is already heavily denormalized,¹⁴ while adolescent smoking rates are now at an all-time low.^{14,16} Given the growing denormalization of smoking in front of children,¹⁷ adults may now be less likely to use tobacco on or near school grounds than during earlier studies. Furthermore, young people who continue to smoke in contemporary society do so despite it being widely stigmatized within society and hence may be less influenced by norms within the school environment. As such, the capacity for strong policies to achieve further gains in reducing youth smoking may have diminished over time.

However, no previous studies have looked beyond effects on smoking and toward understanding secondary effects on other substances. Smoking clusters with other risky behaviours¹⁸ and is often considered a 'gateway' into future use of illicit substances such as cannabis.^{19,20} However, while smoking tobacco is increasingly denormalized, strong government policies on tobacco have been accompanied by mixed messages on cannabis, and it is unclear whether cannabis use has declined at the same rate as tobacco use. Internationally, legislation surrounding cannabis use has become more rather than less permissive, including legalization in some jurisdictions. Perhaps arising from these mixed messages, there is some

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Predictors of physical activity and sedentary behaviours among 11-16 year olds: Multilevel analysis of the 2013 Health Behaviour in School-aged Children (HBSC) study in Wales

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Abstract

Background: The present study investigated associations between individual- and school-level predictors and young people's self-reported physical activity (total activity and moderate-to-vigorous activity) and sedentary behaviours.

Methods: Individual-level data provided by the 2013/14 cross-sectional survey 'Health Behaviour in School-aged Children (HBSC) study in Wales' were linked to school-level data within the HBSC School Environment Questionnaire. The final sample comprised 7,376 young people aged 11-16 years across 67 schools. Multilevel modelling was used to examine predictors of total physical activity, moderate-to-vigorous physical activity (MVPA) and sedentary behaviours (screen-based behaviours).

Results: Taking more physical activity (less than 5 days vs. 5 or more days per week), engaging in higher levels of MVPA (less than 4 hours vs. 4 or more hours per week) and reporting 2 or less hours of sedentary time were predicted by several individual level variables. Active travel to school positively predicted high levels of physical activity, however, gender stratified models revealed active travel as a predictor amongst girls only (OR:1.25 (95 % CI: 1.05 - 1.49)). No school-level factors were shown to predict physical activity levels, however, a lower school socioeconomic status was associated with a higher level of MVPA (OR:1.02 (95 % CI:1.01 - 1.03)) and a lower risk of sedentary behaviour (OR:0.97 (95 % CI:0.96 - 0.99)). A shorter lunch break (OR:1.33 (95 % CI:1.11 - 1.49)) and greater provision of facilities (OR:1.02 (95 % CI:1.00 - 1.05)) were associated with increased sedentary activity. Gender stratified models revealed that PE lesson duration (OR:1.18 (95 % CI:1.01 - 1.37)) and the provision of sports facilities (OR:1.03 (95 % CI:1.00 - 1.06)) were predictors of boy's sedentary behaviours only.

(Continued on next page)

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Network and Capacity Development



Electronic cigarette use in young people in Wales

School Health & Wellbeing Research Brief, November 2016

- Termly Newsletter, Webinars and Research Briefs for WNHSS activity
- Network Events in North, South and West Wales
- Briefings for key stakeholders
- Research Literacy workshops and workforce development
- Developing pupil engagement infrastructure

Electronic cigarettes have become a popular and successful aid to help adults stop smoking, thereby poten-

School practices important for young people's sexual health
School Health & Wellbeing Research Brief, February 2016

Schools can be an important influence on the sexual health and wellbeing of young people, through both sexual relationships education (SRE) in the formal curriculum and through other aspects of the school environment, such as offering sexual health clinics. What is the relationship between these elements of sexual health promotion activities in schools in Wales and young people's sexual health?

What we already know...

- Adolescence is a critical period for establishing norms around sexual activity and in the UK, many young people leave compulsory education having engaged in sexual intercourse and risky sexual behaviours.
- SRE is associated with improved uptake of contraceptives and a reduction in pregnancy, abortion and sexually transmitted infections.
- Increasing contraceptive availability is key to better improving sexual health outcomes and provision of contraception in school grounds is recommended in the UK.

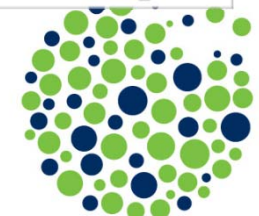
What we did...

- We used data from 5,392 students aged 15 to 16 who took part in the 2015/16 Student Health and Wellbeing survey in Wales.
- Students reported whether they had ever had sexual intercourse.
- Those that answered 'yes' were then asked the age they first had sex and whether they had used a condom the last time they had sex.
- Information on the school environment, pertaining to sexual health was collected from the 20 schools the students attended.
- Schools reported who had the main responsibility for delivering SRE, whether the school had an on-site 'drop in' service specifically for sexual health, and whether the school had an on-site provision of free condoms for students.

In a nutshell

- 24.5% of Year 11 students had engaged in sexual intercourse but over half had not used a condom at last intercourse.
- SRE delivery by specialist SRE health education teachers, school nurses and outside agencies was associated with positive sexual health outcomes.
- Providing an on-site sexual health service was associated with increased condom use, but provision of free condoms was associated with lower use.
- Having sexual health lessons and free condoms provision were not associated with young people becoming sexually active.

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System integration and adoption

‘It is enormously beneficial for us to get a raft of data which can be considered by staff, pupils and external agencies to analyse and organise programmes accordingly.’
Headteacher

When working within a system that has become so data driven it is great to be part of a like-minded network with wellbeing at the forefront.’ **Assistant Head**

‘Privileged – glad that the school is on board and supportive. Priority to see/hear about new initiatives and ideas that will fit into healthy schools.’ **In-school Healthy Schools Coordinator**

‘Being a member of SHRN gives us as a school, access to up to date and relevant research, support and information.’
Assistant Head

