

7 Summary and discussion

Young people and sexual orientation

This report describes the most recent situation with regard to sexual orientation and young people in the Netherlands. It devotes attention to two important pillars of the Dutch lesbian, gay, bisexual and transgender (LGBT) emancipation policy: attitudes of young people to LGBT issues, and the social situation, lifestyle and well-being of young LGBTs themselves. We compare this latter group with the social situation, lifestyle and well-being of young heterosexuals. Data were drawn from two large-scale population surveys, Health Behavior of School-Aged Children (HBSC) and Cultural Changes/Social Situation Index. A supplementary survey was also carried out: Lesbian, Gay and Bisexual youth. We divided the survey population into two groups: school students (aged 11-16 years) and young adults (aged 16-25 years). Not all information is available for both groups, which means we frequently describe the situation for just one of the groups. Where information is available for both groups, we refer to them collectively as young people, youngsters or the young.

7.1 Current situation

Today's young people have grown up in an age when marriage is permitted between same-sex couples, popular presenters help young people to come out on tv, parties across the whole political spectrum denounce homophobic violence, and issues such as excluding gay people from military service or mass demonstrations against equal rights are phenomena that they only know from countries such as the United States and Russia. Notwithstanding these developments, it is not the case that young heterosexuals in the Netherlands have a universally positive attitude towards their LGBT counterparts, nor that young LGBTs in the Netherlands can be just as unconcerned and happy as their straight peers.

The attitudes of young people in the Netherlands are positive towards some LGBT issues, but more negative on some others. The majority of school students are willing to consider the possibility of friendships with young LGBTs. Two-thirds (67%) of primary school pupils and three-quarters (76%) of secondary school students say they would have an LGBT friend. By contrast, the thought of two boys or girls kissing each other is not always considered acceptable by schoolchildren: 36% of primary school pupils and 34% of secondary school students find the idea of two boys kissing repugnant, and this applies for 33% and 19%, respectively, when it comes to two girls kissing. Many schoolchildren also say that, gay students at their school cannot tell everyone about their sexual orientation (23% think they cannot reveal this at all, 39% think they can only tell friends). The attitudes of schoolchildren in 2013 are more positive than in 2009, but whether this indicates a trend towards more positive attitudes among the school population or this is a chance fluctuation is not possible to say on the basis of the available data.

The majority of young adults are perfectly happy with equal rights for LGB and heterosexual individuals, say they should be free to lead their lives as they wish and think they should be able to become teachers. However, a sizeable group disapprove of LGBs kissing, having sex or walking hand in hand, and 17% would find it difficult if their son or daughter had a same-sex partner. The attitudes of young adults have become more positive since 2006. Eight years ago, 18% rejected homosexuality and bisexuality, while today the figure is 6%. Most young adults have no problem with friendships with transgenders, but gender ambivalence (where it is unclear whether they are dealing with a man or a woman) is more difficult for many of them. Many young adults do not believe that medical interventions for gender transitions should be reimbursed, but think that transgenders should pay for this themselves. Among both schoolchildren and young adults, females hold more positive attitudes and those who are religious more negative. Schoolchildren with a migrant background also have more negative attitudes.

The differences between young LGBs and heterosexuals outweigh the similarities. First, the similarities according to the research results. There are no differences between young LGBs and heterosexuals as regards their circle of friends. LGB schoolchildren have just as much contact with their friends, receive the same amount of support from them and have the feeling that they can turn to their best friend with their problems. LGB young adults have just as many straight friends as their heterosexual peers, more LGB friends (although many straight young people also report that they have LGB friends) and just as much experience with relationships. They are slightly more lonely than heterosexual young adults. There is also little difference between the two groups as regards informal participation in sociocultural activities (volunteering, cultural activities or going out) and social views about women, migrants and freedom. The two groups of young adults also do not differ in terms of sports participation, alcohol consumption, subjective health status and level of happiness.

So where do we find differences and problems? LGB schoolchildren have more problems at home and at school. They feel they receive less support from their families, are less able to talk to parents about concerns, enjoy school less, experience a negative atmosphere in the classroom and poorer contact with the teacher, play truant more often and experience more bullying. They play sport less, are more often overweight and their consumption of alcohol, cigarettes and marijuana is between two and six times higher than among their straight peers. They score their lives 6 out of 10, compared with the 8 that heterosexual schoolchildren give their lives. They report poorer health and have far more psychosomatic, emotional and behavioural problems.

Young LGB adults smoke and use marijuana more often. They have lower self-esteem and far more psychological problems. They also report having suicidal thoughts and attempting suicide far more often than their heterosexual peers. The differences between LGB and heterosexual youngsters are greater than one might (or would like to) imagine in a country like the Netherlands.

In contrast to the sombre picture that emerges for the general social situation, lifestyle and well-being of LGB young adults, LGB-specific aspects of their existence present a more positive picture. Most young LGB adults have someone close by who is aware of their LGB feelings and if not, the most cited reason is that they are themselves not yet

sure about these feelings. In three-quarters of cases, their best friend is aware, and in between 66% and 70% of cases their parents know about their sexuality. The openness declines as the social circle widens, but even so, 64% have told some or all classmates/fellow students and 59% have come out to some or all work colleagues. Sport is the only area where a minority (47%) have come out to some or all of their fellow participants. If LGB young adults are open about their feelings, the vast majority initially receive a positive reaction from every social quarter, and attitudes to their sexual orientation remain predominantly positive thereafter.¹ It would seem that their LGB status does not lead to major interpersonal problems in their immediate social setting for most LGB young adults, though there may of course be a selection effect at work here: it may be that only those in an accepting or tolerant setting are open about being LGB.

These positive figures notwithstanding, four out of ten LGB young adults have encountered negative reactions during the past year, and a quarter have regularly or frequently adapted their behaviour so as not to stand out. This may include not touching their partner where this might be seen by others, or avoiding certain locations. And although the vast majority have no difficulty with the fact that they have feelings for members of their own sex, there is also a group of LGB young adults who are ambivalent or negative about their own sexual orientation. For example, they are ashamed of their feelings or feel unhappy when they think about being LGB.

7.2 Explanations for differences between LGB and heterosexual youngsters

In this report we look not only for similarities and differences, but also at possible explanations for the differences found. We are more successful at explaining some differences than others. For example, the available data did not provide a clear insight into why LGB schoolchildren feel they receive less support at home and why they are more often bullied at school. When it comes to their truancy, unhealthy lifestyle and mental health issues, the data explain around 50-60% of the differences. Many problems then appear to go hand in hand. The fact that LGB schoolchildren play truant more often than their heterosexual counterparts can for example be attributed partly to the fact that they are less able to talk about their concerns with their parents, their weaker relationship with their teachers and their greater psychosomatic, emotional and behavioural problems. Their increased substance use (alcohol, smoking and drugs) and overweight stem partly from a lack of regulation of substance use at home, the lower support they experience at home, their reduced ability to talk about their concerns with their parents and their greater emotional and behavioural problems. The more negative home situation and more frequent bullying are also partly related to the greater psychosomatic, emotional and behavioural problems of LGB schoolchildren.

Unfortunately, we know nothing about the home situation or the school, study and work situation of LGB young adults, so we are unable to make any statements about the relevance of these aspects in explaining their heightened problems. The nature of the dataset (which focused more on LGB-specific issues) does not provide a clear picture of the general risk and protection factors that might explain differences in loneliness, smoking, use of cannabis and psychological problems between LGB and heterosexual young

adults. What the data do show is that some of the differences in loneliness and suicidal thoughts are related to the higher degree of gender-nonconformity (incongruence between biological gender and the appearance or behaviour that is generally expected of men and women, e.g. effeminate men and mannish women). LGB young adults are thus more often lonely and more often have suicidal thoughts because they behave less in accordance with the dominant norms and prescripts for the sexes. Their greater mental health problems are also partially related to their more frequent suicidal thoughts. The accumulation of problems among young LGBs was recently studied in the United States from a 'syndemics' perspective (Mustanski et al. 2014). Syndemics is a term originally coined in the medical world and refers to the simultaneous occurrence of two or more diseases which constantly interact with each other, producing negative consequences and thus more rapidly leading to serious health consequences. Mustanski et al. show that different psychosocial problems among young LGBTs often go hand in hand and that these problems in turn explain other problems. For example, bullying and substance abuse go together in a cluster of substance use and mental health issues, and that cluster of problems (e.g. the simultaneous occurrence of depression with alcohol and cannabis use) goes together with a heightened risk of suicide. Syndemics analyses were not used in this study of young Dutch LGBs, but our results do show correspondences: the problems in the home situation, at school, in relation to substance use and mental health issues partially explain each other.

The problems are also related to each other in the sense that earlier studies show that young people end up in a vicious circle. For example, bullying leads to mental health problems, and young people with emotional and behavioural problems are more likely to be bullied (Cook et al. 2010). Mental health problems and substance use also interact: excessive substance use can give rise to psychological disorders, which in turn can then lead to more substance use. Once again, we are unable to say how far this applies for our study, because we only have cross-sectional data. Investigating complex interactions of this nature would require research that tracks young people over a longer period.

We are unable to explain some of the problems in the social situation, lifestyle and well-being of young LGBs in the Netherlands because we currently do not have the data needed for this. What we can do is put forward suggestions for supplementary explanations. First, there is the negative attitude to (visible) homosexuality and bisexuality in young people. This negative climate can influence the well-being of LGB youngsters. Hatzenbuehler has conducted a lot of research on this relationship and shows using American data that where the social context is less favourable for LGBs (e.g. because of more negative attitudes, more conservative legislation or less policy), they report more health problems than their counterparts in more positive contexts (Hatzenbuehler 2011; Hatzenbuehler et al. 2014; Hatzenbuehler & Keyes 2013). There appears to be a direct relationship between negative attitudes to homosexuality and bisexuality and the well-being of young Bs.

A second additional explanation is that the simple realisation of being different from others, in a phase of life when the opinions of others are very important and there is a sense that everyone is watching and judging all the time, plays a major role in the problems experienced by young LGBs. It is more important for young people than for any

other age group to be the same as others and to adapt to what is normal at their school, in their neighbourhood or at the sports club. The perceived social control is relatively high in this phase of life. LGB youngsters by definition differ from their heterosexual peers, and that difference is centred on an area that gains greatly in importance during adolescence: love, relationships and everything to do with sexuality. Homosexual boys develop a crush on their male biology teacher rather than their female French teacher; lesbian girls dream about Jennifer Lawrence rather than Jude Law. And both groups would rather dance at the end-of-year school ball with a classmate of their own sex for whom they have feelings, but that is not an option. This being different and their awareness of it can have a negative impact on their well-being.

Other additional explanations are that LGB youngsters differ in terms of risk and protection factors that could not be investigated in the present study because they do not occur in the questionnaire, but which are nonetheless related to the social situation, lifestyle and well-being of young people. Some examples of these factors are bonding, personality traits (e.g. impulsiveness), temperament, cognitions (e.g. seeking sensation), social trust, perceived social norms and social pressure, helplessness and coping strategies. All these factors emerge in international studies as risk or protection factors for problems and as potential differences between LGB and heterosexual youngsters.

In addition to the above explanations, LGB-specific risk factors also play a role. We investigated a number of factors for LGB young adults that are described in the literature as minority stress factors, or factors which only affect sexual minorities and which exact a toll on their health, on top of the factors that can make life more difficult for everyone. Examples are experiencing negative reactions or hiding one's sexual orientation. Although the negative consequences of staying in the closet, encountering negative reactions or internalised homonegativity have been frequently demonstrated internationally in cross-sectional and longitudinal studies, in our study we found only a small number of relationships. Whether someone is open or not about their sexuality only affects loneliness, and whether or not they receive negative reactions only affects psychological problems. A more negative attitude towards one's own feelings for members of the same sex is however strongly related to more loneliness and more psychological problems. The outcomes thus suggest that combating negative feelings about their own sexual orientation is important in addressing problems in this group, but that developing genuinely effective interventions requires attention not just for LGB-specific aspects (such as daring to come out or dealing with the negative reactions of others), but also for general risk and protection factors in the lives of young people, such as their home situation and school experience.

7.3 Risk groups among LGB youngsters

Earlier studies have shown that religious, bisexual, gender-nonconforming and very young LGBs experience a relatively large number of problems (Van Lisdonk & Van Bergen 2010). This is only partially reflected in the present study. Whether this is due to the small sample size and therefore the limited number of participants in the subgroups, or

because the differences are not prominent, is unclear. The small sample size means we need to be cautious in interpreting the results discussed in this section.

First, there are few indications that religious young LGBs are at greater risk. Religious young people are more often in a situation where no one around them is aware of their feelings towards members of their own sex and they themselves have a more negative attitude to their own sexual orientation. However, there are no differences between religious and non-religious LGB schoolchildren in the support they receive from their family, the frequency with which they are bullied at school, truancy, being overweight, using substances or having psychosomatic, emotional and behavioural problems. Young adult LGBs who are religious also do not differ from their non-religious peers in terms of loneliness, psychological complaints or suicidal thoughts. If anything, religion appears to offer some protection against smoking and using cannabis. LGB youngsters with a migrant background also do not emerge from the data as a risk group. They do however play truant and smoke cannabis slightly more often.

As stated, the absence of differences between religious and non-religious LGB youngsters and between Dutch natives and young LGBs with a migrant background is probably due to the limitations of our study. For example, the sample did not enable us to split respondents into different ethnic backgrounds and religious denominations. The size of the group of young LGBs was also limited, which means that differences are often not significant. Added to this, LGB young adults were recruited from a panel, a source that is known for its selective group of migrants and religious respondents (for a more detailed discussion, see Huijnk 2014). It is therefore important not to draw overly firm conclusions from the lack of associations.

As stated earlier, bisexual young people emerge in many foreign studies as a group who are at risk of problems involving substance use and well-being, even more so than their gay peers. Our study partially confirms this. We found no difference at all in the social situation, lifestyle and well-being of lesbian, gay and bisexual schoolchildren, but we did find differences among young adults. Bisexual young adults more often have no one around them who knows about their orientation and they more often have a negative view of their own sexual orientation. They do however experience fewer negative reactions from others to their sexual orientation (probably because they are less visible). Bisexual young adults are more lonely, report more substance use (smoking and cannabis), more psychological problems and more suicidal thoughts. Our explanations for these differences are based partly on speculation and partly on our data. The difference in loneliness, for example, seems to be related mainly to the fact that bisexual young adults are more closed about their feelings and have more negative attitudes to them themselves. These are important factors that are closely associated with loneliness among LGB young adults in general. Their negative view of their own feelings also explains the difference in psychological problems compared with their lesbian and homosexual peers. However, the differences in substance use and suicidal thoughts cannot be explained by our data. Hypotheses about the differences are the difficult position of bisexual young individuals caught between lesbian and gay youth on the one hand and heterosexual youth on the other; the invisibility of bisexuality in the media, politics and society; or differences between young lesbian, gay and bisexual individuals in terms of

the risk and protection factors (such as differences in personality traits, temperament, cognitions, perceived social norms and social pressure or coping strategies) can be put forward, but not tested at this point in time. Similarly, we can speculate about the differences between school pupils and young adults (a bisexual status makes no difference for the former, but does for the latter), but we cannot assert anything with certainty. It may be that the distinction between bisexuality and homosexuality only matters later in life, but it may also be that the difference is due to the different research methods used for school pupils and young adults.

Gender nonconformity is a characteristic that is receiving more and more attention as a possible risk factor for young LGBs. Feminine (gender-conforming) lesbian and bisexual girls are thought to experience fewer problems than mannish (gender-nonconforming) lesbian and bisexual girls, while effeminate (gender-nonconforming) boys are at more risk than mannish boys (gender-conforming). We were only able to look at this for young adults, because school pupils were not asked about gender-nonconformity. We found little evidence among LGB young adults of a relationship between gender-nonconformity and problems. There was for example no relationship with loneliness, substance use, psychological complaints or suicidal thoughts. We also did not find that gender-nonconforming young people experience more negative reactions. This is striking and goes against the trend in the international literature, though there are other studies that also find no such associations (e.g. Mustanski & Lui 2013). Whether this is due to differences in research methods or in the social context cannot be said with certainty. Gender-nonconformity does play a role in explaining differences in loneliness and suicidal tendencies between LGB and heterosexual young adults. The higher degree of gender-nonconformity among LGB youngsters is associated with more loneliness and more suicidal thoughts.

We found no clear patterns based on degree of urbanisation, sex and ethnicity which point to a more vulnerable or more resilient group. Differences based on age are discussed in the next section.

7.4 Differences between school pupils and young adults: does it get better?

Within the groups of LGB school pupils and young adults, we found few associations between problems and age. However, if we look at the overall picture of the differences between LGB school pupils and young adults, the latter group appears to be in a better position in some respects. For example, there are no differences on certain aspects of lifestyle (frequency of sports participation and alcohol use) between LGB and heterosexual young adults, whereas there are differences in the school LGB population. LGB school pupils also assess their lives substantially more negatively than their heterosexual counterparts, whereas LGB young adults are no unhappier than their heterosexual peers. LGB young adults also do not assess their own health as worse than heterosexual young adults, whereas there are substantial differences on this point between LGB and heterosexual school pupils. The less favourable position of school pupils may be due to differences in the research methods used or to the fact that this group are actually in a worse position.

Different research methods and question formulations were used for the two respondent groups. The school pupils were recruited via a random sample of schools and classes, whereas the young adults came from an online panel. The question formulations on things such as sport or subjective health were also not the same. It may be that these methodological differences explain the deviating findings. Subject to the explicit reserve that the differences between school pupils and young adults may be a methodological artefact, we consider a few substantive, hypothetical explanations for the findings below.

First, it may be that LGB young adults are better off than LGB school pupils. As young people grow older, they gain more control over their own lives. A 12 year-old gay boy has little choice about where he lives, the type of family in which he lives, the school he goes to or the social context in which he makes friends. A 25 year-old gay adult has more freedom to make choices, and may find it easier to choose a context in which he feels comfortable (as a gay person), whereas the 12 year-old has to make the best of the context in which he finds himself.

Social norms, the opinions of others and the need to be 'normal' also play a greater role in adolescence than during young adulthood. It is much more important for those in puberty to act as if they are 'normal' and like everyone else, than it is for young adults. Moreover, the latter group are less sensitive to other people's views and also less inclined to think that other people are constantly watching and judging them. Deviating from the heterosexual norm could therefore potentially have fewer negative consequences for young adults than for school pupils.

A 25 year-old also has a larger arsenal of coping strategies than a 12 year-old. Young adults have more ways of dealing with setbacks and have more positive experiences to set against them. They also have more opportunities to experiment with same-sex relationships, and that has a positive impact on their well-being (Baumeister et al. 2010). Finally, it is important to realise that those school pupils who are already aware of their own sexual orientation are reaching this awareness at a relatively early age, and this may make them more vulnerable. The data for young adults show that half of young adult LGBs were still unaware on their 16th birthday that they had feelings for members of their own sex. The school pupils in the study were aged between 12 and 16 years and in the questionnaire stated that they already know that they have feelings for members of their own sex. This is relatively early, and it may be that those who are aware of their feelings at an earlier age are more at risk of all kinds of problems.

Sometimes, the substantive questions we ask in the Netherlands have already been addressed in foreign research. An example is the question of whether things get better for young LGBs as they grow older. American studies have monitored young people over a longer period and have charted the extent to which the well-being of LGB and heterosexual school pupils varies over time. The available data mostly come from ADD Health (begun in 1994 among 14-18 year-olds) or GUTS (launched in 1996 among 9-14 year-olds). The findings from these studies do not point in any particular direction. For example, Austin et al. (2009a; 2009b) observe that differences in problematic eating behaviour were already manifesting themselves in the youngest age group, were still present later in life and that the extent of the differences does not increase or decrease.

The differences do decrease for overweight boys: in early adolescence, homosexual and bisexual boys suffer more from overweight than heterosexual boys, but later in life the differences are reversed. Lesbian and bisexual girls consistently struggle with overweight more than their heterosexual peers. Cardom et al. (2013) show that depressive complaints and suicidal tendencies generally decline as young people grow older, but not among homosexual and bisexual boys. Marshall et al. (2013) find no differences in the prevalence of depression and suicidal tendencies between LGB and heterosexual young people over time; over a period of thirteen years, young LGBs remain at the same degree of heightened risk. Corliss et al. (2010; 2013) show that differences in substance use remain over time, but do reduce in magnitude. Marshall et al. (2009), by contrast, demonstrate that the differences increase. And to make the picture even more complicated, Pollard et al. (2011) show that young people who have been consistently LGB for a number of years smoked more in the first years of the study but not later in their lives, while those who discovered their LGB feelings during the course of the study began smoking more.

In short, researchers abroad have been engaged in collecting and analysing long-term data, but have still not arrived at uniform, unambiguous answers. Moreover, the question remains how far these answers can be generalised for the Dutch context. This would require a comparative study in the Netherlands itself.

7.5 Recommendations

We began this study by looking at similarities and differences in social situation, lifestyle and well-being between LGB and heterosexual youngsters in the Netherlands. Our aim was to paint a broad picture of the social situation of young LGBs and not just to focus on problems. Despite this, the emphasis gradually came to lie on the differences and on the vulnerability of young LGBs in areas such as experiences in the home situation and at school, substance use and mental well-being. In our view, the data justify this somewhat alarming message. However, this emphasis does carry the risk of creating the impression that all young LGBs have problems. We would therefore like to stress that, while the group as a whole are at greater risk of experiencing problems, the majority of young LGBs still manage perfectly well to lead healthy and happy lives. It is important to be aware that young LGBs are at more risk of things such as bullying, truancy, overweight, smoking, drinking, drug use and suicidal tendencies, but also that the majority do not encounter these problems.

Making specific recommendations on how to address these problems is difficult, not least because no approach has been proven to be effective in improving the school climate for LGB pupils or improving the well-being of young LGBs (Bucx & Van der Sman 2014; Marshall et al. 2013; Plöddorl 2013). Developing meaningful interventions based on existing (national and international) knowledge and studying their effectiveness would therefore seem to be of prime importance. Interventions should focus not only on LGB-specific factors such as discrimination or being in the closet, but also on the general risk and resilience factors related to the problems encountered relatively frequently by young LGBs. Existing intervention experiences and scientific knowledge of both LGBs and of

young people, and lifestyle/well-being in general, are important here. Theory-driven interventions should not only take account of LGB studies, but also of general studies in areas such as family problems, school experience, bullying, substance use and psychological problems.

7.6 Conclusion

This is the second large-scale study of young LGBs carried out by the Netherlands Institute for Social Research|scop. It builds on earlier experiences gained in relation to the recruitment and research methodology and has benefited from that knowledge and experience. However, a number of caveats can be mentioned concerning the present study, including the panel-based nature of the data on young adults, the small number of LGB school pupils which prevented a further breakdown into subgroups, or the differences in group size between LGB and heterosexual youngsters. Despite this, we would endorse the comments by Plödorl et al. in a recent overview article on young LGBs and suicidal tendencies:

We think that it is important to be aware that, in certain fields, such as in sexual minority research, for the many reasons noted in this article, the evidence cannot reach top quality status. We nonetheless believe that if incontrovertible evidence is lacking, the available evidence should be judiciously evaluated when a particular group may be at heightened risk. (Plödorl et al. 2013: 715)

The data used in our study once again underline the importance of policy and programmes focusing on young LGBs in the Netherlands. Attitudes to sexual minorities and their safety and well-being warrant undiminished attention from those who develop interventions, policymakers and researchers. Dutch research on young LGBs can draw on the international arena for inspiration. In the UK and US, for example, long-term studies are being carried out on young people and well-being which map out various dimensions of sexual orientation, such as attraction, sexual behaviour and identity, and relate these to well-being and risk factors. A recent study in the United States also combined data drawn from health studies of young people in different states (Youth Behavior Risk Surveys, YBRS) to create a pooled dataset. This dataset contains data on tens of thousands of young people and is large enough to enable differences to be examined on the basis of sex, age, ethnicity and sexual orientation simultaneously (Mustanski et al. 2014). Taking the example of the American YBRS, a pooled dataset from the municipal E-MOVO studies² of the health, welfare and lifestyle of young people in the second and fourth years of secondary school could offer similar opportunities in the Netherlands. This pooled dataset would probably contain data on enough young people to enable them to be split into lesbian, gay, bisexual and transgender youngsters and also into different religions and ethnic backgrounds. This would be a truer reflection of the diversity within this sexually diverse group of young people.

Notes

- 1 This may appear to contradict the finding cited earlier that the relationship with parents is more troublesome, but it should be borne in mind that this is a different group of young people (school pupils versus young adults), and that this finding relates only to the attitude of the parents (positive or negative) to their child's LGB status and not to the generally experienced support, care, etc..
- 2 The E-MOVO studies are municipal health studies carried out by local municipal health departments. They are repeated at regular intervals. Although they contain a number of standardised questions, no dataset is available which pools the data from the different local health departments.