

Annual Report of the Director of Public Health on the health of the people of Lincolnshire 2016



Introduction

Welcome to this Annual Report of the Director of Public Health for Lincolnshire. As Interim Director of Public Health this is my first ever annual description of the state of the health of the people of Lincolnshire, and one I have enjoyed working with my colleagues to design and compile.

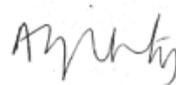
I decided this year to focus on the mental health and mental illness profile of local people. My decision was based on the principle best described as ‘no health without mental health’, which leads us to a definition of mental health as a resource, rather than simply a state involving the absence of illness or distress.

Good mental health is a valid goal in and of itself for individuals and communities to pursue. However, it is also a prerequisite for people to achieve their goals and potential in life; to support their ability to make good choices and protect themselves from harm. Many different factors can support or challenge the mental health of individuals and communities, and these have more or less effect at different points in people’s lives. For this reason my report is presented as a series of points along the average life-course, highlighting the risks and opportunities to mental health at each of these stages of life.

These are summarised in the table below and described more fully in each of the chapters presented.

I commend the report and its recommendations to the reader, and hope the reading will encourage you to think about your own mental health and that of those around you. For those of you who have a wider sphere of influence I trust that you will work with me to:

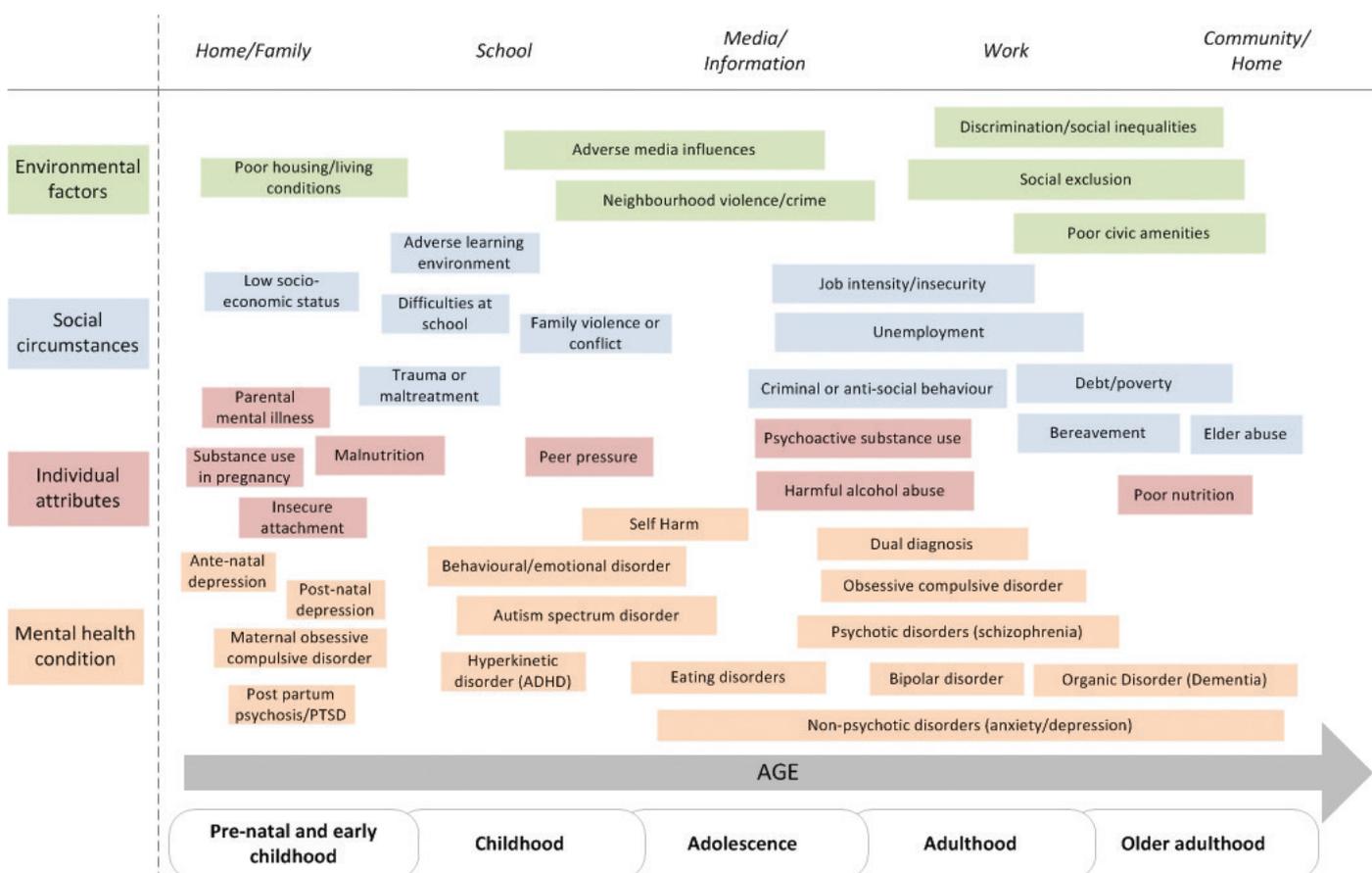
- applaud the things in Lincolnshire that already support mental health;
- reflect on the things that we could do more of, or be better at;
- ensure that we adjust what we do to make it as easy as possible for those of us whose mental health is challenged to get the best out of life.



Tony McGinty
Interim Director of Public Health



Figure 1: Mental health across the life-course – a framework for the ADPHR 2016/17



Sources:

World Health Organisation. Risks to mental health: An overview of vulnerabilities and risk factors, 2012
 Djuretic, T. Mental Health in London, <http://www.birmingham.ac.uk/schools/social-policy/departments/health-services-management-centre/news/2016/06/making-change-happen-for-mental-health.aspx>
 Maternal Mental Health Alliance - http://everyonesbusiness.org.uk/?page_id=6

Contents

Progress against last year's recommendations	4
Executive Summary	7
Chapter 1: Risk factors: What influences our mental health?	8
Chapter 2: Perinatal and maternal mental health conditions	16
Chapter 3: Childhood and adolescent mental health conditions	20
Chapter 4: Adult and older adult mental health conditions	25
Chapter 5: Recommendations	30
Glossary	31
References	32

Progress against last year's recommendations

In the 2015 Annual Report, the then Director of Public Health made a series of recommendations. I would like to use this opportunity to provide an update on progress against these. I am aware that a wide range of organisations are involved in leading and supporting the implementation of the recommendations and this report is intended to provide information on some of this work rather than a comprehensive overview.

Recommendations	Update												
Data and Intelligence													
1. Mechanisms for collecting more comprehensive data on liver disease should be explored. For example, investigating whether liver disease can be recorded in primary care data.	The Lincolnshire liver disease strategy group will look into the feasibility of liver disease being recorded in primary care data.												
2. Lincolnshire organisations should play an active role in the East Midlands Liver Programme Group, which is led by Public Health England's East Midlands Centre. This will help in learning from our regional partners about best practice in addressing liver disease.	A multi-agency, high level Lincolnshire liver disease strategy group has been set up to develop a county-wide liver disease strategy, which is working very closely with Public Health England.												
Awareness													
3. National campaigns aimed at increasing the awareness of liver disease should be supported locally.	The launch of the Public Health England One You campaign, which is promoted locally, has encouraged over 4,700 people in Lincolnshire to engage with the campaign, either by completing the 'How Are You' self-assessment tool and/or downloading an associated support app (Oct 16). From this cohort, 21.9% of these people were not achieving the recommended levels of physical activity, 12.1% were smokers, 5.6% were drinking over the alcohol recommendations and 3.2% were not meeting the healthy eating recommendations for optimal health. Lincolnshire County Council has begun engaging with partners across the county via the locality health and well-being networks, JSNA expert panels, events, various media channels and via the newly formed Health Improvement Partnership. As a result of the partnership we are able to form a collaborative response to national campaigns and are able to effectively utilise partners' communication channels. Commissioned services, and other willing organisations, are being encouraged to co-brand with One You to increase consistency and awareness of the initiative.												
4. There is a need for stakeholders to work jointly to raise awareness of links between obesity, excessive alcohol consumption and liver disease amongst the local population, particularly in areas with high rates of liver disease-related hospital admissions.													
5. There is a need to work with Health Education England to improve the awareness of health professionals on the causes of, and treatments for, liver disease, as well as the importance of early detection.	Liver disease is taught in medical curriculum.												
Early Detection and Treatment													
6. Stakeholders should work together to facilitate early identification of risk factors for Liver disease through continued action to improve the participation of individuals in NHS Health Checks, at a GP and county level.	NHS Health Checks, which is primarily a vascular disease screening programme, has successfully recruited eligible people to engage with the Health Checks programme: (Source – NHS Health Checks Annual Report 2015-16)												
7. Health checks are a potential intervention point for those at risk of liver disease. It must be ensured that individuals, who are identified as having relevant risk factors are followed up in general practice, provided appropriate onward referral or, where referral is no longer available, provided a brief intervention by their GP practice (e.g. advice on dietary improvement and/or weight-loss).	<table border="1" data-bbox="805 1904 1487 2123"> <thead> <tr> <th data-bbox="805 1904 1053 1989">NHS Health Check</th> <th data-bbox="1054 1904 1189 1989">England</th> <th data-bbox="1190 1904 1342 1989">East Midlands</th> <th data-bbox="1343 1904 1487 1989">Lincolnshire</th> </tr> </thead> <tbody> <tr> <td data-bbox="805 1991 1053 2040">Offered (Invited)</td> <td data-bbox="1054 1991 1189 2040">56.4%</td> <td data-bbox="1190 1991 1342 2040">54.4%</td> <td data-bbox="1343 1991 1487 2040">60.8%</td> </tr> <tr> <td data-bbox="805 2042 1053 2123">Received (Uptake)</td> <td data-bbox="1054 2042 1189 2123">48.4%</td> <td data-bbox="1190 2042 1342 2123">53.8%</td> <td data-bbox="1343 2042 1487 2123">57.3%</td> </tr> </tbody> </table>	NHS Health Check	England	East Midlands	Lincolnshire	Offered (Invited)	56.4%	54.4%	60.8%	Received (Uptake)	48.4%	53.8%	57.3%
NHS Health Check	England	East Midlands	Lincolnshire										
Offered (Invited)	56.4%	54.4%	60.8%										
Received (Uptake)	48.4%	53.8%	57.3%										

Recommendations	Update
	<p>In terms of identifying overweight and obese adults within the Health Checks, the programme has identified more than 16,000 people as overweight (BMI 25+) and 6,500 as obese (BMI 30+) in Lincolnshire.</p> <p>Only 445 adults were referred to some form of weight management intervention (6.8% of the obese population referred on to services). This referral to weight management indicator is a low number and is being investigated further.</p> <p>Despite this low activity, GP based support and brief intervention is being documented (currently on an ad-hoc basis).</p>
<p>8. Hepatitis B screening for migrant populations should be improved through local measures, for example primary care registrations and new-registrant screening for new migrants from medium and high prevalence countries.</p>	<p>The Public Health Immunisation Programme Officer will be tasked to investigate methods of promotion and targeting of HepB immunisations.</p>
<p>9. The uptake of Hepatitis B vaccination by individuals at high risk of exposure to the disease should be increased.</p>	<p>Lincolnshire Integrated Sexual Health Services (LISH) already conducts thorough screening. This service sees many of the relevant target population and will monitor uptake of HepB immunisations within their services. This work will be supported through education and outreach work provided by Positive Health and The Terrence Higgins Trust, both significant partners within LISH. A new JSNA around HIV prevention for publication in 2016 will reference the need to utilise MECC and signpost to liver disease reduction measures.</p>
<p>10. Rates of diagnostic testing for Hepatitis C should be increased among individuals at high risk of the disease, in order to detect disease early and to commence treatment.</p>	<p>Newly commissioned substance misuse treatment services offer Hepatitis B vaccination and Hepatitis C screening, including pre and post-test counselling, to all those accessing services. Onward referrals are made for further testing and treatment as necessary and anyone who declines screening has the offer repeated at intervals throughout their recovery journey.</p>
<p>11. The specialist alcohol and substance misuse services should support people to reduce problematic alcohol consumption. This should include links with hospitals to identify and support people who might benefit from such specialist support.</p>	<p>Specialist substance misuse services provide individually structured support to everyone who accesses services; this includes harm minimisation advice and a personal recovery plan. The provider also offers Identification and Brief Advice training as well as a specialist hospital liaison service which is currently under development and will be available from February 2017.</p>
<p>12. The alcohol treatment services within local authority commissioning of substance misuse services should be of high quality and outcome based.</p>	<p>During 2016 re-commissioning of all specialist treatment services was undertaken by the local authority and a new contract commenced with Addaction in October 2016. This new service realises efficiency savings and provides Lincolnshire with a flexible, outcome based service to meet the current need and future changes in substance misuse trends. The new contract has a total of thirty outcomes spread over seven separate domains which are:</p> <ul style="list-style-type: none"> • Freedom from dependence on drugs or alcohol • Improvement in mental and physical wellbeing • Prevention of substance misuse related deaths and blood borne viruses • A reduction in crime and re-offending • Sustained employment • Improved relationships with family members, partners and friends • Improved capacity to be an effective caring parent

Recommendations	Update
Strategy and Policy	
13. The Health and Wellbeing Board should take leadership in prevention, early identification and treatment of liver disease, as recommended by the Chief Medical Officer.	The Health and Wellbeing Board has included outcomes relating to prevention, early identification and treatment of liver disease within its Joint Health and Wellbeing Strategy for Lincolnshire and they receive annual assurance reports relating to the progress of the strategy.
14. Lincolnshire organisations should advocate for evidence based national policies to reduce excessive alcohol consumption, for example health and wellbeing to become a 5th licensing objective.	The Public Health Division is actively involved with Public Health England policy reviews and regional forums. It is anticipated that a new substance misuse strategy including initiatives for alcohol will be released in February 2017 alongside new clinical guidelines for treatment services.
15. Lincolnshire organisations should advocate for governmental regulations to reduce sugar and saturated fat content in food and drink that are informed by evidence, for example Public Health England recommended policy actions to reduce sugar intake.	This has become a national policy agenda with plans to implement a “sugar tax” on fizzy drinks. Little local advocacy or regulation has been undertaken.
16. A multi-agency obesity and overweight reductions strategy should be developed.	Obesity reduction forms a key part of the prevention programme that has been developed as part of the Lincolnshire Sustainability and Transformation Plan (STP). This is an all age strategy, although there is recognition that forming healthy life long habits are best begun during childhood. Therefore a multi-agency strategic action plan to reduce obesity in children through actions across health and social care, business and education is currently in development. A new model of children’s health services due to be implemented in Lincolnshire in 2017 has elements known to promote healthy weight in childhood such as breastfeeding, a healthy start to eating and physical activity at its heart.
17. There is a need to continue to integrate public health across local authority departments to ensure public health is considered in areas such as planning and licensing, for example, using local planning powers to support play and active travel.	A public health consultant has been allocated to work closely with each of the Council’s Executive Director areas of service. They are tasked with supporting the delivery of the service areas’ objectives, seek integration and influence these service areas to achieve maximum health gain.
18. There is a need to explore innovative legislative, planning and environmental actions to improve the health of the local population, for example learning from ‘Reducing the Strength’ in Ipswich and Brighton’s ‘Sugar Smart City’ policy.	<p>Lincolnshire Chamber of Commerce has been commissioned to establish Pubwatch schemes in all towns within the county in order to reduce anti-social behaviour (ASB) by driving those who cause problems in alcohol out of the night time economy. Pubwatch was also set up raise the standards of the bars within the scheme.</p> <p>In Boston a Community Alcohol Partnership has been set up in order to tackle underage drinking including point of sale through test purchasing activity and training for off-licenses, prevention education and investing in diversionary activities for young people in the local community.</p> <p>In Spalding and Lincoln a Public Space Protection Order has been set up in the town centre to prevent street drinking in parks and the town centres in order to reduce ASB related to alcohol.</p>

Executive Summary

Good mental health is the cornerstone of the achievement of other life goals, and ultimately has an effect on the choices and opportunities people make about every aspect of their lives. In the pressure of day to day life, and the sometimes more urgent demands on local people and services the focus on good mental health as a resource is easily overlooked. It is for this reason that this Director of Public Health (DPH) Annual Report focuses entirely on mental health and illness in Lincolnshire.

In focusing on mental health and illness, this report is even more topical at publication than it was at inception, with the Prime Minister identifying the need for new energy in public services around mental health and illness. For some time now there has been focus in national and local policy on the comparatively low investment in mental illness services, through a focus on parity of esteem with physical conditions for example.

The need to have mental health crisis managed in a seamless fashion has also been a focus of development, with the development of local 'Crisis Concordats' and the service developments arising from them.

This report uses national and local data alongside research to set out what we know about mental ill-health in Lincolnshire, describing the scale of the problem, the risk-factors associated with mental ill-health, and the services in Lincolnshire that seek to prevent and treat ill-health. A 'life-course' approach has been used, focusing on specific populations grouped by age in order to understand how the influences on our mental wellbeing can change as time passes.

Mental Ill-Health in Lincolnshire

Mental ill-health is more common than many people think. Recent national research tells us that "1 in 4 adults will be diagnosed with a common mental disorder (such as depression or anxiety) during their lifetime"¹. Many more may struggle with these issues without seeking help or meeting the threshold for a clinical diagnosis. We estimate that at any one time over 100,000 people aged 16+ in Lincolnshire are living with a diagnosed common mental disorder².

Of course, mental illnesses can be of varying severity, but for some the outcomes are tragic; we know that between 2011 and 2013 there were over 2,400 emergency hospital admissions for self-harm in Lincolnshire, and that every year since 1999 there have been at least 60 deaths in Lincolnshire from suicide.

For more than half of the estimated 100,000 adults in Lincolnshire with a common disorder, it is expected that their condition would have begun before the age of 14 years.

Nationally, 1 in 10 children and young people aged 5 to 16 have a clinical diagnosis relating to mental ill-health³. Improving and protecting the mental health of children and young people is thus crucial for ensuring a healthy, happy population across all ages.

Summary Statistics – Mental Ill-Health in Lincolnshire

- It has been estimated that over 3,000 Lincolnshire women per year have mental health problems during pregnancy and after childbirth²;
- Over 9% of Lincolnshire's children aged 5 to 16 are estimated to have a diagnosed condition, similar to national rates. The national Child and Adolescent Mental Health Intelligence Network estimate over 9,000 children in Lincolnshire have a mental health disorder²;
- Over 100,000 adults in Lincolnshire are estimated to have a diagnosed common mental disorder, such as depression or anxiety²;
- Every year since 1999 there have been at least 60 deaths from suicide in Lincolnshire²

The Economic Cost of Mental Ill-Health

Nationally, mental ill-health has been estimated to cost the economy over £70bn per year⁴. "In Lincolnshire, the estimated cost to the economy of mental ill-health equates to at least £230m per year"⁵. In addition to the burden of population ill-health, there is a clear economic mandate to ensure people in Lincolnshire are helped to be as mentally healthy as possible.

Risk Factors

Although at an individual level anyone can suffer from poor mental health, across a population we are able to identify some factors which increase the risk of mental ill-health for some population groups. The start that babies in Lincolnshire get in life is crucial; we know that babies born into loving, supportive families tend to have better mental health as they grow up⁶. For children, the family environment is fundamental, and as they grow up the influence of peers and the school environment grow; and the potential for issues that damage mental health, such as bullying, grows.

As we all know, any child or adult can have good days and bad days when it comes to their mental wellbeing, but research tells us that negative life experiences; unemployment, grief and struggling to get by can vastly increase stress and affect our mental health⁷. These risk factors can 'accumulate,' especially in the lives of those at the margins of society, meaning that there is a known link between socio-economic deprivation and mental ill-health. These inequalities can be addressed through a combination of targeted and universal services that meet the population's health needs.

Chapter 1 Risk factors: What influences our mental health?

What Influences our Mental Health?

Our mental health, like our physical health, is something that can change throughout our lives; it is not a static state and can be influenced for improvement or deterioration at any time. Sometimes we have excellent mental health, and sometimes our mental health isn't so good. Research tells us that 1 in 4 people will experience a mental health problem at some point in their life and, at any one time, 1 in 6 adults have a common mental disorder. Our mental health is fundamental to our health in general, both influencing our physical health and being influenced by it⁸.

Many different factors and circumstances affect how we think, how we feel, and our general level of wellbeing. Some of these factors relate to our environment, some to our social circumstances and some are individual characteristics. This chapter will take a closer look at these factors, emphasising both the risk factors that can undermine our mental health as well as the protective factors that can improve our wellbeing. In order to do this we will use a 'life-course' approach, where we will examine the factors that influence the mental health and development of young children, through school-age years and then into adolescence, working age and then eventually finishing with the factors that can influence the mental health of adults.

Birth and Early Years

The emotional and relational environment into which a baby is born has a fundamental effect on their neurological development. Put simply, a baby who receives positive, loving care and affection from the adults caring for them will develop with significant neurological differences from a child who experiences prolonged exposure to severe stress^{9,10}. The development of a baby's brain and nervous system has been said to depend 'as much on human relationship as it does on nutrition'⁸. Positive and secure attachment between baby and caregiver also results in healthy and positive emotional and social development, and can predict mental wellbeing and ill-health in adulthood^{8,11,12,13}. Thus early childhood experiences can have a significant impact on mental health and wellbeing in later life.

Parental mental health can also be an important factor in the lives of young children. We know that parenting behaviour can have a real effect on the emotional and behavioural development of children¹⁴ and that maternal distress can influence cognitive, social and emotional development¹⁵. Importantly, scientific studies have shown that children of mothers who experience depression show greater vulnerability to anxiety, depressive and conduct

disorders¹⁶. So the environment we are raised in influences the degree to which we are vulnerable to mental ill-health from the beginning of our lives; conversely, it follows that children, who are raised in loving and supportive environments, may have less of these risk factors and perhaps a lower degree of vulnerability to mental ill-health as they grow.

Two Babies; Very Different Worlds

Imagine two babies born in Lincolnshire this year. The first baby is born into an environment where she gets loving care from her mum. Like any baby, she gets distressed and cries when she's hungry, needs changing, or is bored and wanting to play. But whenever she cries, someone is there to make it better. As she grows and develops she starts to trust that whenever she needs help, she will get it; a loving adult will help and the problem will go away.

And then we have another child, born into a situation where those around her aren't willing or able to help in the same way. If the lack of love and care is extreme, research tells us that clear developmental differences will be seen in the baby's brain. Importantly, we can't say that this means that the child will grow to have a mental illness, but it means that the risk of this is higher. Insecure attachment has been shown to predict depression, anxiety, and other mental health problems. This underlines the importance of providing the best start we can for babies and young children in Lincolnshire. When, as parents and carers, we are looking after our children in a positive and loving manner we are helping to improve their wellbeing and reduce their risk of mental ill-health in the future.

Children and Young People

Mental Health Surveys of children and young people in Great Britain have found that 1 in 10 children and young people under the age of 16 have a diagnosable mental disorder¹⁷. At this age, the family and parenting environment is still of primary importance, and the primary predictor of these diagnosable mental disorders remains parenting and the quality of the parent-child relationship⁸. Nonetheless, during the school years the child or young person's experience at school becomes a huge influence on their mental wellbeing.

Bullying

Children who have been victims of bullying have been consistently found to be at greater risk of being diagnosed

with depression or anxiety disorder at some stage before the age of 50¹⁸ and being bullied has been linked to suicidality¹⁹. Having excellent schools that prevent bullying and help children to develop to their full potential is fundamental to protecting and improving the mental health of children and young people.

Children and Young People with Learning Disabilities

We also know that children and young people with learning disabilities are more likely to experience mental health problems²⁰. In Lincolnshire, a rough estimate would be that there are approximately 2,400 children and young people with a learning disability, of whom approximately 1,000 might be expected to suffer from a mental health problem, based on the size of the population in Lincolnshire².

Looked-after Children

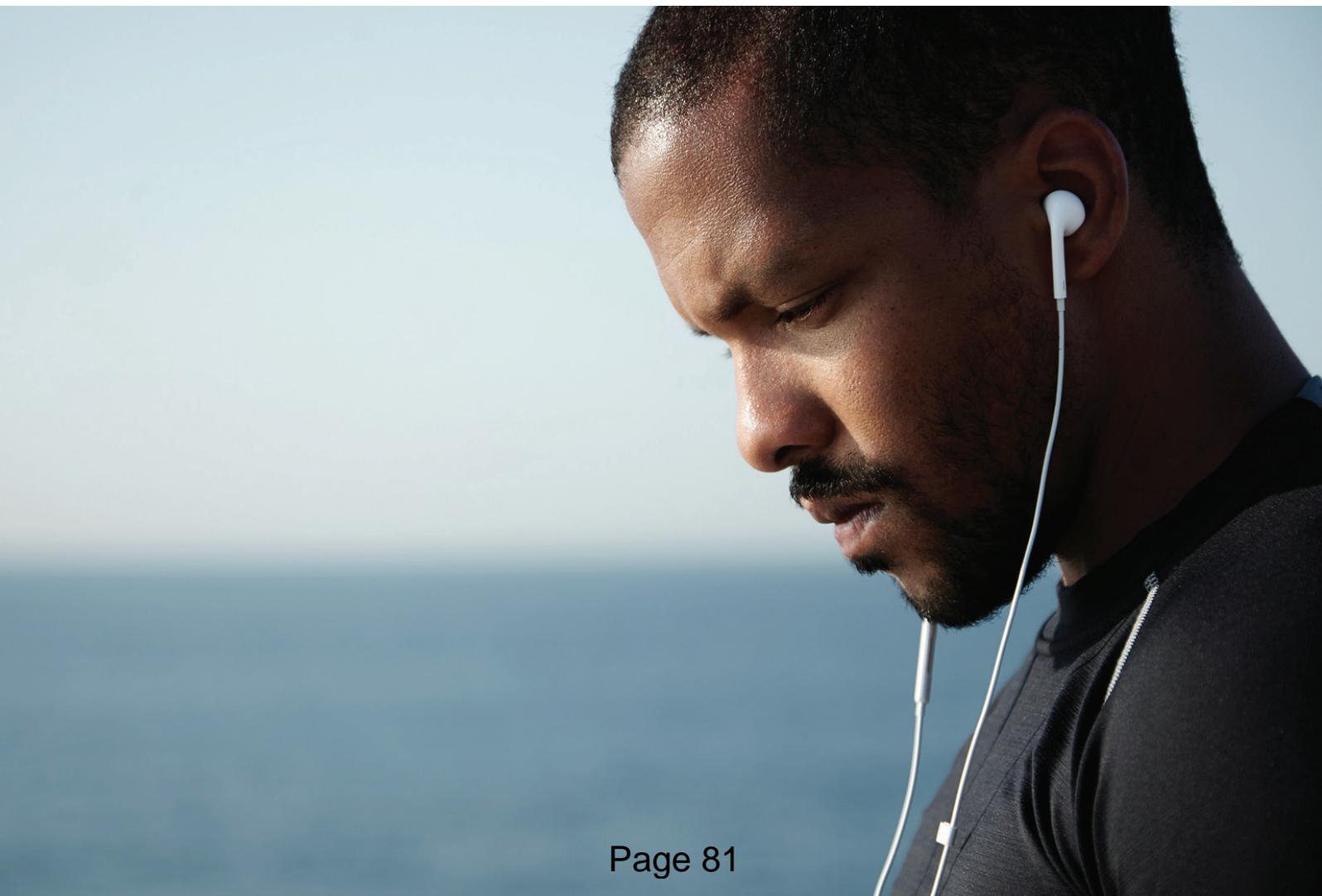
Children who are looked-after by the local authority are another group who have a greater risk of mental ill-health than the wider population. In fact, evidence tells us that looked-after children are approximately 5 times more likely than their peers to have a diagnosis of a psychiatric condition²¹. The most common reasons for children being taken into care are abuse or neglect, and it is known that children in these situations can experience significant trauma, and that this trauma can be linked to mental illness during childhood and in later years²².

Adverse Childhood Experiences

Negative experiences in childhood can have an impact on all of us in later life. If those negative experiences are traumatic, it is understandable that this can be related to mental illness. Research tells us that adverse childhood experiences such as neglect or 'maternal antipathy' are linked to self-harm²³. We also know that those children with extremely negative experiences, such as homelessness and drug use, are likely to be depressed and also vulnerable to physical diseases such as AIDS and viral hepatitis²⁴; 67% of rough sleepers aged 16 to 25 were found to have mental health issues in one study²⁵.

Adolescence

Moving from childhood into adulthood is a challenging time for all young people, where physical, social and emotional changes combine with the pressures of teenage life and the need to establish an identity as an independent adult. During this time, the influence of a young person's parents on their life diminishes (but remains important) and the influence of peers increases. In recent surveys of young people in the UK, mental & emotional health and wellbeing are consistently identified as priorities^{26 27}. Adolescence is a time where all young people can experiment with different interests and behaviours, and where a degree of anxiety and confusion can be expected. However, it is known that a majority of adults with a diagnosable mental health condition identify that these conditions had



their genesis in childhood and adolescence³. Furthermore, in some cases, this can include experiments with alcohol, drugs and sex which come with their own distinct risks to mental and physical health.

A Tale of Two Teens

Risk factors for mental health often correlate strongly with socio-economic deprivation, but this is only true across a population; when we look at people, we find unique individuals, not populations. It isn't possible to make assumptions about who will suffer from poor mental health and who won't. Imagine a young person who has been through the care system; all of the available data tells us that this young person has a much greater risk of poor educational outcomes, of interacting with the criminal justice system, and of being out of work. But this young person, let's call her Aisha, despite the trauma related to the abuse that she's suffered, finds support from her social worker, her foster carers, and from a teacher at school who takes a special interest in her. This teacher starts lending her books, and she develops an interest in writing. She passes her English exams, and decides to stay in education after she's 16. Despite the challenges of her upbringing, she gets excellent results and wins a scholarship to a top university.

And then we have another teen, let's call him Ben. Ben is raised in an affluent household in Lincoln, and attends a top school. He is sporty, confident, and has a wide circle of friends. Both of his parents work and are high-flyers in their own careers. Ben is expected to do well in his exams; he has few of the risk-factors associated with developing a mental illness. But depression and anxiety are there beneath the exterior, as they are for many of us, and he feels increasingly isolated. Confused and unsure of where to turn, he experiments with substance abuse and starts to feel like his life is spinning out of control. It's not hard to see how, if he doesn't get the support he needs, this fairly normal 'low point' for Ben could deepen, and eventually, if he sought help, he could be diagnosed with a common mental disorder, such as depression. For some young people in Lincolnshire, we know that this path ends in self-harm or even suicide. The importance of schools, parents, social workers, the health service and all of us working together to prevent such an outcome is clear. For some young people in Lincolnshire, the stakes couldn't be higher.

Environmental Risk Factors – Mental Health and the Built Environment

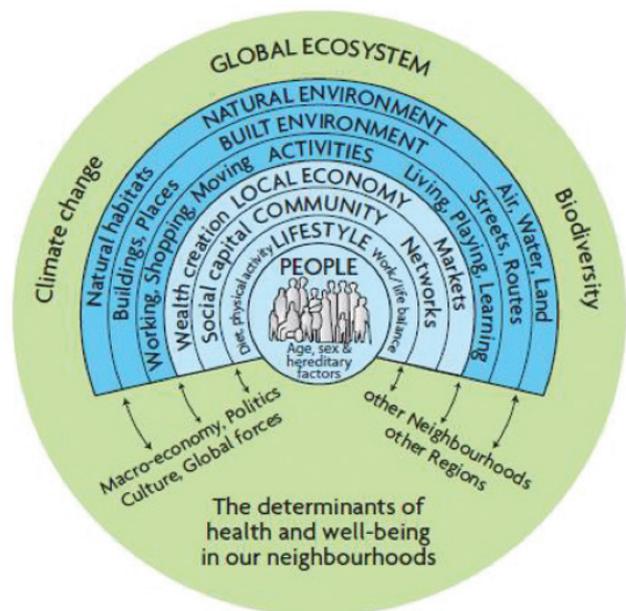
For all of us, the environment we live in can have a profound effect on our mental health. Evidence suggests that a range of features of the built environment have an impact.

The impact of the built environment on our mental health and wellbeing

Place and space have an impact on health and wellbeing. What's more, individual actions to improve lifestyle or health and wellbeing status are likely to be influenced by the context in which they take place; to put it simply, someone who has access to safe outside space may find it a lot easier to go out for a walk than someone who does not. When we think of the health impact of the built environment, we need to consider not only the physical structures in and around which we live our lives, but also the open space, networks and connectivity (such as roads, footpaths and cycle paths) between these places. We need to consider the places where people work, live, play and socialise. All of these shape the social, economic and environmental conditions in which we live our lives. These determinants of health are depicted in Figure 2 below.

Figure 2: The determinants of health and wellbeing in our neighbourhoods.

Diagram by Barton, H & Grant, M, 2006, derived from Whitehead, M & Dahlgren, G, The determinants of health and wellbeing, 1991.



What features of the built environment affect health and wellbeing?

In order to understand how the world around us can influence our mental health and wellbeing, it helps to unpick how this effect can operate. In a June 2011 report ('Steps to Healthy Planning: Proposals for Action'), the Spatial Planning and Health Group (SPAHG) suggested that several specific features of the built environment have an impact on both physical and mental health:

- the location, density and mix of land uses
- street layout and connectivity
- access to public services, employment, local fresh food and other services
- safety and security

- open and green space
- affordable and energy efficient housing
- air quality and noise
- extreme weather events and a changing climate
- community interaction
- transport and car dependency

It's important to note that these features of the built environment can have both a positive and negative impact on our mental health, and could thus be either a protective factor or a risk factor for mental illness. The places in which we live can make a real difference to how we feel, think and live our lives.

How does the built environment influence our health?

To help identify how the built environment influences our health (both physical and mental); we will consider some specific ways in which this happens.

Social networks, communities and isolation

The influence of social networks, our friends, colleagues and those we have a positive health connection with is an area of growing interest. Fewer social networks may be associated with a number of health outcomes including mental health problems²⁸. Some neighbourhood designs enable or encourage community connections, whereas others do not. Neighbourhood designs most likely to promote social networks are those that are mixed use and pedestrian-oriented, enabling residents to perform daily activities without the use of a car²⁹. Studies have shown that as traffic volumes increase, people's sense of neighbourliness decrease. In residential streets, people on 'light traffic use' streets considered the whole street to be their territory and reported more social networks than those living on 'heavy traffic use' streets³⁰. The availability of parks and civic spaces also increases the potential for social interaction and community activities³¹.

The evidence shows that cohesive communities foster better mental health through the creation of neighbourhoods and communities that are in control, and that pull together to shape the world around them. Evidence also shows that fostering and supporting social action, social inclusion and volunteering can improve wellbeing.

Local community groups, such as local voluntary groups, peer support services, user led self-help groups, mentoring and befriending etc., enable participants to be both providers and recipients of support. This allows members of a community to play an active role in their own wellbeing and that of their community³².

Loneliness is a growing problem amongst older people. It is associated with poor health outcomes, specifically higher blood pressure, depression and higher rates of mortality comparable to those associated with smoking and alcohol³³. Neighbourhoods that make it difficult for cohesive communities to form could increase isolation

and loneliness; this can be a problem for those in rural areas, where distance can make it harder to visit friends and colleagues.

Long commuting times can also impact on mental health, family life and social networks, with people having less time for engagement in the lives of their communities³⁴.

Housing design and space

Adequate provision of space has also been linked to health outcomes. An association has been found between poor mental health and lack of space within the home as well as lack of social space for interaction inside and outside the home.²⁸ Multi-occupation dwellings and flats, particularly high rise flats, are the types of housing most strongly associated with poor mental health³⁵.

Housing quality

Good housing is known to have a beneficial impact on maintaining mental health in general. Having secured and settled accommodation, together with the right type of support, can have a positive impact on people's lives. However, people with mental health problems are particularly likely to have poor and/or insecure housing and compared with the general population are four times more likely to say that their health has been worsened by their housing. Mental ill-health is common among people who experience homelessness and rough sleepers.

Based on an extensive literature review, and with input from expert environmental health practitioners, the Chartered Institute of Environmental Health (CIEH) produced a 'Health and Housing Resource' to provide evidence, case studies and guidance to enhance local understanding of the relationship between the home environment and health. The evidence for the mental health and wellbeing impacts of housing, especially poor housing conditions, is less developed than that supporting physical health impacts. However, there is some evidence of pathways that might link poor housing conditions to mental health outcomes. For example, living in poor housing conditions has been shown to increase stress, and reduce empowerment and control. Homelessness, lack of security of tenure and the fear of retaliatory eviction by landlords if tenants complain contribute to an individual's mental health and wellbeing. See table 1 for a breakdown of how the link between poor housing and poor mental health can operate.

Interventions that improve housing conditions have been shown to result in improvements on mental health measures, including reduced anxiety or depression, psychological distress, and improved patient reported health score³⁶. Providing a warm home has been clearly shown to benefit both the young and old in relation to their feeling of wellbeing as well as reducing the physical risks that can arise from cold homes³⁷.

Table 1: Hazards and their mental health and wellbeing effects

Hazard	Mental health and wellbeing effect	Vulnerable groups
General Substandard Housing	Mental health – anxiety, depression ; Socio-emotional development; Disruption to education and impact on academic achievement.	25 years or less
Damp and Mould Growth	Depression and anxiety; Feeling of Shame.	14 years or less
Excess Cold	Depression and anxiety; Slower physical growth and cognitive development in children	65 years plus
Lead	Continual exposure at low levels has been shown to cause impaired cognitive development and behavioural problems in children.	Under 3 years
Crowding and-Space	Psychological distress and mental disorders; Reduction of tolerance; A reduction of the ability to concentrate; Disruption to education and impact on academic achievement; Stress tension and sometimes family break-up; Lack of privacy.	
Entry by Intruders	Fear of crime; Stress and anguish.	
Lighting	Depression and psychological effects caused by a lack of natural light or the lack of a window with a view.	
Noise	Stress responses; Sleep disorders; Lack of concentration; Anxiety and irritability.	
Domestic Hygiene, Pests and Refuse	Emotional distress.	
Personal Hygiene, Sanitation and Drainage	Feeling of shame.	

Light

Levels of illumination, particularly the amount of daylight exposure, can impact on psychological wellbeing. An

association has been found between depression and lack of adequate daylight³⁸.

Green space

Green space can help us have better mental wellbeing. There is evidence of preventive, physical, mental and social benefits of engagement with the natural environment for people suffering from mental illness and dementia. Less greenspace in a living environment is associated with greater risk of anxiety, depression, and feelings of loneliness and perceived shortage of social support. Contact with nature is linked with improved mood, and reduced stress and anxiety³⁹.

Natural England has developed an Accessible Natural Greenspace Standard (ANGSt) which provides local authorities with a detailed guide as to what constitutes accessible green space. The Accessible Natural Greenspace Standard not only recommends the distance people should live from certain types of green spaces but also recommends the size of the green spaces in conjunction with distance to homes. All people should have accessible natural green space:

- Of at least two hectares in size, no more than 300m (five minutes’ walk) from home.
- At least one accessible 20 hectare site within 2km of home.
- One accessible 100 hectare site within 5km of home.
- One accessible 500 hectare site within 10km of home.

A study from MIND comparing groups taking part in two walks in contrasting environments, a country park compared to a shopping centre found that the group in the country park reported significant improvement in self-esteem, depression, anger, tension, confusion, fatigue compared to the group walking in the shopping centre⁴⁰.

Lincolnshire – ambitious for growth

Lincolnshire is a great place to live, and we know that the population is likely to grow in the future. In terms of the environment, Lincolnshire is a large, mainly rural county with many sparsely populated areas. The districts are characterised by market towns, villages and hamlets. The city of Lincoln is the largest urban centre but it is still small in comparison to other regional centres in the East Midlands, such as Leicester and Nottingham.

We know how important it is that there is enough housing in Lincolnshire for the growing population. New Local Plans with ambitious but realistic housing growth targets are being prepared across Lincolnshire to set out local planning policies in light of the National Planning Policy Framework (NPPF). It is expected that large parts of this growth will be accommodated in new communities built on to existing urban conurbations, known as Sustainable Urban Extension (SUEs).

This new national planning framework, the NPPF, refers to a healthy community as a good place to grow up and grow old in – something that we want to ensure is the case across Lincolnshire. To help ensure Lincolnshire’s new communities are healthy, we can use research from elsewhere in the country to guide us as to how best to plan for this growth – see ‘Learning from Cambourne’s Story’.

Learning from Cambourne’s Story

South Cambridgeshire has a number of existing and planned new communities. Research on one of these, Cambourne, found that early residents in these new communities had higher than average mental health problems. This was attributed to a lack of facilities in the new community (so-called ‘new town blues’). The Clinical Commissioning Group and County Council produced a Joint Strategic Needs Assessment on new housing developments and the built environment. The local planning authority’s Health Impact Assessment Supplementary Planning Document was a response to these findings. It is recommended that similar guidance is produced and adopted across Lincolnshire with plans progressing for central Lincolnshire in the first instance.

Rural Isolation

We know that lots of issues, which have the potential to result in poor mental health, are experienced by people living in rural areas, where distances can increase the chances of social isolation and compound the effects of poor-quality housing. There are recurring themes in the literature, which are applicable to rural settings as well as urban, suburban and market towns in terms of housing quality, social networks, car dependency, overcrowding, etc.²⁸

Social Circumstances

We’ve seen how risk and protective factors for mental illness work across infancy, childhood and adolescence. We’ve considered how the environment, especially the built environment in which we live our lives, can influence our mental wellbeing. It’s also important to consider the ways in which our circumstances throughout adulthood can affect our mental health, especially when seeking to understand how to best help those most at risk of self-harm and suicide.

We know that certain population subgroups are more likely to experience mental ill-health or attempt suicide. It’s also clear that specific risk factors, or vulnerabilities, may operate in isolation or interact within individuals to further increase risk. For example, for an individual and amongst a population, unemployment can lead to lack of self-esteem, poor quality housing, and an increase in socio-economic deprivation. We will look at some risk factors in turn, starting with this – socio-economic deprivation.

i) Deprivation

We know that adults living in the most deprived areas are at a higher risk of poor mental health, as are their children⁴¹. Overall, Lincolnshire is less deprived than many areas in England, ranking 90th out of 152 local authorities in England, where 1st is the most deprived^{xxxv}. However, like any county in England, there are areas that are relatively much more deprived than others. We know that there are approximately 50,000 people living in areas in Lincolnshire that rank amongst the most deprived 10% in the country⁴².

ii) Homelessness

People who are homeless are more than twice as likely to have a common mental health problem than people in the general population, and between 4 and 15 times more likely to have a psychosis. Serious mental illness is often accompanied by alcohol or substance misuse problems, and research suggests that between 10 and 20% of homeless people may suffer from such a dependency⁴³. We know that in 2014-15 across Lincolnshire 646 people were accepted for housing support who identified as homeless. Over a third of these were in Lincoln and almost a further third in South Kesteven. The numbers of those living with insecure or unstable housing is far higher; in 2014-15, Lincolnshire managed 3,320 cases where a household was in danger of becoming homeless but this was avoided⁴⁴.

iii) Debts & Financial Problems

We can all worry about money at times, but people, who are really struggling, such as those with multiple debts, perhaps at high levels of interest, can experience mental and physical health problems as a result. For example, people with five or more separate debts are six times more likely to have a mental illness, and we know that difficulty repaying debt is a significant risk factor for suicide⁴⁵.

iv) Unemployment

We know that those in employment are at a lower risk of both mental and physical ill-health than those who are unemployed. However, in order to be protective of health, employment needs to be ‘good’ employment. This has been defined as work that offers a living wage, is sustainable, has opportunities for development and advancement, protection from adverse working conditions and allows a balance between work and family life⁴⁶. Although unemployment in Lincolnshire is lower than the national average, across the county there are pockets of long-term unemployment and there are places, especially on the east coast, that have a high degree of seasonal employment – which in many cases cannot offer the security, sustainability, wages and work-life balance to protect health. Furthermore, unemployment among younger adults (aged 18-24 years) is higher than the national average in Lincolnshire. Lincolnshire also has a higher proportion of people not in work who are on long-term sick leave



compared with the East Midlands and England (26% compared to 23% and 22% respectively).⁴⁷

v) Substance Misuse

Substance use (alcohol and drugs) and mental health problems often coexist, with a complex relationship existing between substance misuse and mental health. It is clear that substance use is a risk factor for the onset of mental health problems⁴⁸, and dependency on these substances can cause a wide range of mental and behavioural disorders. It is also true to say that people with mental health problems may use substances to manage their symptoms, for example to self-medicate the symptoms of depression or anxiety. However, substance use can also exacerbate these symptoms and may interact with medications used to treat conditions such as mood stabilisers and anti-depressants.

vi) Loneliness and Social Isolation

It is estimated that between 5% and 16% of over 65 year olds nationally have reported loneliness, while 12% reported social isolation.¹ Both loneliness and social isolation can negatively impact on health and wellbeing, with high blood pressure and depression being closely associated amongst those who are lonely or who feel isolated.

Whilst there is no current data to identify loneliness or

social isolation in Lincolnshire, we can provide a rough estimate using given national rates. Of the 159,953 over 65 year old residents living in Lincolnshire, we can estimate that between 8,000 (5%) and 25,500 (16%) are lonely, with a further 19,200 who feel isolated².

Groups at a Specific Risk of Suicide

In Lincolnshire, between 2011 and 2013 there were 184 deaths due to suicide. Although it is not always possible to identify specific people at a higher risk of suicide, we do know that there are certain population sub-groups who have a higher risk of completing suicide. We will examine some of these groups in turn².

1. People in Institutional Care or Custody

We know that certain groups have a higher risk of completing suicide than others, and this is certainly true for people in institutional care or custody, the rate of suicide and self-harm is much greater in the prison population than the general population. We also know that there are high levels of self-harm and suicide among detained asylum seekers, even when compared with the UK prison population⁴⁹.

2. People with Post-natal Depression

Suicide is the leading cause of death amongst new mothers in England. Key risk factors for maternal suicide in-

cluded severe onset of mental illness soon after childbirth, being an older mother and being relatively privileged in terms of social circumstances; which is important as it means that in this instance, it isn't necessarily people from more socio-economically deprived backgrounds who are most at risk⁵⁰.

3. People of Sexual Minorities

Lesbian, gay, bisexual and trans-gender (LGBT) people are at higher risk of suicidal behaviour, mental disorder and substance misuse and dependence than heterosexual people. This may be linked to experiences of homophobic discrimination and bullying, especially during the vulnerable adolescent years⁵¹. This is a large population across all ages, ethnicities and social groups, numbering (if estimates of 5-7% of the population are accurate) between 36,575 and 51,205 people who self-identify as LGBT in Lincolnshire.

4. Veterans

Young men who leave the armed forces can be 2-3 times more likely to complete suicide than members of the general population, which is especially important in Lincolnshire as there are a large number of armed forces and ex-armed forces personnel in the county. Although it is also important to note that men aged 30-49 years who leave the armed forces have a lower risk of suicide than in the general population⁵².

5. Students at University and College

Students make up approximately 3% of the Lincolnshire population (about 23,000 people). In the past 12-months there have been three suicides in the student population in Lincolnshire, which represents a higher rate than in the general population. In recent years the University of Lincoln has reported an increasing number of students seeking support for mental health and complex mental health needs through the University's Student Wellbeing and Mental Health Service.

6. People Bereaved by Suicide

Research suggests that there is an increased risk of suicide in mothers bereaved by the suicide of an adult child, and in partner's who have been bereaved by suicide. There is also a higher risk of a range of other mental health issues for people bereaved by suicide⁵³. It is important to ensure mental health services are able to support those people who are bereaved by suicide, in order to help to reduce the future burden of mental ill-health and suicide mortality.

7. People who Have Self-harmed

Self-harm is something that has a high degree of stigma attached to it. It is considered to be shameful, something that people don't like to talk about. We know that there is an increased risk of suicide following self-harm episodes, and this could be as high as a 30-fold increased risk of suicide compared with the general population⁵⁴. Suicide rates have been found to be especially high in the six months

after a self-harm episode, suggesting that early intervention after an episode of self-harm may be important to reduce the risk of suicide⁵⁴.

Summary: Interaction of Risk Factors

"Sorrows come not in single spies, but in battalions" - William Shakespeare

This overview of the risk factors for poor mental health in childhood and adolescence highlights the complexity of the influences on our mental health. Put simply, there is clear evidence linking negative experiences throughout childhood and adolescence with a higher risk of mental ill-health. In adulthood, the built environment and the circumstances of our lives can influence our mental and our physical health. Unfortunately, these risk factors are not always evenly distributed throughout the population, specific people and groups of people can experience many of these risk factors at the same time. Specifically, we know that many of these risk factors can affect those in the most deprived groups; the unemployed, for example, who perhaps live in the areas of Lincolnshire with the lowest-cost housing and consequently have the highest degree of exposure to environmental risk factors.

Summary: Risk Factor or Protective Factor?

When considering how to improve the health of the population, it can seem daunting when we consider the wide range of risk factors that can influence our mental health, but intuitively this makes sense. We know that fundamentally, life can affect us negatively. For some, this may simply affect their sense of wellbeing. For others, it may coincide with the onset of a mental illness. But it is also critical to see these factors as potential protective factors. If we can improve the level of good employment in Lincolnshire, or increase the degree to which our communities are cohesive, or positively influence any of these risk factors, we will be potentially helping to protect the mental health of the population of Lincolnshire. With the wide range of factors that can influence our mental health, there are correspondingly a wide range of actions we can take to improve our health. The challenge for us is to ensure we take the actions that help the most.

Recommendations

Policy statements and actions to inform place based health proprieties that give:

- clear reference and commitment to access to green space in development and regeneration policies for Lincolnshire neighbourhoods.
- clear reference and commitment to community space availability, both safe informal spaces like pubs and seating areas and buildings where communities can come together in more organised groups.

Chapter 2 Perinatal and maternal mental health conditions

Definition of the Problem

Mental health problems that affect women during pregnancy and the postnatal period (defined as up to one year after childbirth) are known as perinatal mental health conditions. Mental health problems occurring during the perinatal period can range from symptoms which do not meet the threshold for clinical diagnosis (subthreshold) to severe mental illness.

Women going through pregnancy and childbirth can experience the same mental health problems as the general population but it is particularly important to address them during this period. The mental health of the mother has a far reaching effect on the foetus, baby, the wider family and mother's long term health. Problems are not always disclosed, recognised or treated during this period, making general awareness, normalisation of the problem and assessment by professionals at each contact extremely important.

Depression and anxiety are the most common mental health problems experienced during the perinatal period⁵⁵. Additionally, women with existing mental health problems can be at increased risk; for example, women with a history of bipolar disorder are at increased risk of relapse in the postnatal period.

The health of a baby is crucially affected by the mental health and wellbeing of its mother and wider family. Maternal mental health problems can affect the quality of the mother-baby relationship, which is necessary for secure attachment and good development of the child. In babies and toddlers, healthy social and emotional development is essential to prevent behavioural problems and mental illness later in life and support educational attainment. It is recognised that some fathers have mental health problems during this period that may have similar effects upon the whole family, but in measuring the scale of the problem, most studies refer to women only.

NICE defines attachment as:

“A secure relationship with a main caregiver, usually a parent, allowing a baby or child to grow and develop physically, emotionally and intellectually. Babies and children need to feel safe, protected and nurtured by caregivers who identify and respond appropriately to their needs. Unmet attachment needs may lead to social, behavioural or emotional difficulties, which can affect the child's physical and emotional development and learning.”

NICE. Looked-after children and young people. NICE guidelines (PH28). London: National Institute for Health and Clinical Excellence, 2010. Available from: www.nice.org.uk/guidance/ph28

The individual and societal cost of mental health problems in young families are reflected in economic analysis. The average cost to society of one case of perinatal depression is £74,000, of which £23,000 relates to the mother and £51,000 relates to the impact on the child. This is likely to roughly double for each episode of perinatal psychosis⁵⁶.

What is the Size of the Problem for Lincolnshire?

“It is estimated that between 10% and 20% of women are affected by mental health problems at some point during pregnancy or the first year after childbirth⁵⁷.”

Based on the number of women giving birth each year in Lincolnshire, we would estimate the following numbers of women to suffer a diagnosed mental health problem in the perinatal period. Please see glossary for definitions of each mental health condition mentioned in the table. These estimates are based on national estimates of the conditions and have been rounded up to the nearest five. They do not take into account differences in population groups or anything else which is likely to cause local variation. Without local data, we cannot detect differences between smaller geographical areas or groups within Lincolnshire. Therefore it is useful to consider this information alongside the chapter on risk factors to understand which groups may be more vulnerable to perinatal mental health problems.

Table 2: Estimated number of Lincolnshire women with mental health problems during pregnancy and after childbirth (2015)^{58 59}

Diagnosed mental health condition	Estimated number of women affected
Postpartum psychosis	16
Chronic serious mental illness (SMI)	16
Severe depressive illness	234
Mild-moderate depressive illness and anxiety	Between 781 – 1,171
Post traumatic stress disorder (PTSD)	234
Adjustment disorders and distress	Between 1,171 – 2,342

N.B. Adding all these estimates together will not give an overall estimate of the number of women with each mental health condition, as some women may suffer with more than one condition.

Suicide risk

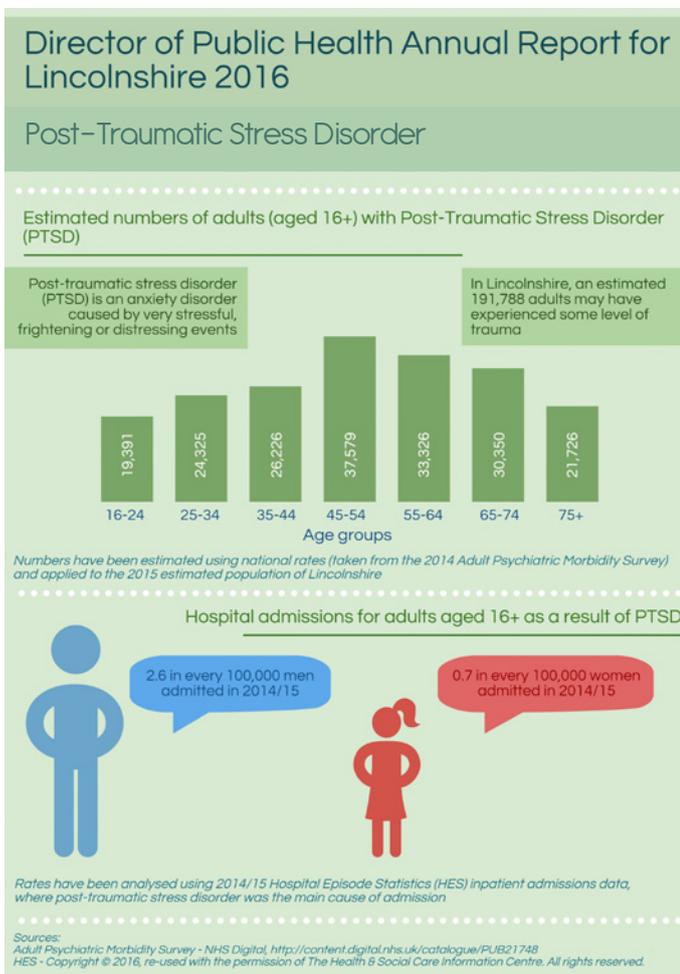
Whilst there is no local data available for Lincolnshire, the latest report from Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries (MBRRACE) Saving Lives, Improving Mothers' Care (2015)⁶⁰ reported that between 2011-13, almost a quarter of women who died between six weeks and one year after pregnancy in the UK died from mental-health related causes, and that 1 in 7 of these died by suicide.

The care of more than 100 women, who died by suicide during pregnancy, or in the year after giving birth, between 2009 and 2013, was reviewed in detail. The report warns that although severe maternal mental illness is uncommon, it can develop very quickly in women after birth; the woman, her family and mainstream mental health services may not recognise this or move fast enough to take action.

The care for women with substance misuse problems and those living socially complex lives was also reviewed. The messages for future care echoed those for women with mental health problems, including the need for joined up multi-agency care to ensure that these women do not fall through the cracks between services.

Figure 3: Post-Traumatic Stress Disorder in Lincolnshire

Who is most at risk of perinatal mental health conditions in Lincolnshire?



Attachment disorder

Secure attachment forms the building block of good mental health and wellbeing for both mother and baby and is essential for children's healthy development. The presence of mental health problems, even low level anxiety and depression (which may go undetected) can interfere with good parent-child bonding.

There is no reliable data available on parent-baby attachment, but it is important to consider the risk factors that can lead to attachment problems. These are discussed below and throughout the other chapters in this report.

Domestic violence and abuse

There appears to be a link between domestic violence and antenatal depression, postnatal depression, anxiety and post-traumatic stress disorder (PTSD), although it is not clear whether domestic violence actually causes mental health problems or simply that the two often go hand in hand because people are more vulnerable⁶¹. Although we cannot say that it causes maternal mental health problems, domestic violence in groups within our population are likely to predict higher levels of perinatal mental health problems. Pregnancy is known to be a potential trigger. Almost one in three women, who suffered domestic abuse during their lifetime, report that the first incidence of violence happened while they were pregnant⁶². Living in a household with domestic violence is also a risk factor for poor mental health in babies and toddlers⁶³.

Lincolnshire does have slightly lower levels of reported domestic violence; 14.1 incidents per 1,000 population compared to 16.1 for the East Midlands and 15.6 nationally. Offering adequate support for parents suffering domestic abuse is a good opportunity to prevent further mental health problems within the family.

Poor social support

Women who lack social support have been found to be at increased risk of antenatal and postnatal depression⁶⁴. Having a poor relationship with a partner is also a risk factor for postnatal depression⁷. The number of births which were registered by the mother alone may give an indication of the number of mother and babies who lack the support of the father during transition to parenthood. In Lincolnshire in 2014, there were 425 sole registrations (5.5% of all births, which is similar to the England average of 5.4%).

Parents with a drug and alcohol problem

Those with mental health problems are more likely to misuse drugs and alcohol and vice versa. Within Lincolnshire, the number of pregnant women entering treatment services for drug and/or alcohol misuse is low, with year-end figures reducing from 20 in 2014/15 to 9 in 2015/16. When shown as a proportion of all women in treatment, the latest figures throughout 2015/16 show 1.8% of women in treatment were pregnant at the start of treatment,

which is lower than the 2.4% seen nationally. This shows a decrease on the 3.9% of women who were pregnant at the start of treatment during 2014/15, when the Lincolnshire rate rose higher than the national average of 2.3%⁶⁵.

Table 3: Percentage of women in Lincolnshire who were recorded as pregnant at the start of treatment ⁶⁵

	2013/14	2014/15	2015/16
Total females in treatment	498	514	500
Females pregnant	10	20	9
% pregnant	2.0%	3.9%	1.8%
England average	2.3%	2.3%	2.4%

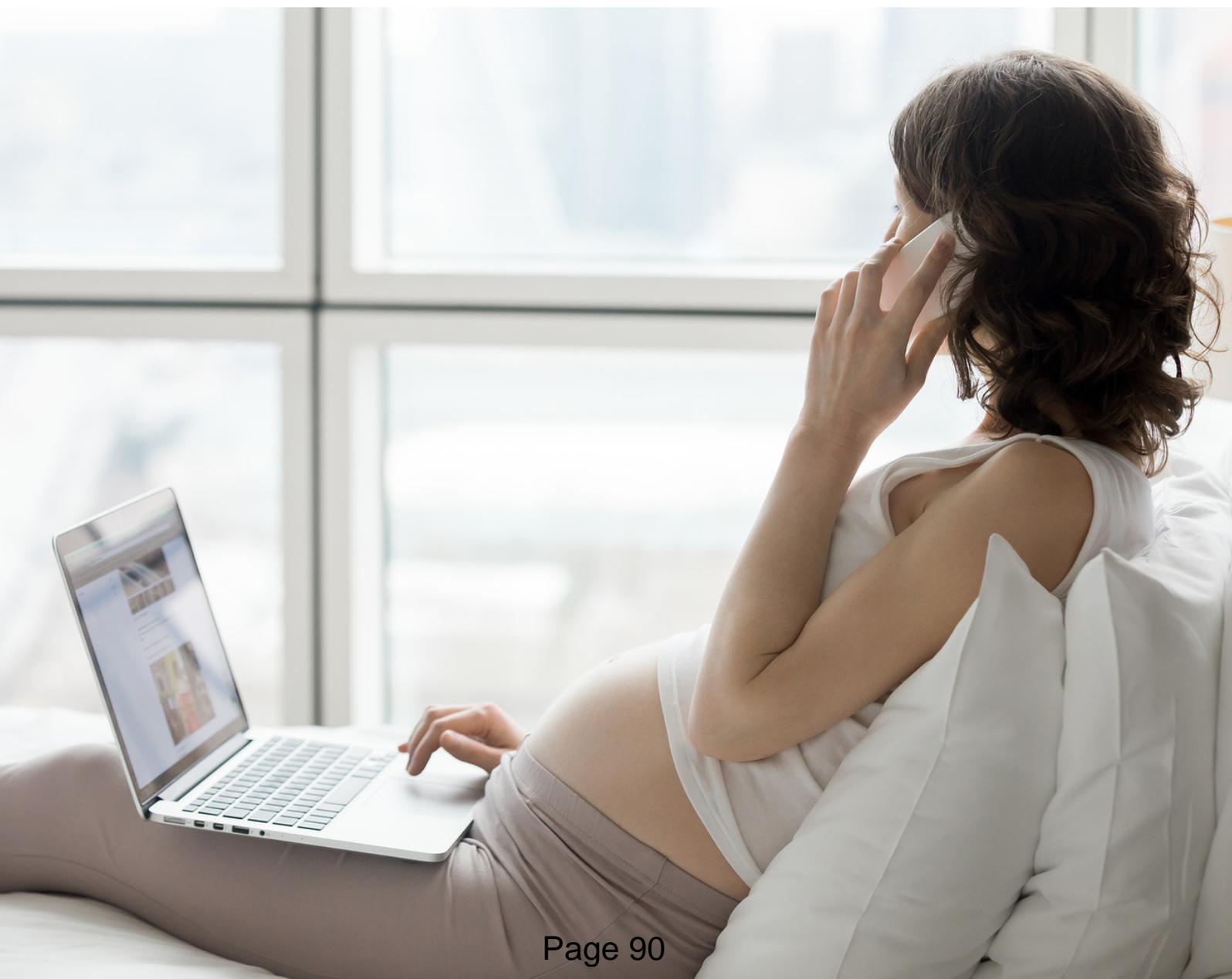
It should be noted that these figures only include those women who started a new treatment journey between the 1st April and 31st March of the respective year and will not include any that still remain in their existing course of treatment for over a year.

Teenage parents

Pregnancy in under-18 year olds is linked to poorer health and social outcomes for both the mother and child; for example, lower educational attainment, emotional and behavioural problems, maltreatment or harm, and illness, accidents and injuries⁶⁶. The vulnerability of young parents can make them more susceptible to many of the risk factors for mental health problems that have already been described. Teenage mothers are more at risk of developing postnatal depression than average⁶⁷. Lincolnshire teenage pregnancy rates have fallen rapidly in recent years, from 50.1 to 22.4 per 1,000 births in 2014 and remain similar to the England average⁶⁸.

Family homelessness

454 families in Lincolnshire containing children or a pregnant woman were homeless in 2014/15⁶⁹. Babies and toddlers that live in families that are homeless are vulnerable to poor social and emotional wellbeing and even developmental function⁷⁰. As described in the National Society for the Prevention of Cruelty to Children (NSPCC) report 'An unstable start', providing high quality care can be extremely difficult for parents who are homeless,



notwithstanding the additional stress that impacts on the mother-child relationship. The Lincolnshire rate (1.4 per 1,000 households) is slightly higher than the East Midlands average (1.3 per 1,000), but lower than the England average (1.8 per 1,000)⁴⁴.

What do we have that works well for Lincolnshire people?

Assets & protective factors

Informal support networks such as family, friends and groups such as mother and baby or toddler groups, are invaluable in supporting people through the transition to parenthood and managing with the demands of family life. Accessing these is likely to have a positive effect on mental wellbeing and resilience, although it is acknowledged that some groups within the population, such as young parents, those in isolated rural areas, with low incomes, parents with disabilities and long term conditions, may need additional support to access these. The new 0-19 children's health services (public health nursing) include an antenatal education programme, open to all women, which are hoped to help develop peer networks for support.

Lincolnshire benefits from a large network of children centres that support children and families. Early Help Workers deliver a range of evidenced based programmes addressing home conditions, budgeting or parenting to help the family prepare practically and emotionally for the birth, one to one at home or in a group. For pregnant teenagers there is a Young Expectant Parent (YEP) programme, supported by the use of virtual babies. Learning from the Family Nurse Partnership programme is being embedded in the new services to support families with children aged 0-19 years, with enhanced support planned for young and vulnerable parents.

Services

All contacts with pregnant women include assessment of mental health in accordance with NICE guidance.⁵⁵ Women have access to the same psychological therapies as the general population through self-referral, or via their GP or other health professional, in addition to specialist perinatal mental health services. The Perinatal Mental Health Services (PERIMNS) provides assessment, support and treatment for childbearing women with, or at risk of, serious mental illness who cannot be managed effectively by primary care or other mental health services, as well as advice and assistance to other professionals on the treatment and management of serious perinatal mental illness.

Additional targeted services such as 'Birth after thoughts' (Lincoln based) support women who have had a service difficult or traumatic delivery, and a United Lincolnshire Hospitals Trust (ULHT) service which works with families in the event of a miscarriage/stillbirth or neo-natal death.

Where are the gaps?

We know the number of women, who are treated for severe post-natal depression, but we lack information on the number of women who suffer from 'lower' level post-natal depression and the ability to separate out those who seek and go on to get help and those who may not get the support they need.

Recommendations

- Women should continue to be assessed for mental health problems at every contact with a health professional and throughout a child's early years.
- Low level support should be maximised through upskilling of Health Visitors and developing peer support networks, meaning that a lower number of women will need onward referral to specialist services.
- All professionals who come into contact with women during the ante and postnatal periods should ask about substance misuse, especially in women with known mental health problems, and refer on for additional support where needed.
- Evidence based support for low level or undiagnosed mental health problems should be made available through early years' pathways to improve maternal and child mental health.
- Data to find out the level of need should be collected through local surveys and/or by professionals who come into contact with pregnant women and young families.
- Women and families should be signposted to informal support where appropriate and awareness of the common nature of mental health problems should be raised in all groups who work with families and young children.

Chapter 3 Childhood and adolescent mental health conditions

Definition of the Problem

Common mental health problems affecting children and young people include conduct disorders, anxiety, depression and hyperkinetic disorder (severe attention deficit hyperactivity disorder often known as ADHD). A national survey published in 2004¹⁷ reported that “one in ten children and young people (10%) aged 5–16 have a clinically diagnosed mental disorder: 4% an emotional disorder (anxiety or depression); 6% a conduct disorder; 2% a hyperkinetic disorder, and 1% a less common disorder (including autism, tics, eating disorders and selective mutism). Some children (2%) had more than one type of disorder.” The rates rise sharply in mid to late teens, with the type of disorder becoming more similar to those seen in adults.

Children and young people with mental health problems represent some of our most vulnerable people. Emotional and behavioural problems in early life are predictors of poor outcomes in later years, and can lead to mental health problems. Over half of all mental ill-health starts before the age of 14 years, and 75% have developed by the age of 18 years⁷¹.

The costs to society of treating mental health problems are high. A recent report conducted by the London School of Economics found that for young people aged 12–15 at baseline assessment, mental health-related costs over the following three years averaged £1,778 per individual per year; 90% of this cost fell to the education sector, with the remaining cost divided between health and social care. Fewer young people with mental health problems were in employment and training; more were in receipt of benefits and/or in contact with the criminal justice system than their counterparts without mental health problems⁷².

The costs to individuals are high in terms of reduced life chances. Young people with mental health problems have worse physical health, their educational and work prospects and their chances of committing a crime and even the length of their life are reduced⁷³. Among young people aged 11–16, those with an emotional disorder are more likely to smoke, drink and use drugs than other children.¹

Of great concern is the rise in the number of children and young people identified with a mental health problem in recent years. Reported rates of “depression and anxiety among teenagers have increased by 70% in the past 25 years⁷⁴, the proportion of 15/16 year olds reporting that they frequently feel anxious or depressed has doubled in the last 30 years (from 1 in 30 to 2 in 30 for boys and 1 in 10 to 2 in 10 for girls)⁷⁵, emergency department presenta-

tions due to self-harm by those aged 17 and under have risen by 30% since 2003–04”⁷⁶. Young Minds, a UK charity committed to improving the emotional wellbeing and mental health of children and young people identifies the following threats to children and young people’s mental health⁷⁷:

- Family breakdown is widespread
- There is so much pressure to have access to money, the perfect body and lifestyle
- Materialist culture heavily influences young people
- 24 hour social networking and what young people can access from a young age can have a negative impact on their mental health and wellbeing
- Body image is a source of much distress for many young people
- Bullying on and offline is rife
- Increasing sexual pressures and early sexualisation throw young people into an adult world they don’t understand
- Violence is rife in many communities and fear of crime a constant source of distress for thousands of young people
- Schools are getting more and more like exam factories; university entry has become more competitive and expensive
- 13% of 16–24 year olds are not in employment, education or training (NEET)

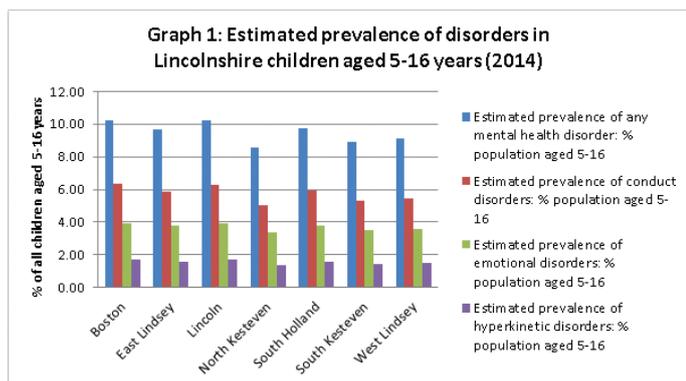
What is the size of the problem for Lincolnshire?

Estimates of mental health problems in children and young people in Lincolnshire is taken from national surveys undertaken in 1999 and 2004¹⁷, since there is no local data available.

Public Health England [Children’s and Young People’s Mental Health and Wellbeing profiling tool](#) calculates local estimates of prevalence for 2014. Some key findings for Lincolnshire are:

- The estimated prevalence of any mental health disorder: % GP registered population aged 5–16 is 9.3% for England, with East Midlands and Lincoln marginally higher at 9.4%. The range across the county shows Boston and Lincoln highest at 10.2% and North Kesteven lowest at 8.6%.

Graph 1: Estimated prevalence of disorders in Lincolnshire children aged 5-16 years (2014)



- Child admissions for mental health: rate per 100,000 aged 0-17 years for England is 87.4, East Midlands is lower at 83.3. Lincolnshire is moderately higher at 94.8.
- The emotional wellbeing of looked after children: average score for England is 13.9, East Midlands and Lincolnshire slightly higher with 15.5 and 15.3 respectively.

The National Child and Maternal Health Intelligence Network's CAMHS Needs Assessment estimates that in Lincolnshire in 2014-15:

- 3,410 children aged 5-10 years and 5,325 children aged 11-16 years have mental health disorders
- 2,210 children aged 5-10 years and 3,075 children aged 11-16 years have a conduct disorder, (e.g. awkward, troublesome, aggressive and antisocial behaviours)
- 1,050 children aged 5-10 years and 2,360 children aged 11-16 years have an emotional disorder. (e.g. anxiety and depression)
- 750 children aged 5-10 years and 670 children aged 11-16 years have a hyperkinetic disorder, (involving inattention and over activity)
- 565 children aged 5-10 years and 575 children aged 11-16 years have a less common disorder, (e.g. Autistic Spectrum Disorder and multiple disorders)

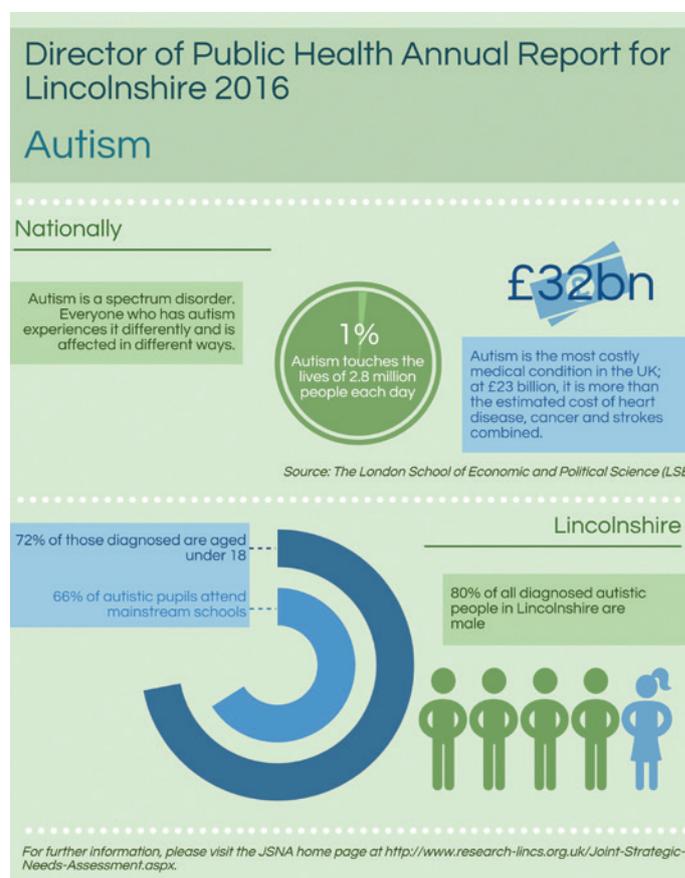
The total number of referrals to Lincolnshire Child and Adolescent Mental Health Services (CAMHS) between April 2015 and March 2016 was 4,427. This number does not represent single individual cases but includes some individuals with more than one condition requiring CAMHS intervention, or repeat referrals during the year. It is important to remember that a large proportion of children and young people with mental health needs will have been seen in universal services provided by practitioners who are not mental health specialists (e.g. GPs, health visitors, or school nurses); only those requiring more specialist support may have been referred to CAHMS.

Suicide is the leading cause of death in young people nationally. In Lincolnshire there were 4 confirmed cases of suicide and 2 suspected cases of suicide between September 2011 and January 2014 amongst under-eighteens. Risk factors include being male (up to three times more males than females complete suicide), previous self-harm and mental health problems⁷⁸. Young people who complete suicide are less likely to be in contact with mental health services compared with adults (14% vs 26%). We also know that young men, who are more likely to complete suicide, are less likely to be in contact with mental health services than young women⁷⁸.

In Lincolnshire, the number of hospital admissions as a result of self-harm in people ages 10-24 years in 2014/15 was 500, giving a rate that is similar to the national average⁷⁹. A Healthwatch survey of 1,251 young people in Lincolnshire identified that 20.5% (n=257) have never self-harmed⁸⁰. Reasons for self-harm included being bullied (40.2%), anxiety/hopelessness (46.7%), difficulties at school/college (52.1%), family problems (58.7%), depression (61.8%) and loneliness/isolation (38.2%). Almost two-fifths of young carers stated that they self-harm.

Figure 4: Autism in Lincolnshire

Which children and young people are most likely to suffer with mental health problems?



Individual reasons for mental health problems in childhood are likely to be complex. However, we are able to identify those groups at highest risk^{81 82 83 84}.



- Children and young people with learning disabilities
- Looked after children
- Homeless children and those sleeping rough
- Children who are being or have been bullied

In addition to these groups, children living with parents who misuse drugs and alcohol are adversely affected both physically and mentally⁸⁵. There were 149 parents living with their children and receiving drug treatment in Lincolnshire during 2012/13 and 207 in alcohol treatment⁸⁶; there are also likely to be parents in Lincolnshire who misuse drugs and alcohol but are not in treatment.

Service use

Local provider data on the reasons for presenting to Lincolnshire CAMHS at tier 2 and tier 3 in 2013-14 show that the three most common presenting conditions were anxiety, depression and low mood (33%), behavioural problems (22%) and self-harm (17%). This does not consider those young people who may have been supported in tier 1 services or whose mental health problems have not been referred to services.

What do we have that works well for Lincolnshire people?

Assets & protective factors

The Department of Health report, Future in Mind states that “if we are to have the greatest chance of influencing the determinants of health and wellbeing, we should

focus efforts on actions to improve the quality of care for children and families. We should start by making efforts to ensure a safe and healthy pregnancy, a nurturing childhood and support for families in providing such circumstances in which to bring up children.” The new Lincolnshire 0-19 service model wholly supports this by emphasising support from the antenatal period onwards, through transition to school and the teen years where needed. New locally based interventions and support delivered by Health Visiting teams are based on evidence for a strong link between parental (particularly maternal) mental health and children’s mental health. These interventions are known to offer better outcomes not only for the mother, but also across their children’s lifetime⁸⁷.

Early help teams provide a team approach to supporting children and young people alongside their family, adopting an early intervention approach with a single route into other services where needed.

Many schools in Lincolnshire have already developed a whole school approach to promoting resilience and improving emotional wellbeing, preventing mental health problems from arising and offering early support where they do. Evidence shows⁸⁸ that interventions taking a whole school approach to wellbeing have a positive impact in relation to physical health and mental wellbeing outcomes, for example, body mass index (BMI), tobacco use and being bullied.

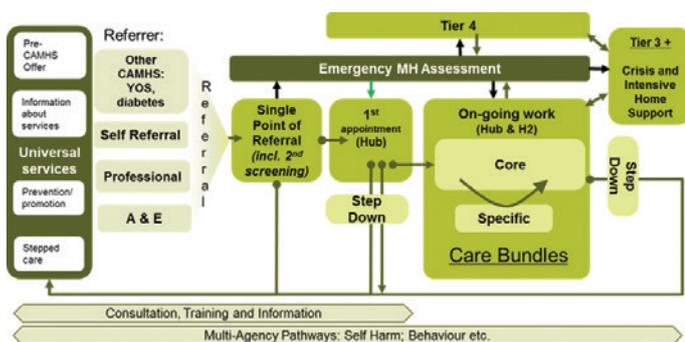
Services

Lincolnshire Child and Adolescent Mental Health Services (CAMHS) underwent a complete review and remodelling in 2016. A new delivery model has been developed and an additional £1.4 million for delivery was secured through transformation funds from April 2016.

Key improvements to the service include:

- Improved access to services, reducing waiting times from 12 to 6 weeks, with even shorter waiting times for certain vulnerable groups (4 weeks for looked after children and 3 weeks for young people under the care of Youth Offending Services).
- Removal of tiers and discrete teams which can lead to silo working.
- A Single Point of Access (SPA).
- Support to other children's 'universal' services, including:
 - a professional advice line,
 - consultation clinics,
 - a full programme of training for staff working in universal services,
 - the development of self-help psychosocial education materials,
 - development of a directory of the local CAMH Services and other potential services that may be beneficial to the young person.
- An integrated CAMHS provision delivering evidenced based pathways with a wider range of interventions offered and focused on outcomes; known as Core CAMHS.
- Extended opening hours into the evening.
- Access to crisis intervention and home treatment 24 hours a day, 7 days a week, aiming to avoid admission to hospital where possible. This includes rapid assessment where there is thought to be a possibility of life threatening harm to self or harm to others and follow-up after assessment for self-harm at A&E.
- A community based eating disorder service known as CAMHS EDS.
- Support to vulnerable groups including young people with a learning disability.
- Care and support through transition to adult services.

Figure 5: Illustration of the CAMHS pathway in Lincolnshire



In addition to these local services jointly commissioned by the Local Authority and Clinical Commissioning Groups, NHS England is responsible for commissioning specialised mental health services, including specialised eating disorder services, secure mental health services, specialised mental health services for the deaf, gender identity services, perinatal mental health services and other specialised mental health services (such as severe obsessive compulsive disorder and body dysmorphic disorder service).

Where are the gaps?

Often the presence of other problems, such as sensory impairment or behavioural problems, can make it more difficult to detect mental health problems in children and young people. Behaviour that challenges often presents a problem for parents and the professionals trying to support them. The new Behaviour Outreach Support Services (BOSS) aims to bridge this gap, taking a joined up approach to supporting the needs of children with challenging behaviour, working alongside universal health programmes, early help services and specialist health services.

The Lincolnshire Joint Strategic Needs Assessment (JSNA) recently identified the following gaps:

Skills of universal children's services workforce: children and young people's mental health 'system' is much broader than specialist CAMHS services, encompassing support offered by GPs, schools, community health centres and local hospitals. The role of universal staff such as teachers, youth workers, GPs, social workers and NHS staff needs to be acknowledged and supported through joint training, helping to foster shared culture and values. Future in Mind called for joint training to be provided for teachers and CAMHS staff, and further training of universal staff e.g. teachers in techniques such as mental health first aid. In partnership with LSCB, LPFT is delivering multi-agency mental health training, specifically in regards to children and young people to universal services, including education.

Transition to Adult Mental Health: given that mental health problems often emerge in late adolescence, for those young people who are accessing mental health support, it is imperative that they receive continuity of care. If young people lose touch with services or have their care disrupted at a crucial point, there is a risk that this could have a significant impact on their future health and well-being. Lincolnshire services are working together to develop effective transition protocols, ensure that transition takes place at a time that is right for the young person.

Reducing Stigma associated with mental health problems: this can prevent young people accessing services quickly. There is an average delay of ten years between experiencing first symptoms of a mental health problem and

receiving help for young people, mostly due to delay in their seeking help. The national mental health awareness campaign, Time to Change, has made strides to tackle stigma; since 2007 there has been an 8.3% improvement in public attitudes towards mental health. This needs to continue to reduce the stigma associated with accessing mental health services and seeking early help in children and young people.

Social Media and Young People's Mental Health: the past two decades has seen a sharp increase in children's use of digital media. Availability of digital devices has fundamentally reshaped young people's relationships with the online world. We know that children are now spending more time on screens - messaging on apps, creating their own blogs and consuming YouTube content. The evidence from a recent report⁸⁹ demonstrates the very real impact that the digital world can have on young people's mental health and wellbeing, both positive and negative.

It is essential to keep abreast of how social media is impacting on children and young people's mental health, strategies for this include schools working e-safety into the curriculum, developing engaging and age-appropriate information about mental health on the CAMHS website and apps and ensuring that teachers, social workers and professionals working in Child and Adolescent Mental Health Services are skilled in understanding young people's experience of the online world and how to help them

to build their digital resilience

Summary

- Societal influences and risks to mental health resilience and wellbeing are changing for children and young people.
- The number of children and young people being identified with mental health problems has increased over recent years. Whilst we want to see and overall reduction in the number of children and young people having mental health problems, encouraging them to come forward for help is an important first step.

Recommendations

- Services should offer a continuous pathway to children and young people, enabling them to access appropriate support at any point.
- Commissioners and providers should undertake engagement activity to understand more about children and young people's mental health including what they find helps them, what worries them most and what would help them feel able to ask for help.
- Support parents and schools to deliver interventions to children and young people which focus on programmes that improve resilience.
- Ensure access to a range of interventions of different intensity, through channels that work for young people.



Chapter 4 Adult and older adult mental health conditions

Definition of the Problem

Mental illness is a problem which, for most of us, will either affect us directly at some point during our life or will impact on the lives of those around us. Nationally, 1 in 4 adults will be diagnosed with a mental health condition during their lifetime, and at the time of the recent Adult Psychiatric Morbidity Survey (APMS) 1 in 6 adults had a Common Mental Disorder (CMD) – about 1 in five women and 1 in eight men.

It is important to understand that mental health can have a real influence on our physical health. In order to grasp the scale of the influence, researchers have studied the difference in life expectancy between those who have a serious mental illness (such as schizophrenia) and those who don't. People with such an illness have been found to live between 15 and 25 years less than people who don't. For people living with such a condition, this can have a real impact on their risk of dying of specific conditions: for example, for people with a serious mental illness, the risk of dying of heart disease has been found to be between one and a half and three times as high as other people. Worldwide, mental health problems are estimated to account for 23% of all of the years of life lost to death or disability amongst the population (Disability Adjusted Life Years – or 'DALYs')⁹¹ and that, in England, just like the rest of the world, depression is the single biggest cause of disability⁹².

What is the size of the problem for Lincolnshire?

In Lincolnshire, mental health conditions are reducing both the quality and length of lives amongst the population, and for the population of those with serious mental illnesses, the difference in lifespan, on average, would be expected to be around 20 years. This is a very important issue for the health and well-being of our population.

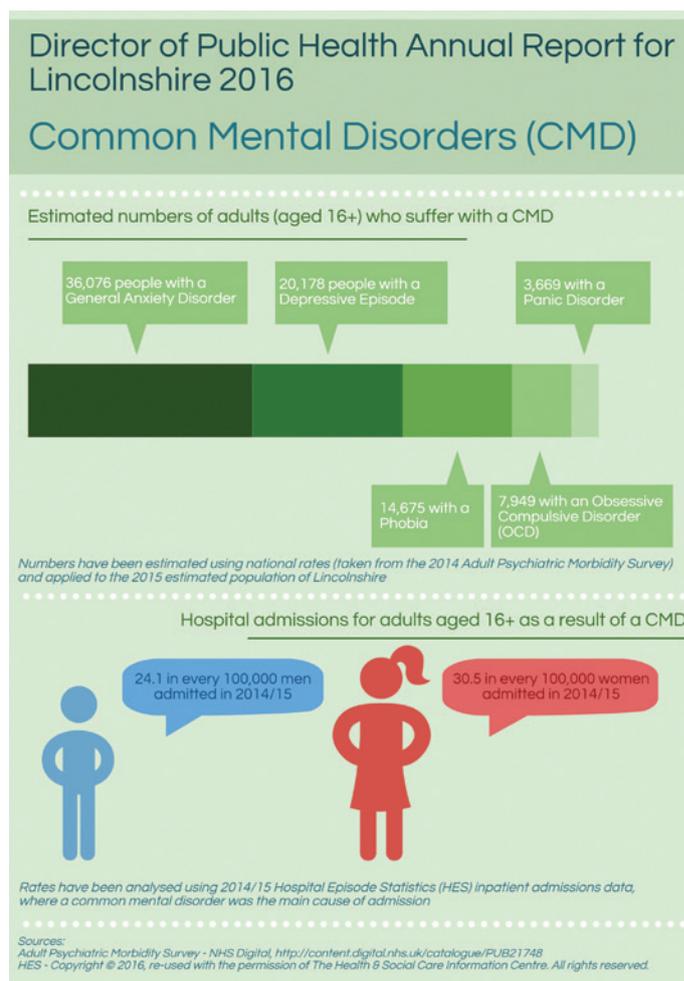
The most recent national survey data, applied to the population of Lincolnshire, would suggest that at any one time about 104,000 adults in Lincolnshire are living with a common mental disorder, which is roughly 17% of the population aged over 16. Common mental disorders include types of depression, anxiety, phobias, panic disorders and obsessive-com-

pulsive disorders.

We know that the prevalence of CMD is higher in younger age groups but is at its highest in people aged between 45 and 54, at 19.9%.

Almost twice as many women as men report having one of these conditions nationally, which in Lincolnshire would equate to approximately 39,000 men and 65,000 women, with the most prevalent single common mental disorder being Generalised Anxiety Disorder. Please see Figure 3 for a further breakdown of the numbers of people estimated to be suffering from a CMD in Lincolnshire.

Figure 6: Common Mental Disorders in Lincolnshire



Depression

Locally produced calculations, based on national data, suggest that over 20,000 people in Lincolnshire

are expected to suffer from depression at any one time. General Practices in the UK keep a record of all patients diagnosed with depression. At present, over 9% of adults in Lincolnshire were on the depression register, over 57,000 people. This has been increasing, but of course we would expect these lists to include the majority of people who have ever reported depression to their GP, rather than just those experiencing symptoms now. Depression is the leading cause of disability worldwide according to the World Health Organisation. There is vast health, social and economic costs associated with it. Depressive disorders that have been clinically diagnosed account for nearly 3% of all of the years lost to ill-health, disability or death in the UK⁹².

Self-harm

For some people, overwhelming emotional distress can lead to self-harming, usually as a coping mechanism⁹³. This may be associated with depression, and can be associated with suicide; over half of people, who die by suicide, have a history of self-harm⁹³. Between 2011 and 2013 there were 2,448 emergency admissions for intentional self-harm in Lincolnshire. We know that 1 in 10 young people can be expected to harm themselves, and that it is something that people of all ages do.

Importantly, people living in the most deprived areas are five times more likely to have an emergency admission to hospital for self-harm than people in the least deprived areas⁹⁴.

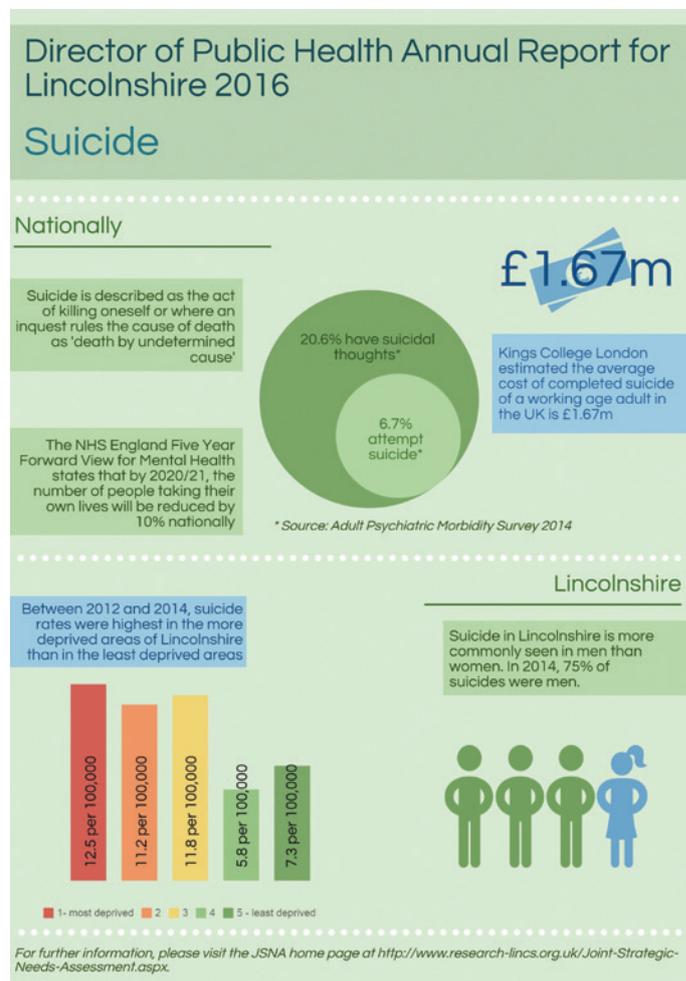
Suicide

Between 2011 and 2013, 184 people aged 15 years and older died from suicide and suspected suicide in Lincolnshire. Every year since 1999 there have been at least 60 deaths in Lincolnshire from suicide.² Suicide is a tragic event and can have a huge impact on the family and friends of people who take their own lives. Suicide prevention is a priority for Lincolnshire, and county NHS and local government organisations are working together to implement a suicide prevention action plan which can be viewed online at www.lpft.nhs.uk

Some groups of people tend to have a higher rate of suicide than the average across the population. The groups include people in institutional care or custody, such as prisoners, people of sexual minorities, veterans, those bereaved by suicide, as well as minority ethnic groups. Understanding the warning signs and risk factors for suicide is an important part of su-

icide prevention. Anyone concerned about someone, or are struggling with suicidal thoughts themselves, can seek help via their GP or through organisations such as the Samaritans (www.samaritans.org).

Figure 7: Suicide in Lincolnshire



Drug & Alcohol abuse

Drug and alcohol abuse often go hand in hand with mental health problems. People can use these and other psychoactive substances as a means of 'self-medicating,' dulling the pain or distracting from it when they are feeling overwhelmed. But this is problematic, as these things can be addictive and often end up with the user becoming dependant on them. This can add serious social problems to mental health issues, thus adding to and exacerbating underlying conditions. It is not unusual for people in Lincolnshire who have serious mental health problems to also have substance abuse or dependency problems, and this can make recovery more challenging.

If we apply the national rates of harmful drinking to the population of Lincolnshire, we see that there are an estimated 23,064 people aged 16 years and older who are drinking at harmful levels,² based on the

2014 Lincolnshire population. There are inequalities in the rate of hospital admissions for mental and behavioural disorders due to use of alcohol, with more people being admitted to hospital for these reasons from the most deprived areas, and relatively less from the least deprived areas. In Lincolnshire, Lincolnshire West CCG has the highest rate of hospital admissions for mental and behavioural disorders due to the use of alcohol (76.8/100,000) and South Lincolnshire has the lowest rate (47.7/100,000)².

We know that men in Lincolnshire are far more likely to be admitted to hospital for mental health problems related to substance abuse than women, the rate of these hospital admissions is nearly three times higher for men than for women, which is suggestive of a greater tendency amongst men to 'self-medicate' rather than seek help⁹⁵. The number of people estimated to be dependent on drugs in Lincolnshire has previously been estimated to be over 20,000 people⁹⁵.

More information on alcohol consumption in Lincolnshire can be found in the Lincolnshire substance misuse health needs assessment 2015, which can be accessed from the following website: www.research-lincs.org.uk/Home.aspx [17]. For more information on drugs, you can have a look at the Lincolnshire substance misuse health needs assessment 2015,

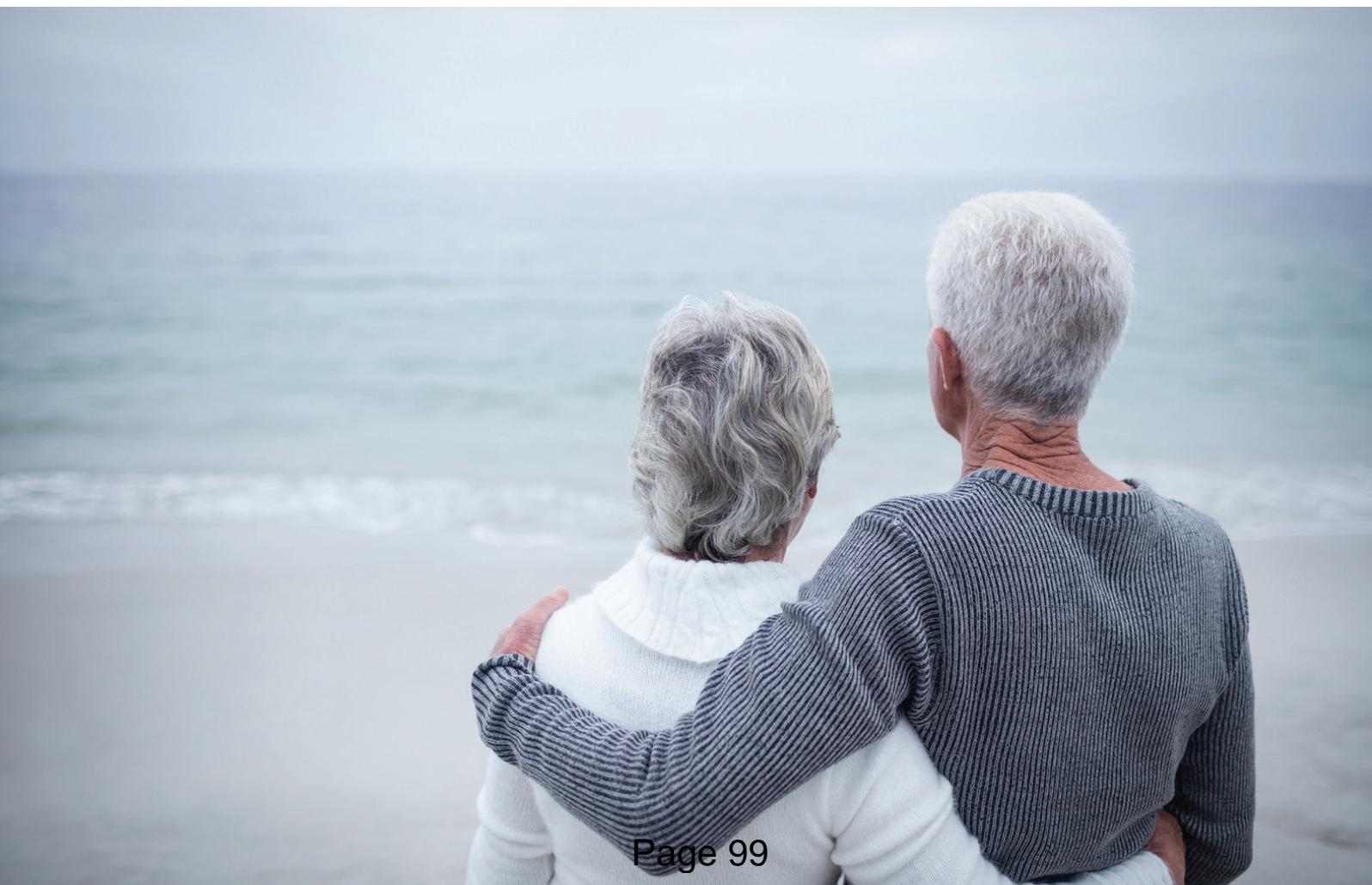
which can be accessed from the following website: <http://www.research-lincs.org.uk/JSNA-Topics.aspx>

Older Adults

Depression in older people has been described as a 'growing concern,' with depression affecting one in five older people living in the community and two in five, nearly half, of those living in care homes⁴. Nationally, it has been estimated that 1.2 million people aged over 50 were severely socially excluded, having little or no engagement with their communities or with society in general⁹⁴. In Lincolnshire, we would expect this number to be over 15,000 people, possibly far higher. Loneliness has been linked to both depression and dementia^{96 97}, and reports have even suggested that loneliness can be as bad for your health as smoking⁹⁸.

Dementia

Dementia is a term that is used to describe a set of symptoms; these can include loss of memory, mood changes, and problems with communication and reasoning. There are many types of dementia of which the most common are Alzheimer's Disease and vascular dementia⁹⁹, and although people of all ages can be affected it usually affects people over the age of 65. The risk of developing dementia increases as people age¹⁰⁰. Importantly, dementia differs from other



mental health conditions discussed in this chapter in terms of the physical causes. Alzheimer's disease, one of the most common forms of dementia, is thought to be caused by a build-up of proteins in the brain, and vascular dementia is associated with damage caused by a loss or restriction of blood supply inside areas of the brain¹⁰¹. These processes can lead to a decline in both a person's mental health, including in terms of memory and cognitive function, and possibly a reduction in physical abilities.

Lincolnshire's Joint Dementia Strategy⁹⁹ outlines how the number of people living with dementia in Lincolnshire is expected to grow to over 13,500 by 2020, from under 10,500 in 2012. Lincolnshire has a population which is relatively more elderly than the national average, with around 21% of the population aged over 65, compared to only 16% for the whole of England¹⁰². Dementia has thus been described as one of the most pressing challenges for health services locally¹⁰⁰.

Services

People in Lincolnshire with mental ill-health can access a wide range of primary, community and secondary care services to address their health needs. A recent Health Needs Assessment has been conducted to fully analyse mental health needs in Lincolnshire as well as the degree to which current services meet those needs. The following discussion of these services is adapted from this work, which can be viewed in full here www.research-lincs.org.uk/Health-Needs-Assessments.aspx#HNA_Current

Mental health services in Lincolnshire begin with primary care - e.g. GPs, dentists, opticians and pharmacies. These services are central to addressing the health needs of people with mental ill-health, and they also provide for the needs of families and other carers.

One way this is done is through the use of psychological therapies, such as the Improving Access to Psychological Therapies programme (IAPT). In Lincolnshire, the IAPT service is for anyone over the age of 16 who is feeling stressed, anxious, low in mood or depressed.

The Adult Psychology service works alongside the primary mental health teams throughout Lincolnshire. Service users may be referred because of the complex and enduring nature of their mental health difficulties, or because of a lack of response to other

accessible therapeutic interventions, such as counselling and cognitive behavioural therapy. Other services exist to help people overcome specific problems that can be linked to mental ill-health, such as eating disorders or a lack of secure employment.

In Lincolnshire, specialist health and care services for people with mental health problems and learning disabilities are provided by Lincolnshire Partnership NHS Foundation Trust (LPFT). LPFT Adult Mental Health Services care for people who are experiencing severe episodes of mental ill-health, or who need longer-term recovery plans put in place in order to return to independent living. LPFT also provides a dementia and specialist older adult mental health service for people of any age dealing with suspected or diagnosed dementia, and for older adults presenting with complex mental health problems.

LPFT's services include community mental health provision, where care is provided in the community for people who are recovering from a mental health problem. In addition to this, crisis resolution and home treatment support is provided to people at risk of being admitted to hospital, and for those who do need to be admitted acute inpatient care is provided. This is for people who are experiencing a severe, short-term episode of mental ill-health that cannot be managed by the community service. Treatment, usually for a short time, is provided on an inpatient ward at Lincoln, Grantham or Boston.

During 2016 re-commissioning of all specialist drug and alcohol treatment services was undertaken in Lincolnshire. A new contract commenced with Addaction in October 2016. This new service provides Lincolnshire with a flexible, outcome based service to meet the current need and future changes in substance misuse trends whilst delivering financial efficiencies. A clear focus for these services is on developing a social recovery model of support with less emphasis being placed on medical interventions and a greater focus on prevention, abstinence, social inclusion and aftercare to enable service users to ultimately lead meaningful and productive lives. As such the new contract has a total of thirty outcomes spread over seven separate domains which are:

- Freedom from dependence on drugs or alcohol
- Improvement in mental and physical wellbeing
- Prevention of substance misuse related deaths and blood borne viruses
- A reduction in crime and re-offending

- Sustained employment
- Improved relationships with family members, partners and friends
- Improved capacity to be an effective caring parent

Forensic mental health services are provided for the care and treatment of individuals experiencing mental health problems who also pose a risk to the public. This service also provides care co-ordination for people suffering from mental ill-health, who are placed out of the county in low, medium or high-security hospitals.

Where are the gaps?

Lincolnshire has a wide range of services to support those with mental health issues. In addition to the services discussed here, community and voluntary sector organisations operate to support people with mental health needs. Information about these services is not always easy to access, both for the general public and for medical professionals such as general practitioners. As such, bringing together information on mental health services into one place so that both users and provider organisations are clear what services and support networks are available and how to access them could be a valuable innovation.

This need for better organisation of information about services and pathways is symptomatic of the degree of complexity in the Lincolnshire landscape of mental health service. This can make it difficult for both patients and professionals to determine the best route for service access and treatment for patients. Furthermore, some services have specific thresholds for access which ensure that only those who are in clear clinical need of the service receive it. Whilst these thresholds are necessary to target provision at those most in need, this may prevent people who are in need but do not meet the clinical threshold for treatment from receiving preventative help. Secondary prevention, where people in the early stages of a mental health need which, left untreated, may get worse, should thus be a priority for Lincolnshire, along with primary prevention (preventing these issues in the first place) and treatment.

Summary

- Mental ill-health is a common problem, with 1 in 4 adults in the UK diagnosed with a common mental disorder in their lifetime. It is estimated that over 100,000 adults in Lincolnshire will be living with such a condition at any time.

- Common mental disorders include depression, anxiety, phobias and a panic disorder.
- Lincolnshire has a wide range of mental health services including primary care, therapeutic and preventative interventions, and acute and specialist care for those with more severe conditions.

Recommendations

Five recommendations for Lincolnshire have been identified as part of the recent Mental Health Needs Assessment for Lincolnshire. For further details, this needs assessment can be viewed here: www.research-lincs.org.uk/UI/Documents/MiHNA%20final%20report.pdf

- Identification and recording of mental ill-health: Work should be undertaken to ensure that health professionals can correctly and consistently identify and record the signs and symptoms of all forms of mental ill-health.
- Timely access to mental health services based on needs: Whilst most adult outpatients are initially seen within the 18 week target, timely access to specific services such as IAPT and dynamic psychotherapy could be improved.
- Data sharing between different organisations: The sharing of data between organisations needs to be improved. This includes between local providers but also between national data controllers and local intelligence teams of data such as the Mental Health Minimum Dataset, Hospital Episodes Data, and GP patient demographic data.
- Awareness of services and support: More should be done to comprehensively bring together information on mental health services and support networks in one place, so that both the public and professionals are clear on what is available and how it can be accessed.
- Service user consultation: Service user feedback is important for understanding and improving the experience of service users. Providers should seek feedback from those who contact or use all mental health services and support networks.

Chapter 5 Recommendations

Risk factors:

What influences our mental health?

- Clear reference and commitment to access to green space in development and regeneration policies for Lincolnshire neighbourhoods.
- Clear reference and commitment to community space availability, both safe informal spaces like pubs and seating areas and buildings where communities can come together in more organised groups.

Perinatal and maternal mental health conditions

- Women should continue to be assessed for mental health problems at every contact with a health professional and throughout a child's early years. Low level support should be maximised through upskilling of Health Visitors and developing peer support networks, meaning that a lower number of women will need onward referral to specialist services.
- All professionals who come into contact with women during the ante and postnatal periods should ask about substance misuse, especially in women with known mental health problems, and refer on for additional support where needed.
- Evidence based support for low level or undiagnosed mental health problems should be made available through early years' pathways to improve maternal and child mental health. Data to find out the level of need should be collected through local surveys and/or by professionals who come into contact with pregnant women and young families.
- Women and families should be signposted to informal support where appropriate and awareness of the common nature of mental health problems should be raised in all groups who work with families and young children.

Childhood and adolescent mental health conditions

- Services should offer a continuous pathway to children and young people, enabling them to access appropriate support at any point.
- Commissioners and providers should undertake engagement activity to understand more about children and young people's mental health including what they find helps them, what worries them most and what would help them feel able to ask for help.

- Support parents and schools to deliver interventions to children and young people which focus on programmes that improve resilience.
- Ensure access to a range of interventions of different intensity, through channels that work for young people.

Adult and Older Adult Mental Health Conditions

- Identification and recording of mental ill-health: Work should be undertaken to ensure that health professionals can correctly and consistently identify and record the signs and symptoms of all forms of mental ill-health.
- Timely access to mental health services based on needs: Whilst most adult outpatients are initially seen within the 18 week target, timely access to specific services such as IAPT and dynamic psychotherapy could be improved.
- Data sharing between different organisations: The sharing of data between organisations needs to be improved. This includes between local providers but also between national data controllers and local intelligence teams of data such as the Mental Health Minimum Dataset, Hospital Episodes Data, and GP patient demographic data.
- Awareness of services and support: More should be done to comprehensively bring together information on mental health services and support networks in one place, so that both the public and professionals are clear on what is available and how it can be accessed.
- Service user consultation: Service user feedback is important for understanding and improving the experience of service users. Providers should seek feedback from those who contact or use all mental health services and support networks.

Glossary

Glossary: mental health conditions

Adjustment disorders

Adjustment Disorder is a state of mixed emotions such as depression and anxiety which occurs as a reaction to major life events or when having to face major life changes such as illness or relationship breakdown.

Source: Royal College of Psychiatrists

Mild-moderate depression and anxiety

The main symptoms of depression are losing pleasure in things that were once enjoyable and losing interest in other people and usual activities. A person with depression may also commonly experience some of the following: feeling tearful, irritable or tired most of the time, changes in appetite, problems with sleep, concentration and memory. People with depression typically have lots of negative thoughts and feelings of guilt and worthlessness. Sometimes people with depression harm themselves, have thoughts about suicide, or may even attempt suicide.

Mild depression is when a person has a small number of symptoms that have a limited effect on their daily life. Moderate depression is when a person has more symptoms that can make their daily life much more difficult than usual.

Mild anxiety is experienced as feelings of being overwhelmed by responsibilities and unable to cope. People with depression may have feelings of anxiety as well.

Source: NICE²⁷, Best Beginnings

Postpartum psychosis

Postpartum psychosis (or puerperal psychosis) is a severe episode of mental illness which begins suddenly in the days or weeks after having a baby. Symptoms vary and can change rapidly. They can include high mood (mania), depression, confusion, hallucinations and delusions.

Source: Royal College of Psychiatrists

Post-traumatic stress disorder

Postnatal Post Traumatic Stress Disorder (PTSD) is experienced as nightmares, flashbacks, anger, and

difficulty concentrating and sleeping. It may be a pre-existing condition or be triggered by a traumatic labour.

Source: Best Beginnings

Serious mental illness (severe mental illness)

Serious mental illness includes diagnoses which involve psychosis. The most common disorders which are associated with psychotic symptoms are schizophrenia, bipolar disorder and psychotic depression. Psychosis is used to describe symptoms or experiences that happen together. Each person will have different symptoms, but the common feature is that they do not experience reality like most people. A person with psychosis may have: hallucinations, delusions, muddled thinking, lack of insight.

Source: Mental Health Wales, Royal College of Psychiatrists

Severe depressive illness

Severe depression is when a person has many symptoms that can make their daily life extremely difficult. Sometimes a person with severe depression may have hallucinations and delusions (psychotic symptoms).

Source: NICE

References

1. McManus S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016) *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital.
2. Gavens, L (2016) *A Mental Illness Health Needs Assessment for Lincolnshire*, Lincoln, 2016
3. Regan M, Elliot I, Goldie I (2016) *Better Mental Health for All: A public health approach to mental health improvement*, London, 2016, p19
4. *Better Mental Health For All*, Faculty of Public Health, London, 2016, available at http://www.fph.org.uk/better_mental_health_for_all
5. Based on estimated Lincolnshire economy of approx. £10bn per year, see <http://www.research-lincs.org.uk/Local-Economic-Assessment.aspx>
6. Gerhardt, S. (2014). *Why love matters: How affection shapes a baby's brain* (2nd Edition). Routledge.
7. Bell, M.A., Ashton, K., Hughes, K., Ford, K., Bishop, J. and Paranjothy. (2015). *Adverse Childhood Experiences and their impact on health-harming behaviours in the Welsh adult population*. Wales: Public Health Wales.
8. Faculty of Public Health. (2016). *Better Mental Health For All*. London. Retrieved from http://www.fph.org.uk/better_mental_health_for_all
9. Blank L, Baxter S, Messina J, Fairbrother H, Goyder L, Chilcott J. Summary review of the factors relating to risk of children experiencing social and emotional difficulties and cognitive difficulties. Available at www.nice.org.uk/nicemedia/live/13634/58884/58884.pdf.
10. Gerhardt, S. (2014). *Why love matters: How affection shapes a baby's brain* (2nd Edition). Routledge.
11. Bosmans, G., Braet, C. & Van Vlierberghe, L. (2010). Attachment and symptoms of psychopathology: early maladaptive schemas as a cognitive link? *Clinical Psychology & Psychotherapy*, 17, 374-85.
12. Gormley, B. & McNeil, D.E. (2010). Adult attachment orientations, depressive symptoms, anger, and self-directed aggression by psychiatric patients. *Cognitive Therapy and Research*, 34, 272-281.
13. Ein-Dor, T., Doron, G., Solomon, Z., Mikulincer, M. & Shaver, P.R. (2010). Together in pain: attachment-related dyadic processes and post traumatic stress disorder. *Journal of Counselling Psychology*, 57, 317-327.
14. Giallo, R., Cooklin, A., Wade, C., D'Esposito, F., & Nicholson, J. M. (2014). Maternal postnatal mental health and later emotional-behavioural development of children: The mediating role of parenting behaviour. *Child: Care, Health and Development*, 40(3), 327-336. <https://doi.org/10.1111/cch.12028>
15. Kingston, D., Tough, S., & Whitfield, H. (2012). *Prenatal and Postpartum Maternal Psychological Distress and Infant Development : A Systematic Review*, 683-714. <https://doi.org/10.1007/s10578-012-0291-4>
16. Apter-Levy, Feldman, Vakart, Ebstein, & Feldman (2013), *Impact of Maternal Depression Across the First 6 Years of Life on the Child's Mental Health, Social Engagement, and Empathy: The Moderating Role of Oxytocin*, *Am J Psychiatry* 2013; 170:1161-1168, 2013
17. Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2005). *Mental Health of Children and Young People in Great Britain, 2004*. London. <https://doi.org/10.1037/e557702010-001>
18. Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. *Archives of Disease in Childhood*, 100(9), 879-85. <https://doi.org/10.1136/archdis-child-2014-306667>
19. Klomek, A., Sourander, A., & Gould, M. (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *Canadian Journal of Psychiatry*, 55(5), 282-288
20. E. Emerson and C. Hatton, "Estimating Future Needs for Adult Social Care for People with Learning Disabilities in England," Centre for Disability research, Lancaster University, Lancaster, 2008.
21. Ford, T., Vostanis, P., Meltzer, H., & Goodman, R. (2007). Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. *British Journal of Psychiatry*, 190(319), 319-325. Retrieved from <http://bjprcpsych.org.eresources.shef.ac.uk/content/bjprcpsych/190/4/319.full.pdf>
22. McAuley, C., & Davis, T. (2009). Emotional well-being and mental health of looked after children in England. *Child & Family Social Work*, 14(2), 147-155. <https://doi.org/10.1111/j.1365-2206.2009.00619.x>
23. Kaess, M., Parzer, P., Mattern, M., Plener, PL., Bifulco, A., Resch, F., & Brunner, R. (2013) Adverse childhood experiences and their impact on frequency, severity, and the individual function of nonsuicidal self-injury in youth, *Psychiatry Research*, Volume 206, Issues 2-3, 30 April 2013, Pages 265-272.
24. Vostanis (2002). *Mental health of homeless children and their families*, *Advances in Psychiatric Treatment*, vol. 8, pp. 463-469.
25. C. Vasiliou (2006), "Making the link between mental health and youth homelessness. a pan-London study," Mental Health Foundation, London, 2006
26. Nottinghamshire County Council (2015), *Young People's Health Strategy for Nottinghamshire*, Nottingham, 2015, available at: <http://www.notting->

- hamshire.gov.uk/
27. Susan Matthews & Susie Sykes (2012) Exploring Health Priorities for Young People Leaving Care, *Child Care in Practice*, 18:4, 393-407, DOI: 10.1080/13575279.2012.717913
 28. Berkman LK, Kawachi I, eds. *Social Epidemiology*. New York: Oxford University Press; 2000
 29. Leyden KM. Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *Am J Public Health* 2003;93(9):1546-1551
 30. Cave B, Coutts A. Health Evidence base for the Mayor's draft Cultural Strategy. London: South East London Strategic Health Authority and East London & the City Health Action Zone; 2002
 31. Michie C, De Rozarieux D. Rapid Review to Support the Mayor of London's Biodiversity Strategy. The Health Impacts of Green Spaces in London. London: Ealing Hospital NHS Trust; 2001..
 32. Delivering mixed, balanced communities. 2009, p. Chapter 26.
 33. Government, Department for Communities and Local. Transferable Lessons from the New Towns. 2006
 34. Dannenberg AL, Jackson RJ, Frumlin H, Schieber RA, Pratt M, Kochtizky C, et al. The Impact of Community Design and Land-Use Choices on Public Health: A scientific research agenda. *Am J Public Health* 2003;93(9)
 35. Taske N, Taylor L, Mulvihill C, Doyle N, Goodrich J, Killoran A. Housing and Public Health: A Review of Reviews of Interventions for Improving Health. Evidence briefing: National Institute for Health and Clinical Excellence; 2005.
 36. Evans GW, Wells NM, Moch A. Housing and mental health: a review of the evidence and a methodological and conceptual critique. *J Soc Issues*. 2003;59:475-500. doi: 10.1111/1540-4560.00074
 37. Marcia Gibson a,n, MarkPetticrew b, ClareBambra c, AmandaJ.Sowden d, KathE.Wright d, Margaret Whitehead (2011), Housing and health inequalities: A synthesis of systematic reviews of interventions aimed at different pathways linking housing and health, *Health & Place* Volume 17, Issue 1, January 2011, Pages 175-184, <http://dx.doi.org/10.1016/j.healthplace.2010.09.011>
 38. World Health Organisation Europe. Fourth Ministerial Conference on Environment and Health. Budapest 2004.
 39. CABE, 2010a; Croucher et al., 2007; Pretty et al., 2007; Clark at al., 2013; Maas et al., 2009; CABE, 2010b.
 40. MIND. Ecotherapy – the green agenda for mental health Key findings Green exercise at local Mind groups . 2007.
 41. M. Stafford and M. Marmot, Neighbourhood deprivation and health: does it affect us all equally?, *International Journal of Epidemiology*, vol. 32, pp. 357-66, 2003.
 42. Department for Communities and Local Government (2015) , The Indices of Multiple Deprivation, available at <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>, 2015
 43. Department for Communities and Local Government (2015) , The Indices of Multiple Deprivation, available at <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>, 2015
 44. Office for National Statistics, “Statutory homelessness in England,” Department for Communities and Local Government, London, 2015
 45. H. Meltzer, P. Bebbington, T. Brugha, R. Jenkins, S. McManus and M. Dennis, “Personal debt and suicidal ideation.,” *Psychological Medicine*, vol. 41, pp. 771-778, 2011.
 46. Marmot (2010), Fair Society, healthy Lives: The Marmot Review, London, 2010, p26
 47. NOMIS, “Labour Market Profile - Lincolnshire,” Office for National Statistics, Newport, 2015.
 48. Faculty of Public Health (2016), Better Mental Health For All, London, 2016, available at http://www.fph.org.uk/better_mental_health_for_all
 49. J. Cohen, “Safe in our hands? A study of suicide and self harm in asylum seekers,” *Journal of Forensic and Legal Medicine*, vol. 15, pp. 235-244, 2008
 50. M. Oates, “Suicide: the leading cause of maternal death,” *The British Journal of Psychiatry*, vol. 183, pp. 279-81, 2003.
 51. Public Health England/Royal College of Nursing, “Preventing suicide among lesbian, gay and bisexual young people,” Public Health England, London, 2015.
 52. N. Kapur, D. While, N. Blatchley, I. Bray and K. Harrison, “Suicide after leaving the UK Armed Forces,” *PLOS Medicine*, 2009.
 53. A. Pitman, D. Osborn, M. King and A. Erlangsen, “Effects of suicide bereavement on mental health and suicide risk,” *The Lancet Psychiatry*, vol. 1, pp. 86-94, 2014.
 54. J. Cooper, N. Kapur, R. Webb, M. Lawlor, E. Guthrie, K. Mackway-Jones and L. Appleby, “Suicide after deliberate self-harm: a 4-year cohort study,” *American Journal of Psychiatry*, vol. 162, pp. 297-303, 2005.
 55. NICE. Antenatal and postnatal mental health: clinical management and service guidance. NICE Clinical Guideline (CG192). London: National Institute for Health and Care Excellence, 2014. Available from: <https://www.nice.org.uk/guidance/cg192>
 56. NICE. Antenatal and postnatal mental health: clinical management and service guidance. NICE Clinical Guideline (CG192). London: National Institute for Health and Care Excellence, 2014. Available from: <https://www.nice.org.uk/guidance/cg192>
 57. Hogg S. Prevention in mind. All babies count: spotlight on perinatal mental health. London: NSPCC, 2012 (cited 2015 Sep 03). Available from:

- www.nspcc.org.uk/services-and-resources/research-and-resources/2013/all-babies-count-spotlight-perinatal-mental-health/
58. Number of maternities (live and still births): ONS Birth Summary Tables - England and Wales 2015 Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthsummarytables> (Accessed 29.12.16)
 59. Rates of disorders: Joint Commissioning Panel for Mental Health. Guidance for commissioners of perinatal mental health services. Volume two: practical mental health commissioning. London: Joint Commissioning Panel for Mental Health; 2012. Available from: www.jcpmh.info/resource/guidance-perinatal-mental-health-services/
 60. Marian Knight, Derek Tuffnell, Sara Kenyon, Judy Shakespeare, Ron Gray, Jennifer J Kurinczuk (Eds.) Saving Lives, Improving Mothers' Care Surveillance of maternal deaths in the UK 2011-13 and lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009-13 December 2015. Available at: <https://www.npeu.ox.ac.uk/mbrace-uk/reports>
 61. Howard LM, Oram S, Galley H, Trevillion K, Feder G. Domestic violence and perinatal mental disorders: a systematic review and meta-analysis. *PLOS Medicine*. 2013;10(5):e1001452. doi: 10.1371/journal.pmed.1001452.
 62. Lewis, G, Drife, J, et al. (2001) Why mothers die: Report from the confidential enquiries into maternal deaths in the UK 1997-9; commissioned by Department of Health from RCOG and NICE (London: RCOG Press)
 63. NICE. Domestic violence and abuse: how health services, social care and the organisations they work with can respond effectively. NICE guidelines (PH50). London: National Institute for Health and Care Excellence, 2014. Available from: www.nice.org.uk/guidance/ph50
 64. NICE clinical knowledge summary. Depression - antenatal and postnatal. London: National Institute for Health and Clinical Excellence; 2013. Available from: cks.nice.org.uk/depression-antenatal-and-postnatal
 65. NDTMS, Adult Partnership Activity Report, Lincolnshire
 66. NICE. Contraceptive services with a focus on young people up to the age of 25. NICE guidelines (PH51). London: National Institute for Health and Care Excellence, 2014. Available from: www.nice.org.uk/guidance/ph51
 67. Mental Health Foundation. Young mums together: promoting young mothers' wellbeing. London: Mental Health Foundation, 2013. Available from: www.mentalhealth.org.uk/content/assets/PDF/publications/young-mums-together-report.pdf
 68. Public Health Outcomes Framework tool (accessed 29.11.16): available at: <http://www.phoutcomes.info/public-health-outcomes-framework#page/4/gid/1000042/pat/6/par/E12000004/ati/102/are/E10000019/iid/20401/age/173/sex/2>
 69. Source: Department for Communities and Local Government
 70. Hogg S, Haynes A, Baradon T, Cuthbert C. An unstable start: All babies count: spotlight on homelessness. London: NSPCC and Anna Freud Centre, 2015. Available from: www.nspcc.org.uk/services-and-resources/research-and-resources/2015/all-babies-count-spotlight-homelessness-an-unstable-start/
 71. Murphy M and Fonagy P (2012). Mental health problems in children and young people. In: Annual Report of the Chief Medical Officer 2012. London: Department of Health.
 72. Personal Social Services Research Unit, London School of Economics and Political Science and Young Minds, 2016. Youth Mental Health: New Economic Evidence. Available at: www.pssru.ac.uk/publication-details.php?id=5160
 73. NHS England. Future in mind: Promoting, protecting and improving our children and young people's mental health and wellbeing. October 2015. Department of Health.
 74. Childhood and Adolescent Mental Health: understanding the lifetime impacts, Mental Health Foundation, 2004
 75. Nuffield Foundation (2012) Social trends and mental health: introducing the main findings London: Nuffield Foundation
 76. Hospital Episode Statistics (HES), Health and Social Care Information Centre
 77. Young Minds: webpages available at: http://www.youngminds.org.uk/about/whats_the_problem (Accessed 5.12.16).
 78. K. Windfuhr, "Suicide in juveniles and adolescents in the United Kingdom," *Journal of Child Psychology and Psychiatry*, vol. 49, pp. 1157-67, 2008.
 79. Public Health England, "Child Health Profiles - local authorities," [Online]. Available: www.altas.chimat.ork.uk/dataviews/report/fullpage?viewId=493&reportId=535&geold=4&geoReports=4618 [Accessed 17 September 2015].
 80. Healthwatch Lincolnshire, "'Hear our voice': children and young people of Lincolnshire," Healthwatch Lincolnshire, Boston, 2014
 81. E. Emerson and C. Hatton, "Estimating Future Needs for Adult Social Care for People with Learning Disabilities in England," Centre for Disability research, Lancaster University, Lancaster, 2008.
 82. T. Ford, P. Vostanis, H. Meltzer and R. Goodman, "Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households," *British Journal of Psychiatry*, vol. 190, pp. 319-325, 2007.

83. H. Meltzer, R. Gatward, T. Corbin, R. Goodman and T. Ford, "The mental health of young people looked after by local authorities in England," Office for National Statistics, London, 2003
84. P. Vostanis, "Mental health of homeless children and their families," *Advances in Psychiatric Treatment*, vol. 8, pp. 463-469, 2002
85. Advisory Council on the Misuse of Drugs. Hidden harm- responding to the needs of children of problem drug users. London: Advisory Council on the Misuse of Drugs, 2011. Available from: www.gov.uk/government/publications/amcd-inquiry-hidden-harm-report-on-children-of-drug-users
86. Health & Wellbeing – Alcohol & Drugs, Public Health England.
87. Bauer A, Parsonage M, Knapp M, Iemmi V, and Ad-elaja B (2014). The costs of perinatal mental health problems. London: Centre for Mental Health.
88. Brooks F (2012). Life stage: School Years. In: Annual Report of the Chief Medical Officer 2012. Our Children Deserve Better: Prevention Pays. London: Department of Health.
89. Resilience for the Digital World. Ecorys and Young-Minds. 2016. Available at: <http://www.uk.ecorys.com/news/building-digital-resilience-key-keeping-young-people-safe-online-%E2%80%93-new-report>
90. Wahlbeck, K. et al., 2011. Outcomes of Nordic mental health systems: life expectancy of patients with mental disorders, pp.453–458.
91. Murray CJL, Lopez Ad, eds. (1996). The global burden of disease and injury series, volume 1: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and project to 2020. Cambridge MA, USA: Harvard University Press
92. World Health Organisation (2013) Mental Health Action Plan: 2012-2020, http://www.who.int/mental_health/action_plan_2013/en/
93. NHS Choices, Self Harm, <http://www.nhs.uk/conditions/self-injury/Pages/Introduction.aspx>, accessed 24.01.17
94. Cacioppo J. T. and Patrick, W. (2008). *Loneliness: Human Nature and the Need for Social Connection*. New York: W. W. Norton.
95. NHS Secondary Uses Service Data, used with permission of the Health and Social Care Information Centre
96. Morgan, E. and Swann, C. (2004). *Social capital for health: Issues of definitions, measurement and links to health*. London: Health Development agency.
97. Mental Health Foundation. (2010). *The Lonely Society*. London: Mental Health Foundation.
98. Cacioppo, J.T., Fowler, J.H. and Christakis, N.A. (2009). Alone in the crowd: The structure and spread of loneliness in a large social network. *Journal of Personality and Social Psychology* 97 (6), 977-991.
99. Lincolnshire County Council (2014), Lincolnshire Joint Strategy for Dementia,p5 available at <https://www.lincolnshire.gov.uk/residents/adult-social-care/strategies/joint-dementia-strategy-2014-%E2%80%932017/121668.article>
100. NHS Choices, About Dementia, <http://www.nhs.uk/Conditions/dementia-guide/Pages/about-dementia.aspx>, accessed 18/01/17
101. NHS Choices, Causes of Dementia, <http://www.nhs.uk/Conditions/dementia-guide/Pages/causes-of-dementia.aspx>, accessed 18/01/17

