

Sense Policy: Statements and Position on rubella and MMR

Introduction - The aim of the Sense policy is:

To state Sense's position in relation to concerns raised in the media

1. Parents and other groups have expressed concern about the risks associated with the measles, mumps and rubella (MMR) vaccine. There has been significant media and professional interest as a result, and some are calling for the introduction of single vaccinations against measles, mumps and rubella to give parents an alternative to the triple vaccine.
2. Sense fully supports the MMR immunisation programme. We know that the use of MMR has been effective in many countries around the world in reducing the incidence of rubella, measles and mumps and associated complications.
3. Sense believes
 - Exposure to rubella in early pregnancy can cause damage to the unborn child, including damage to the eyes, ears, heart, brain and nervous system
 - MMR has been an enormous success in reducing the number of children born with congenital rubella syndrome
 - Single vaccines would be less effective and there's no evidence they would be safer

To raise awareness in staff, carers, professionals, the general public and to provide information on rubella, rubella vaccination and MMR vaccination

4. Sense is concerned that there is reduced awareness of rubella today compared with, say, 10 years ago. A MORI poll commissioned by Sense revealed that twenty seven per cent of adults questioned could not name any of the effects of rubella on an unborn child. The figure was particularly high amongst people aged 15-34, with thirty nine per cent unaware of the dangers. Most of the media debate is focusing on measles, the measles component of MMR and its alleged link with bowel disease and autism. This detracts from the possible devastating effects that rubella may cause if contracted by mothers early in pregnancy.
5. Sense believes that individuals should have information about rubella and its effects before they make their own decision about immunisation.

To guard against complacency through public campaigns and media awareness

6. Sense believes that although the programme of rubella and MMR immunisation has been successful in significantly reducing the incidence of congenital rubella syndrome we have a duty to guard against complacency.
7. Evidence suggests that a decline in the uptake rate of the MMR vaccine could lead to a resurgence of the three diseases that it is intended to guard against.

Policy Statement - Sense's Position

8. Sense is in favour of immunisation against the rubella virus.
9. Sense supports the current MMR immunisation programme for children, but the decision to have a child immunised must be made by the parents. Sense believes that parents should be given the fullest possible information about effectiveness, about side-effects and about possible contraindications that would help identify those people most at risk of an adverse reaction.
10. Sense does not support the introduction of separate or single vaccines instead of the triple MMR vaccination.
11. Sense believes that a rubella containing vaccine should be made available to sero-negative women of childbearing age.
12. Sense believes that the public should be able to make informed decisions about whether or not to receive immunisation for themselves or their families. This may only be effectively achieved if they are able to access information from reliable sources such as that delivered by primary health care professionals and not just from what they read in the media. Sense aims to contribute towards providing factual, up-to-date information on immunisation, particularly rubella.
13. Sense does not give medical advice.

Information

14. The following sections give information on the background to many of the issues surrounding rubella immunisation and how to respond to enquiries.
15. The debate about MMR is current and on going. New issues are likely to arise that Sense has to respond to quickly. Staff and members will be kept up to date on these through regular newsletters and internal briefings.

Information - What is rubella?

18. Rubella or German measles is a virus. If you get it you may develop a rash and feel unwell, or you may not even notice it.
19. If a woman catches rubella in early pregnancy, it can be passed on to the unborn baby and can cause serious damage to the child's sight and hearing. It may also damage the child's heart and brain. The baby is said to have congenital rubella syndrome.
20. Two mothers of children with congenital rubella syndrome established Sense in 1955.

Information - What is rubella immunisation?

21. Rubella immunisation is the process of protecting an individual against the rubella virus through the administration of a vaccine. This is done by introducing a weakened form of the rubella virus into the body. This is usually given as a triple vaccine combining rubella with measles and mumps vaccines (known as MMR).

22. The schoolgirl (rubella) immunisation programme was introduced in 1970 and offered to all girls aged 11-14. The programme was extended in 1972 to include women of childbearing age who had not had rubella and who did not have immunity to the virus. The schoolgirl immunisation programme has now stopped but rubella immunisation in the form of MMR is available to women who have low or non-existent levels of rubella antibodies.

Information - What is MMR?

23. MMR (measles, mumps and rubella) is a 'triple' or 'combined' vaccine, which contains measles, mumps and rubella vaccines. The MMR vaccine protects individuals against those infections and was introduced into the UK in 1988.

24. The MMR vaccine is firstly offered to boys and girls aged 12-15 months. In 1996, a pre-school booster was introduced and given to children aged 3-5 years. This method of immunising children, both boys and girls, has now replaced the schoolgirl immunisation programme.

25. MMR is now offered to boys and girls in these age groups in order to stop the circulation of rubella infection so that women do not catch rubella during pregnancy from their own or their friends' children.

26. MMR is also available to women who have low or non-existent levels of rubella antibodies.

Information - The immunisation programme

27. In addition to the development of Sense's support and campaign work with people who are deafblind or multi-sensory impaired, Sense supports immunisation programmes which aim to reduce the numbers of children born with multiple disabilities due to congenital rubella.

28. As a result of MMR immunisation, incidence of rubella in the UK remains very low, and few babies are being born with congenital rubella syndrome. Although there have been some confirmed reports of isolated cases of rubella infection, these are rare. There have been 40 congenital rubella births since 1990 and over 60 terminations as a result of rubella infection in early pregnancy. This compares to nearly 500 congenital rubella births and over 5,500 terminations in the 1970s.

29. Between 1999 and 2002, there were confirmed reports of eight babies born with congenital rubella syndrome. In five of these cases the mother was infected with rubella abroad.

30. Sense was actively involved in supporting the early rubella immunisation programme and the MMR programme through the National Rubella Campaign, National Rubella Council and National Council for Child Health (NCCH) (Child 2000).

Immunisation effectiveness

31. One dose of MMR vaccine will give 95% of vaccinated individuals protection against the rubella virus¹.
32. The introduction of the combined measles, mumps and rubella (MMR) vaccine has been very successful and has greatly reduced the incidence of measles, mumps and rubella infections. However, it should be remembered that no vaccine is 100% safe for every child.

Pregnancy and immunisation

33. Any woman contemplating pregnancy is advised to see her GP who can arrange to have her rubella antibody levels checked and offer her immunisation if necessary.
34. If a woman who is already pregnant is concerned about having been in contact with someone with rubella, she can ask her GP or ante-natal care provider for a diagnostic test.
35. If a woman receives a rubella containing vaccine during pregnancy or discovers that she is pregnant within a month of being vaccinated she should speak to her GP and discuss any concerns that she may have. World-wide follow-up studies have found no cases of CRS as a result of inadvertent rubella immunisation during pregnancy. Because of the theoretical risk of infant damage, women are advised to avoid conception for one month following rubella immunisation. However, it is highly unlikely that the foetus will suffer any ill effects from inadvertent immunisation of the mother during pregnancy and termination would not be advised because of it.

Side effects and Contraindications

36. Some people may experience an adverse reaction to the MMR vaccine. This is because the MMR vaccine contains viruses that are similar to those that cause the actual diseases. Most side effects are mild and temporary, such as a high temperature and stiffness or swelling in the joints, but parents need to be aware of what they might be.
37. A few children may be hypersensitive to the MMR vaccine and parents should be encouraged to discuss the contraindications (circumstances when immunisation should not be given) with their GP or nurse if they are concerned.
38. Contraindications to the MMR vaccine are contained in the DoH 's Immunisation against Infectious Diseases, also known as the "Green Book" (available online at the DoH website: www.dh.gov.uk):

Links with autism and bowel disease

39. Wakefield and colleagues², who conducted research into the possible link between autism and bowel disease, concluded in the Lancet in February 1998:

¹ Department of Health. *Immunisation against Infectious Disease*. London HMSO 1996. [Also known as the 'Green Book']

- “We did not prove an association between measles, mumps and rubella vaccine and the syndrome described”.

40. As far as Sense is aware:

- There is not any evidence that shows the MMR vaccination causes inflammatory bowel diseases
- Not all causes of autism are known
- There is no evidence proving MMR causes autism
- There is evidence that shows MMR is not linked to rises in the diagnosis of autism.

41. On 23 March 1998, the Department of Health (DoH) asked the Medical Research Council (MRC) to convene a meeting, which included experts in fields of child psychiatry, paediatrics, virology, epidemiology, immunology, and gastroenterology. The expert group discussed all recent research (including Wakefield et al) on measles, measles vaccine, MMR vaccine, Crohn’s disease and Autistic Spectrum Disorder (ASD) (Autism).

42. The expert group concluded that:

- the available virological and epidemiological evidence does not support a causal role for persistent measles virus infection in Crohn’s disease;
- there is no evidence to indicate any link between MMR vaccination and bowel disease or autism;
- there is therefore no reason for a change in the current MMR vaccination policy.

43. In June 1999 the results of two independent studies found no link between MMR vaccination and autism.

44. The first study³ was the result of The Committee on Safety of Medicines setting up an independent Working Party to examine records presented by a firm of solicitors, where there was an alleged association between MMR or MR vaccine and autism or Crohn’s disease. The Working Party concluded that the evidence:

- “did not support the suggested causal associations or give cause for concern about the safety of MMR or MR vaccines”.

45. The second study⁴ carried out by the Royal Free Hospital and the Public Health Laboratory Service examined the history of known autistic children in North Thames

² Wakefield AJ., Murch SH., Anthony A. et al. *Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children*. Lancet 1998; 351:637-41.

³ Committee on Safety of Medicines and Medicines Control Agency. *Current Problems in Pharmacovigilance*. Vol. 25; June 1999. <http://www.open.gov.uk/mca/cuprblms.htm>. Accessed 29/6/99.

⁴ Taylor, B. et al. *Autism and measles, mumps, and rubella vaccine: no epidemiological evidence for a causal association*. Lancet 1999; 353: 2026-29.

since 1979 - covering the period before and after the introduction of MMR vaccination in 1988. This study published in the lancet found:

- no increase in autism since the introduction of MMR in 1988;
- no difference in age of diagnosis between MMR immunised and un-immunised children;
- no difference in the MMR immunisation rates between those children with autism and the general population;
- no link between the timing of MMR and the onset of autism.

Single vaccines

46. The DoH state that there is no evidence of such a risk (i.e. inflammatory bowel disease and autism) from the triple MMR vaccine and that giving vaccines separately would leave children and their contacts unnecessarily exposed to preventable infectious disease and their consequences. The DoH also state that parents should realise that separating the MMR vaccine into separate components is not, as has been portrayed, a safer option.

47. Sense does not support calls for the introduction of single vaccines for measles, mumps and rubella, and is concerned that:

- a strategy of single jabs would mean delays between vaccinations and that would mean prolonged susceptibility and more opportunity for all three diseases to spread. If rubella were to spread again in this country we would see a rise in CRS births.
- It's ethically wrong to promote six invasive procedures instead of two when the bulk of scientific evidence says the triple is safe and effective and there is no similar evidence for a single jab strategy.
- Many might not consider rubella serious enough to warrant vaccination, particularly for boys. The reality is that rubella infection is serious for pregnant women and boys are just as likely to pass on rubella infection as girls.

DoH position

48. The MMR immunisation programme reduces the number of children born with congenital rubella syndrome and protects children against mumps and measles.

49. They believe that the MMR vaccine remains the safest way for parents to protect their children.

50. They believe there is no proven association between the MMR vaccine and conditions such as autism and Crohn's disease.

51. They have produced posters, leaflets and factsheets to address parents' concerns. These resources along with extensive background information are available on an NHS website: www.mmrthefacts.nhs.uk

Anti-immunisation groups

52. Parents and other groups, such as JABS, have expressed concern about the risks and safety of immunisation, particularly about the risks associated with the measles component of MMR vaccine. These groups' concerns are being taken seriously by the Department of Health. JABS was established to campaign for compensation for children damaged by vaccination. They also provide information to parents considering whether or not to have their child immunised.

Public campaigns and media awareness

53. The adverse publicity around MMR has been with us for a substantial period of time and does not seem to be going away. Sense believes it is necessary to continue to put resources into this area.

54. Evidence suggests that media coverage so far has had a negative effect on uptake of the MMR vaccination.

55. Research published by the Economic and Social Research Council (ESRC) revealed that more than half of the public wrongly believed that medical science was evenly divided about the safety of the MMR vaccine, even though almost all scientific experts have rejected suggestions of a link between the vaccine and autism

56. Sense activity will aim to:

- maintain and collect information on rubella and MMR;
- raise awareness of rubella and its effects;
- make use of opportunities to put across information about the adverse effects of rubella;
- enable the public to gain information about rubella and its effects;
- enable primary health care professionals to access information on rubella, its effects and MMR;
- enable opinion formers to gain information about Sense's position;
- state Sense's reasons for continuing to support MMR;
- co-ordinate and lead activity with voluntary organisations with similar interests;
- identify spokespeople on rubella to enable Sense media activity;
- monitor media activity.

What to do with enquiries

57. Response to enquiries from the general public must be confined to the information contained within this document. Sense does not give medical advice and thus no attempt should be made to tell individuals whether or not they or their children should be immunised.

58. Enquiries may be referred to Sense's information and library service. Suggested response to enquiries from parents who are not sure whether or not to vaccinate their child may state that:

“Sense supports the current MMR immunisation programme as it has been successful in reducing the number of children born with congenital rubella. However, there are situations under which a child should not be vaccinated (called contraindications). I have enclosed some information about rubella and MMR but would also suggest that you discuss your concerns with your GP if you have not already done so. You may also like to contact Pat Tookey at the Institute of Child Health”.

59. Internal or external enquiries relating to rubella and immunisation can be referred to:

Information and Library Service
Sense Finsbury Park
11-13 Clifton Terrace
Finsbury Park
London N4 3SR
Tel: 020 7272 7774
Fax: 020 7272 6012
Text: 020 7272 9648
Email: info@sense.org.uk

Linda Long
Health Development Officer
Sense Scotland
5th Floor, 45 Finnieston Street
Clydeaway Centre
Glasgow G3 8JU
Tel: 0141 564 2444
Fax: 0141 564 2443
Text: 0141 564 2442
Email: llong@sensescotland.org.uk

Monitoring enquiries

60. Staff who receive and respond to enquiries should make sure that these are logged so they can be monitored. Linda Long (Health Development Officer) will be responsible for logging enquiries in Sense Scotland.

Media enquiries

61. Media related enquiries should be addressed to the Communications Team at Sense Head Office.

Communications Team
Sense Finsbury Park
11-13 Clifton Terrace
Finsbury Park
London N4 3SR
Tel: 020 7272 7774
Fax: 020 7272 6012
Text: 020 7272 9648
Email: sandeep.shah@sense.org.uk

Other enquiries

62. More complex issues related to rubella and MMR immunisation may be dealt with by the Institute of Child Health. Sense has formal links with the Institute and the National Congenital Rubella Surveillance programme. Please contact the Community Support and Information Division (based at Finsbury Park) in the first instance.

Additional sources of information

www.sense.org.uk/rubella

www.mmrthefacts.nhs.uk

www.hpa.org.uk/infections/topics_az/vaccination/mmr.htm

Public statements and facts and figures

Public statements and press releases issued can be found on the Sense website and intranet.

Immunisation programmes - past and present

- 1970 Rubella vaccine licensed in the UK
Offered to schoolgirls aged 11-14
- 1972 Vaccine offered to sero-negative women post-partum and screened 'high risk' groups
- 1974 Screening for adult women extended
- 1988 MMR for all children in second year of life
- 1994 Mass MR immunisation of 5-16 year olds
- 1996 End of schoolgirl programme
MMR pre-school booster introduced

Administration of MMR vaccine to children

- 12 to 15 months - First vaccine given
- 3 to 5 years - Pre-school booster

Effectiveness of vaccine

- MMR vaccine will give 95% of vaccinated individuals protection against the rubella virus.

Immunisation and pregnancy

- Any woman contemplating pregnancy is advised to see her GP who can arrange to have her rubella antibody levels checked and offer her immunisation if necessary.
- If a woman is vaccinated with a rubella containing vaccine she should avoid pregnancy for one month⁵.

⁵ Department of Health. Immunisation against Infectious Disease. London HMSO 1996.
[Also known as the 'Green Book']

Additional Information - Appendix 3

Note 1: In the past, the terms 'rubella' and 'congenital rubella syndrome' have always been in lower case (except at the beginning of a sentence). Acronyms, i.e. CRS have always been in capitals. For consistency these conventions should continue.

Note 2: It might be an idea to compare timescale with like timescale. Thus:

1971-1975 = 241 births
average of 48.2 births per year

with

1991-1995 = 21 births
average of 4.2 births per year

Note 3: The figures quoted above will be underestimates as many other cases go unreported.

Note 4: It cannot be said that all rubella babies will be or were born with severe disabilities or what they might be. The extent of disability tends to be related to the stage of development of the foetus at the time of the rubella infection. However, it can be said that CR may cause severe disabilities and include examples i.e. deafness, blindness, heart impairments etc.

Note 5: There are two types of antibody testing that may be undertaken. The first, often referred to as a 'screening' test, is offered to women contemplating pregnancy or those already pregnant as part of their antenatal tests. This test checks for levels of antibody and gives results in terms of <15iu or >15iu. (iu = international units.) This is to ensure that women are protected during their childbearing years. If an individual has low or non-existent levels of rubella IG specific antibodies they may be offered immunisation.

The second test is referred to as a 'diagnostic' test and checks for different types of antibodies and whether or not there has been a recent infection. The presence of IgG antibodies indicate infection or rubella vaccination at some time in the past and may denote immunity. IgG antibodies remain at fairly constant levels in the blood. On the other hand, IgM antibodies indicate a recent primary infection. They fight and remove infection and disappear after a month or so.

Glossary

<i>Antibody</i>	An antibody, also known as immunoglobulin (Ig) is a protein produced by white blood cells to fight and remove infection.
<i>Congenital rubella</i>	This describes rubella existing before or at birth and occurs when a pregnant woman contracts rubella and passes it on to her unborn child.
<i>Congenital rubella syndrome (CRS)</i>	This describes a group of symptoms experienced as a result of contracting rubella before birth. The most common symptoms are hearing and vision loss. Other symptoms may include heart defects and endocrinological disorders. Each affected individual experiences congenital rubella syndrome differently and may only have hearing loss for example.
<i>Contraindication</i>	Is a reason or circumstance when immunisation should not occur.
<i>IgG</i>	A type of antibody that indicates infection or rubella vaccination in the past and may denote immunity. These remain at fairly constant levels in the blood.
<i>IgM</i>	Another type of antibody which indicates a recent primary infection. These disappear after a month or so.
<i>Immunisation</i>	This is the act of providing active immunity.
<i>Immunity</i>	This is the body's state of being resistant to injury from infection and poisons.
<i>MMR vaccine</i>	The 'triple' or 'combined' vaccine which contains measles, mumps and rubella vaccines and protects individuals against those infections.
<i>Rubella</i>	Also known as German measles is a mild contagious disease of short duration. Symptoms include: high temperature, swollen glands and a rash but infection without symptoms can occur. Can cause severe disabilities in the unborn child.
<i>Rubella vaccine</i>	A single vaccine used to protect individuals against the rubella virus
<i>Vaccine</i>	This is a special preparation of an attenuated (weakened) virus which is introduced into the body and provides protection against specific viruses.
<i>Virus</i>	This is a minute living organism which may cause a variety of diseases such as rubella, polio and influenza.

References

Committee on Safety of Medicines and Medicines Control Agency. *Current Problems in Pharmacovigilance*. Vol. 25; June 1999. <http://www.open.gov.uk/mca/cuprblms.htm>. Accessed 29/6/99.

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Taylor, B. et al. *Autism and measles, mumps, and rubella vaccine: no epidemiological evidence for a causal association*. *Lancet* 1999; 353: 2026-29.

Terminations for rubella disease/contact in pregnancy (Office of National Statistics) and confirmed rubella births (National Congenital Rubella Surveillance Programme) England and Wales (June 1998).

Tookey, PA., Peckham, CS. *Surveillance of congenital rubella in Great Britain, 1971-96*. *BMJ* 1999; 318: 769-770.

Wakefield AJ., Murch SH., Anthony A. et al. *Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children*. *Lancet* 1998; 351.