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Health impact of the *Salmonella enterica* serotype Enteritidis phage type 4 epidemic



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London
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Background

BBC NEWS

[Front Page](#)

[UK](#)

[World](#)

[Business](#)

[Sci/Tech](#)

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[Despatches](#)

[World News](#)

[in Audio](#)



[On Air](#)

[粵語廣播](#)

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Wednesday, January 14, 1998 Published at 15:23 GMT

Special Report

Scares prompt Food Agency move



Farmers suffered as fears over BSE saw beef exports banned

Relevant Stories

13 Jan 98 | UK

[Food expert warns of crisis](#)

13 Jan 98 | Background

[Salmonella poisoning](#)

05 Dec 97 | Special Report

[BSE - The story so far](#)

16 Oct 97 | Background

[BSE](#)

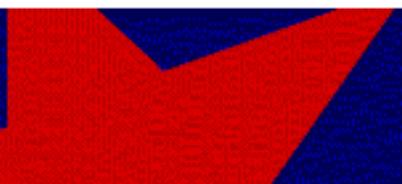
Internet Links

[Ministry of Agriculture, Fisheries and Food](#)

[Institute of Trading Standards](#)

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Background



Salmonella

Salmonella is one of the most common causes of food poisoning and can be fatal. It is contracted mainly through eating raw or undercooked food.



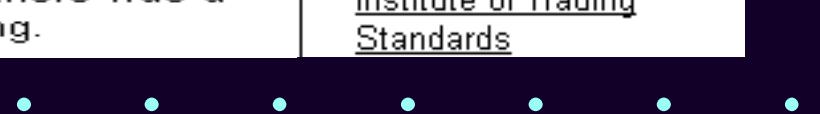
First major food scare linked eggs to salmonella

had investigated the issue and concluded there was a link between eggs and salmonella poisoning.

Salmonella came to prominence when Edwina Currie MP, a junior health minister, said in 1988 that most eggs in Britain were infected with the bacterium.

Her comments sparked a public outcry and two weeks later she resigned.

But by early 1989, the House of Commons Select Committee on Agriculture



Relevant Stories

13 Jan 98 | UK
[Food expert warns of crisis](#)

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[BSE - The story so far](#)

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Background

CNN.com food > news

Editions | myCNN | Video | Audio | Headline News Brief | Feedback

MAINPAGE

WORLD

U.S.

WEATHER

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SPORTS

TECHNOLOGY

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HEALTH

Recipes **Resource** **Restaurant**

Egg fans uneasy about FDA's 'No over easy' advice

December 8, 2000

food central > news > storypage

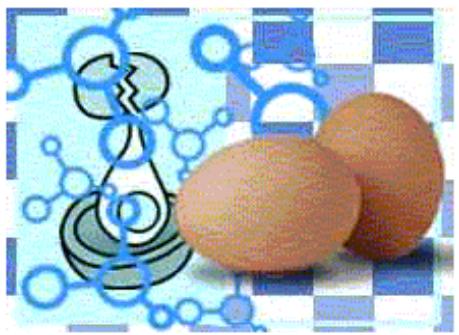
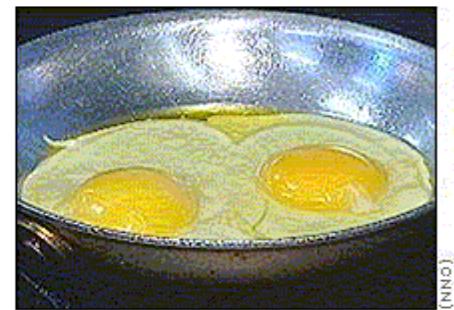
Use the pulldown menus to visit other Food Central sections:

Recipes **Resources** **Restaurants**

Egg-safety measures to be announced today

July 1, 1999
Web posted at: 8:45 a.m. EDT (1245 GMT)

WASHINGTON (CNN) -- A government report says federal agencies need to do a better job of fighting salmonella contamination in eggs, and, as a result, new safety initiatives will be announced Thursday.



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Background

BBC NEWS

News in Audio News in Video Newyddion Hobocri Noticias 国際新聞 香港廣播

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On Air Feedback Low Graphics Help

Thursday, June 18, 1998 Published at 12:14 GMT 13:14 UK

HEALTH LATEST.

Health

Chickens to be vaccinated against salmonella

BBC HOMEPAGE | WORLD SERVICE | EDUCATION

BBC NEWS

You are in: **Health**

Saturday, 10 February, 2001, 00:40 GMT

Salmonella infection cases drop

Eggs from vaccinated hens have helped cut salmonella cases

The screenshot shows the BBC News homepage with a focus on health stories. The main headline is 'Chickens to be vaccinated against salmonella'. Below it is another story about 'Salmonella infection cases drop'. The BBC logo is visible at the top and bottom of the page. The navigation bar on the left includes links for various news categories like World, UK, and Entertainment. The right sidebar contains links for 'Background Briefings' and 'Medical notes'.

[low graphics version](#) | [feedback](#) | [help](#)

BBC NEWS

You are in: **Health**

Saturday, 10 February, 2001, 00:40 GMT

Salmonella infection cases drop

Search BBC News Online

GO

Advanced search options

Launch console for latest audio/video

BBC RADIO NEWS

BBC ONE TV NEWS

WORLD NEWS SUMMARY

BBC NEWS 24 BULLETIN

PROGRAMMES GUIDE

See also:

▶ 05 Feb 01 | Northern Ireland
'One in ten' suffered food poisoning

▶ 06 Sep 00 | Health
Food poisoning 'rife and under-reported'

This screenshot shows a news article titled 'Salmonella infection cases drop'. It features a large image of several eggs. The BBC logo is at the top, and there's a search bar and navigation links on the right side. The text of the article is partially visible at the bottom.

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Aims

To estimate the health impact of the emergence of indigenous foodborne *Salmonella enterica* serotype Enteritidis phage type 4 (IFSE4) on the population of England and Wales during the period 1981 - 2000.

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Methods

Laboratory reports of *S. Enteritidis* PT4 (SE4) to PHLS

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Methods

IID (Population) study

Laboratory reports of *S. Enteritidis* PT4 (SE4) to PHLS

All SE4 illness in England & Wales

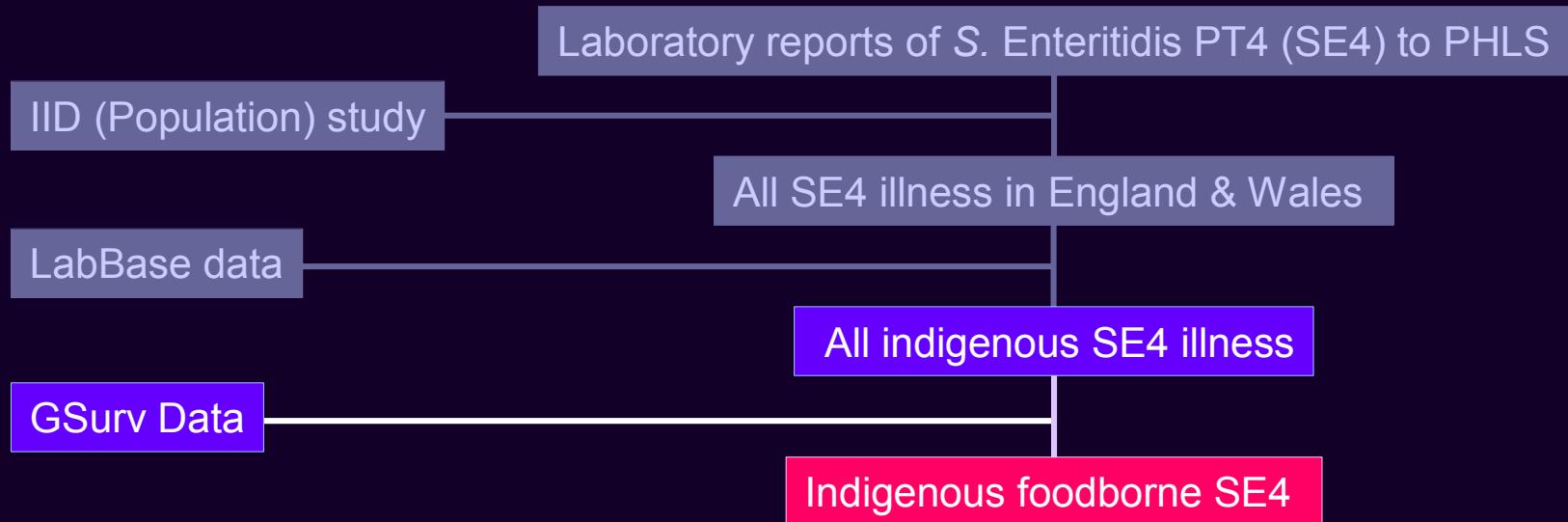
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Methods



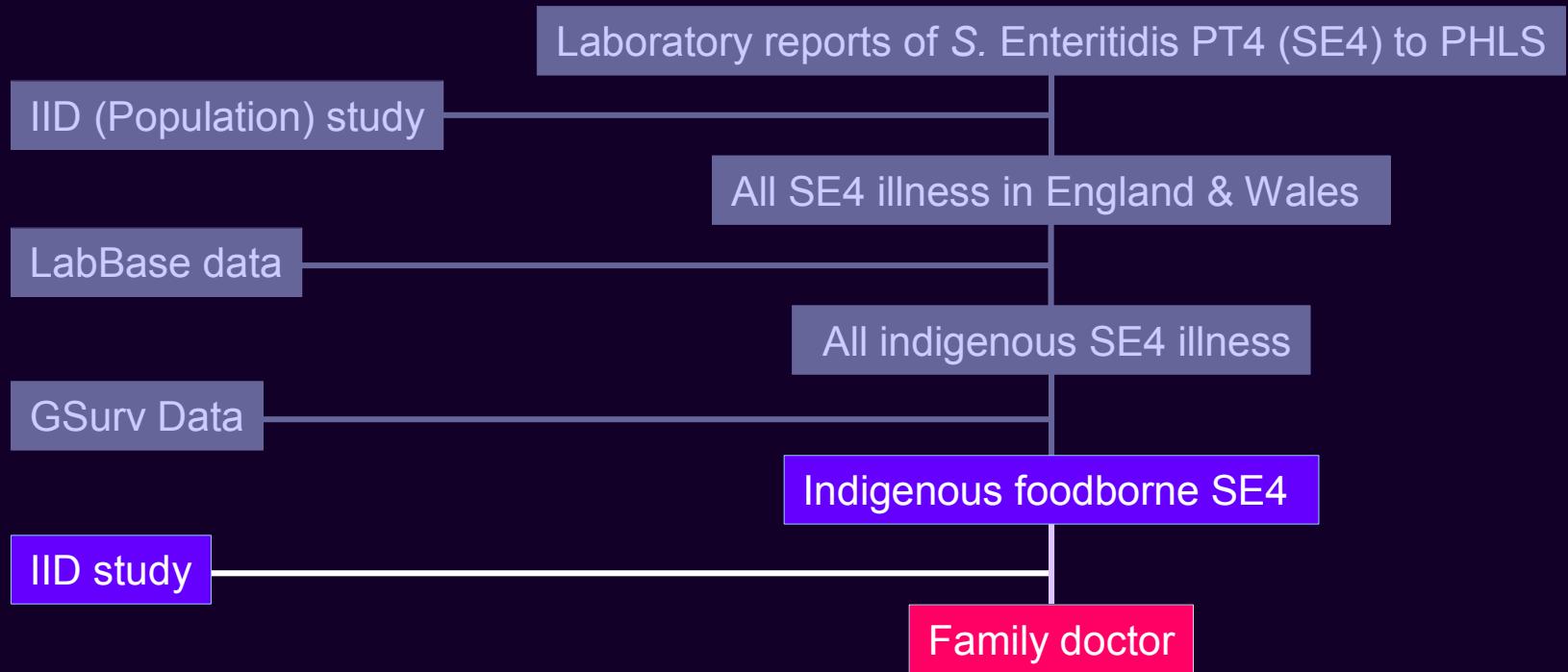
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Methods



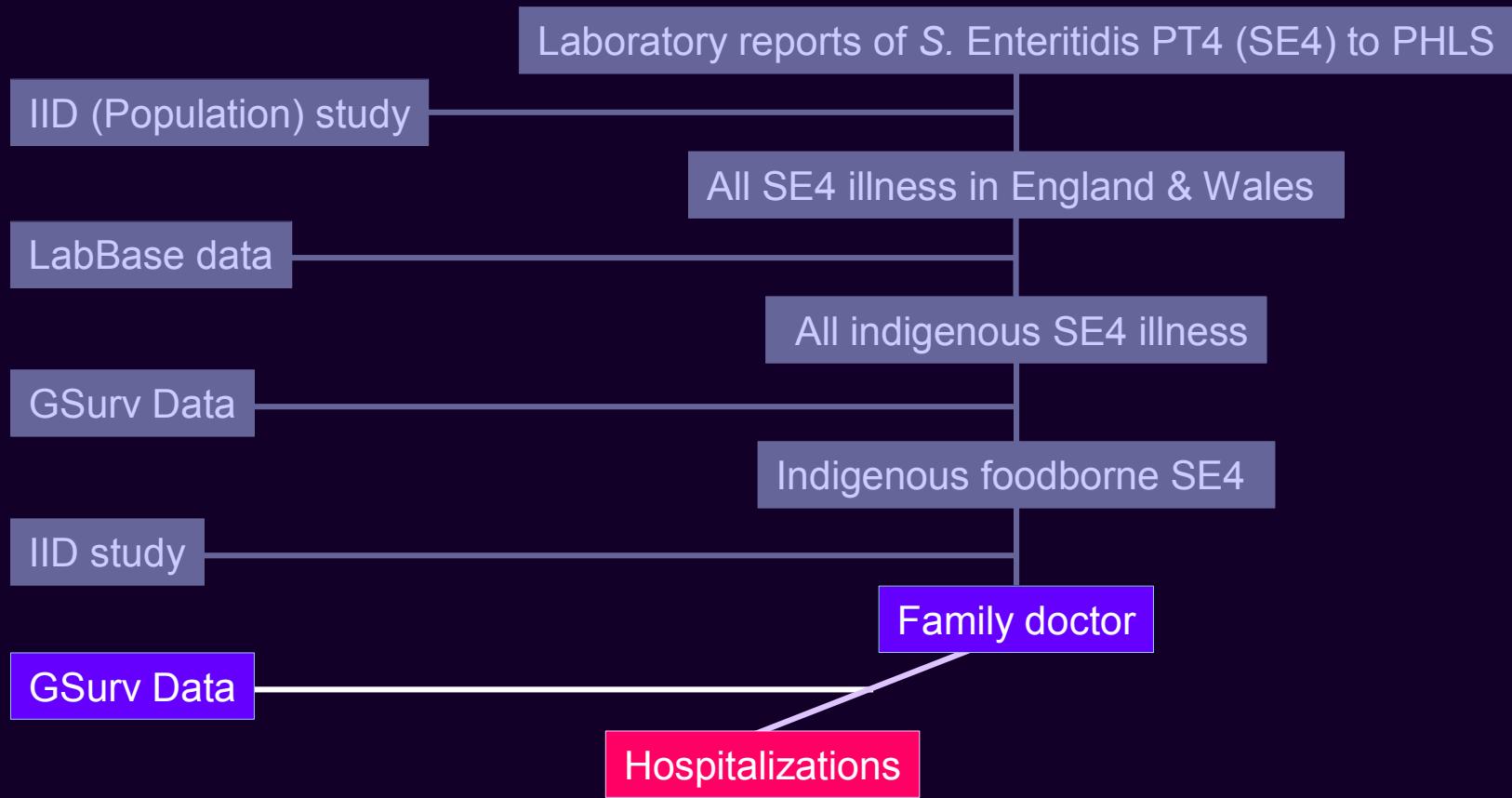
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Methods



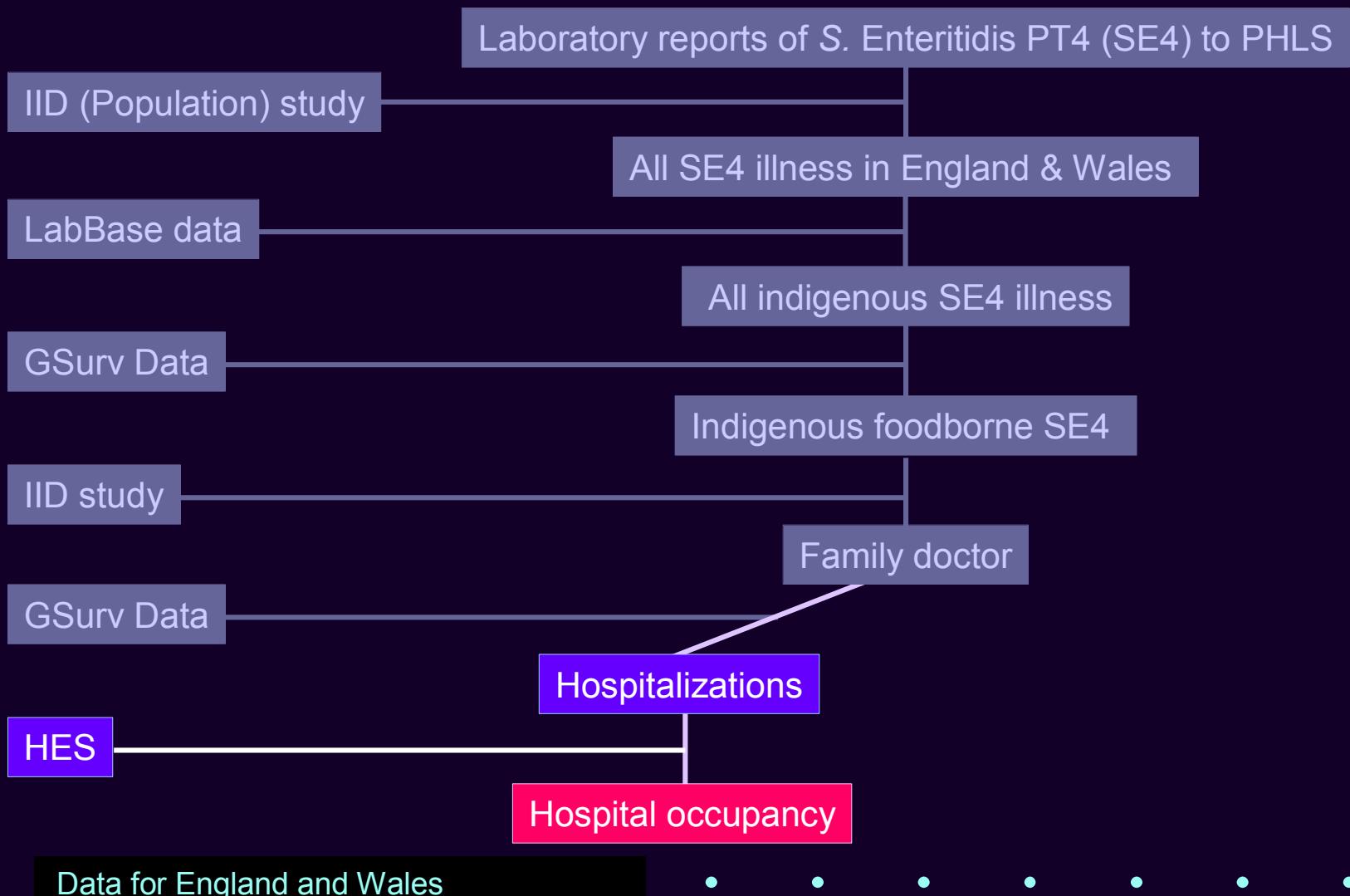
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Methods



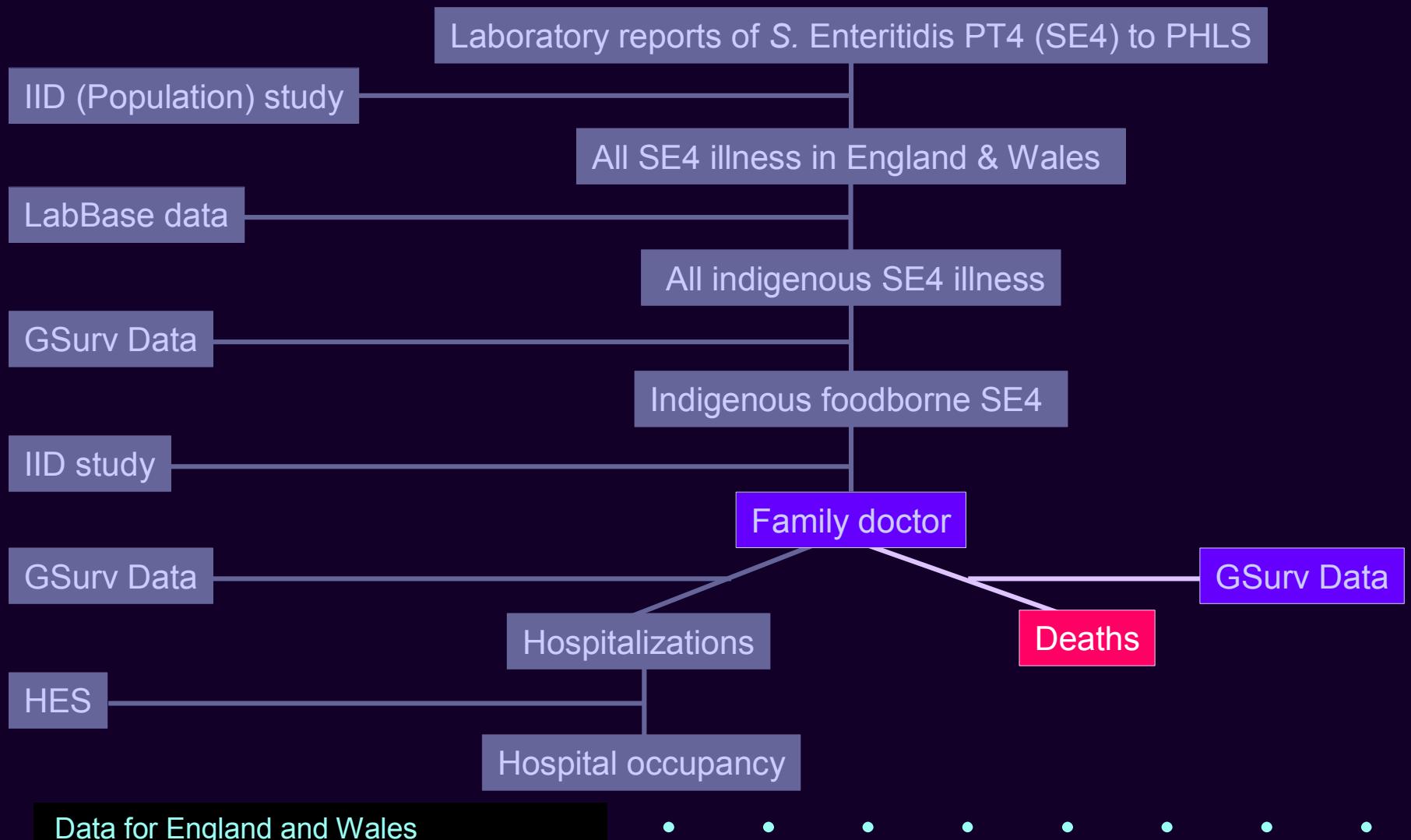
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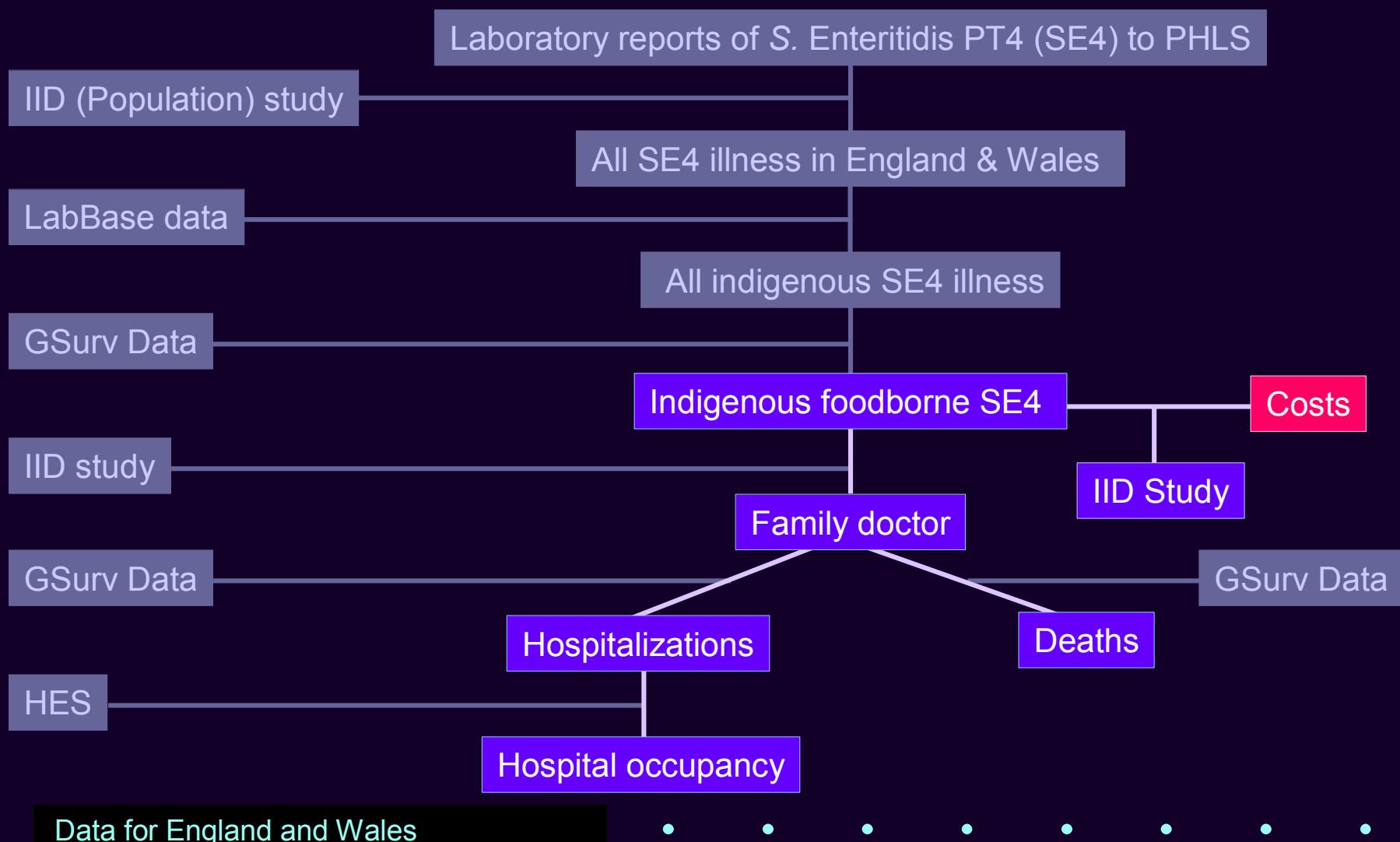


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Methods



Methods



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Results - Illness due to IFSE4

Number

70000
60000
50000
40000
30000
20000
10000
0

1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

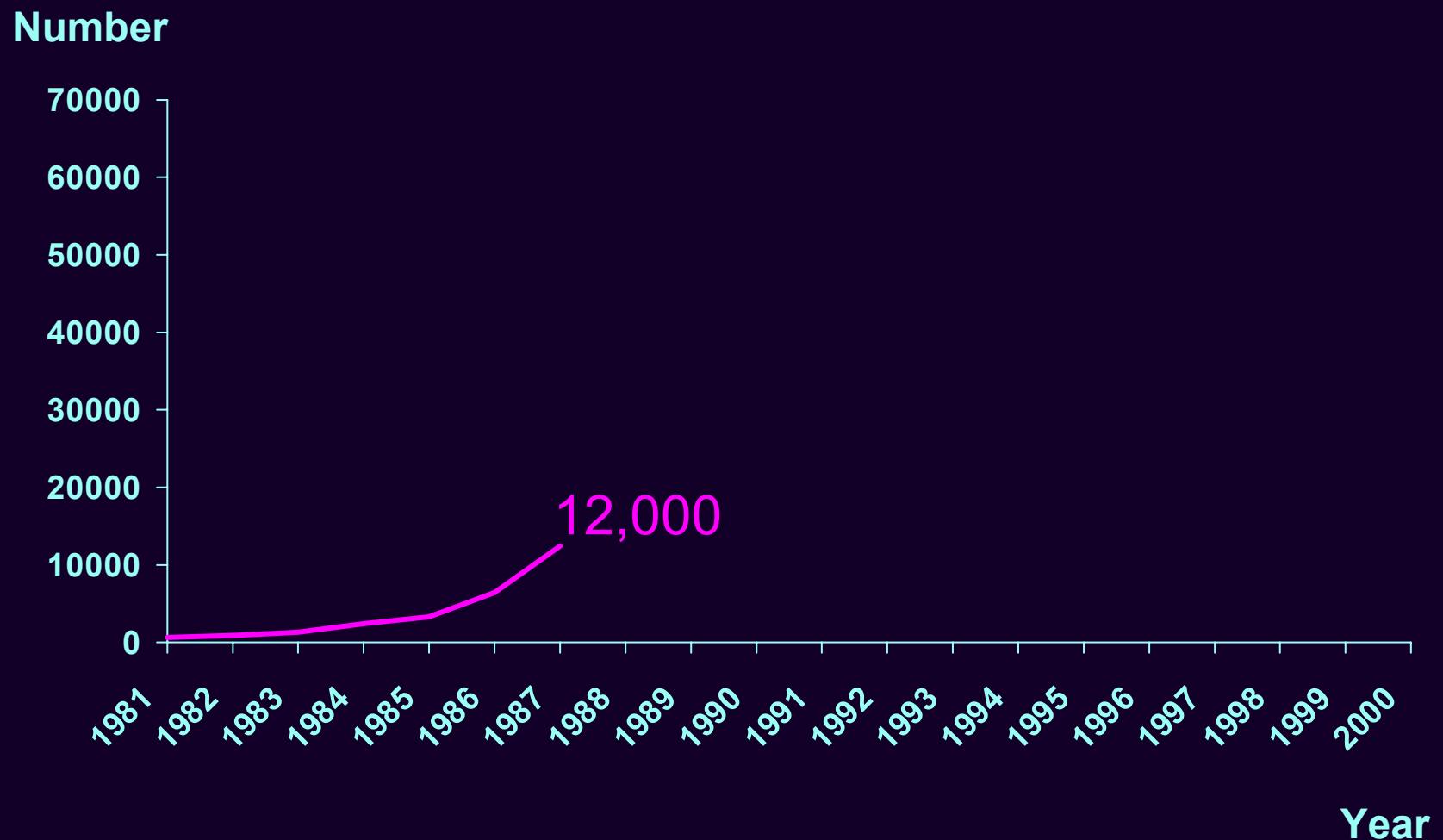
Year

900

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Results - Illness due to IFSE4

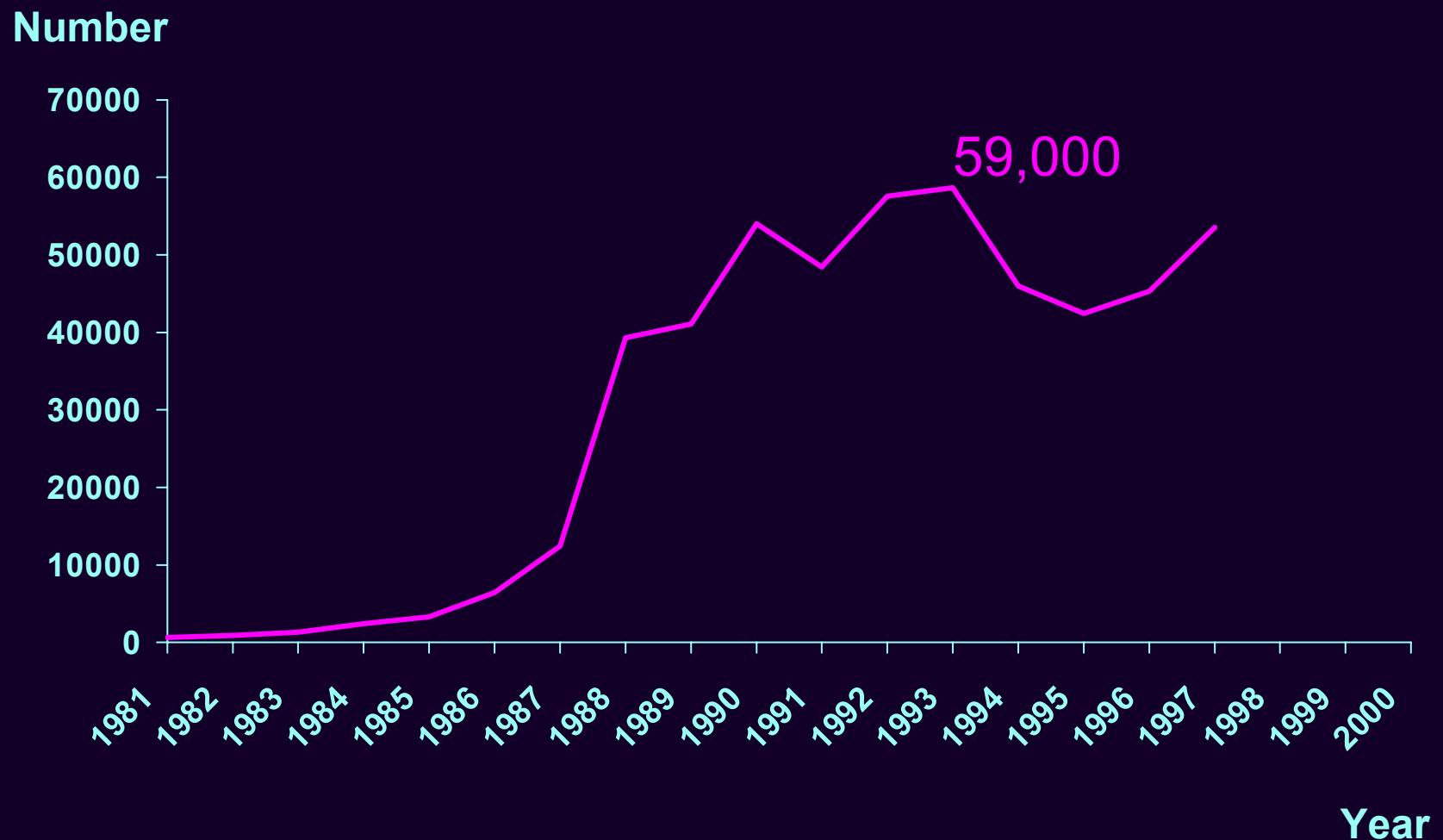


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Results - Illness due to IFSE4

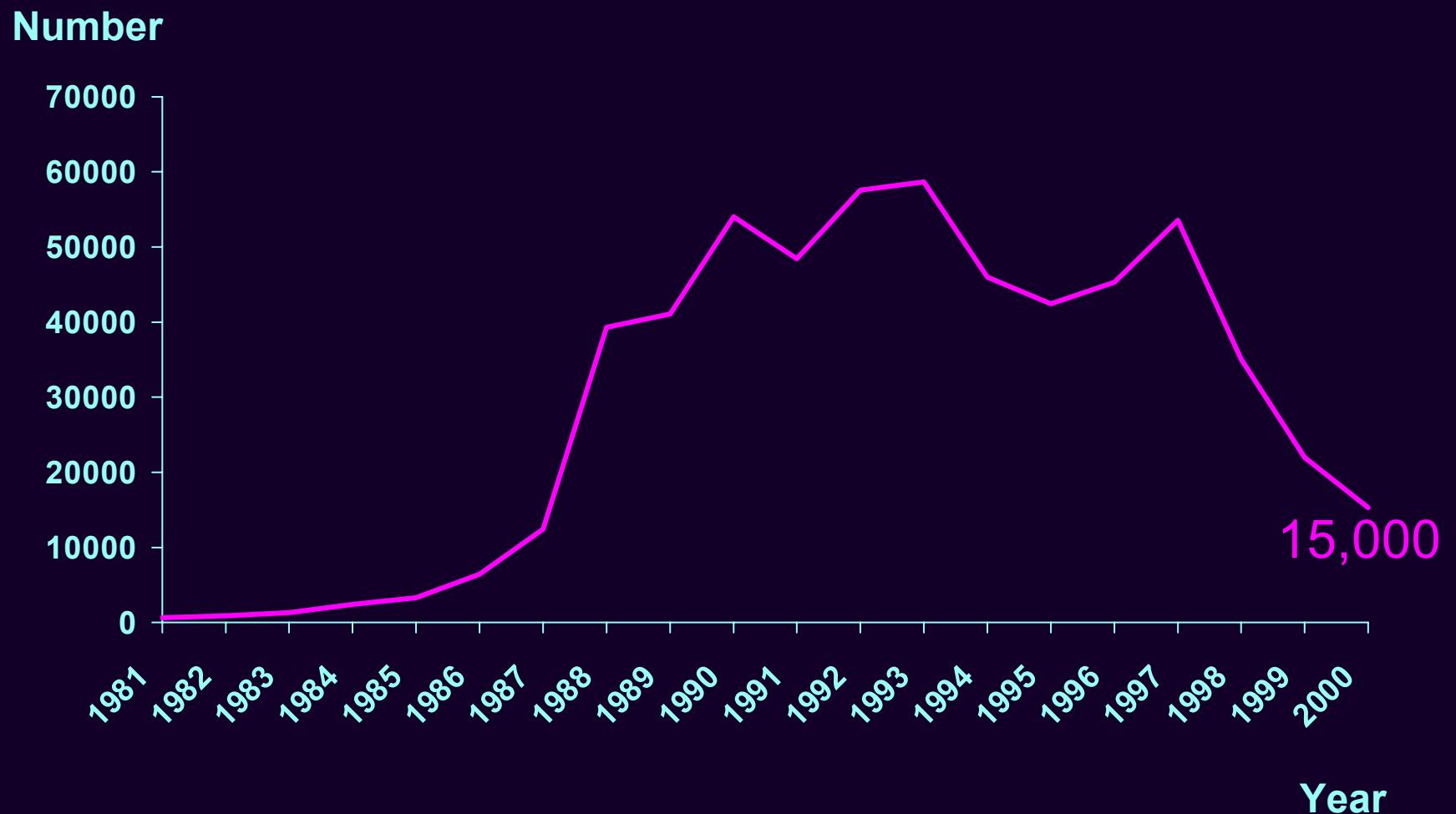


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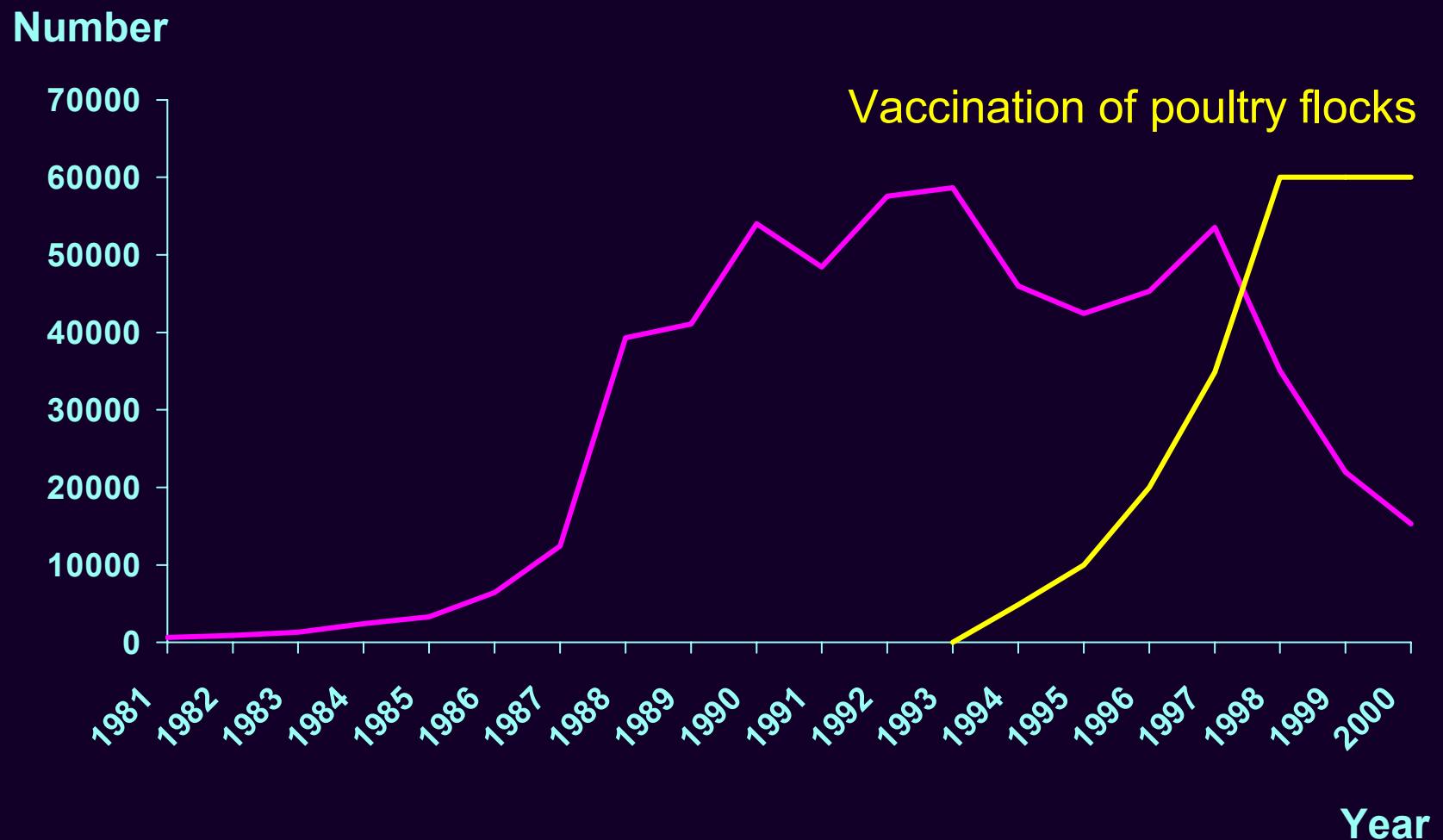
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Results - Illness due to IFSE4



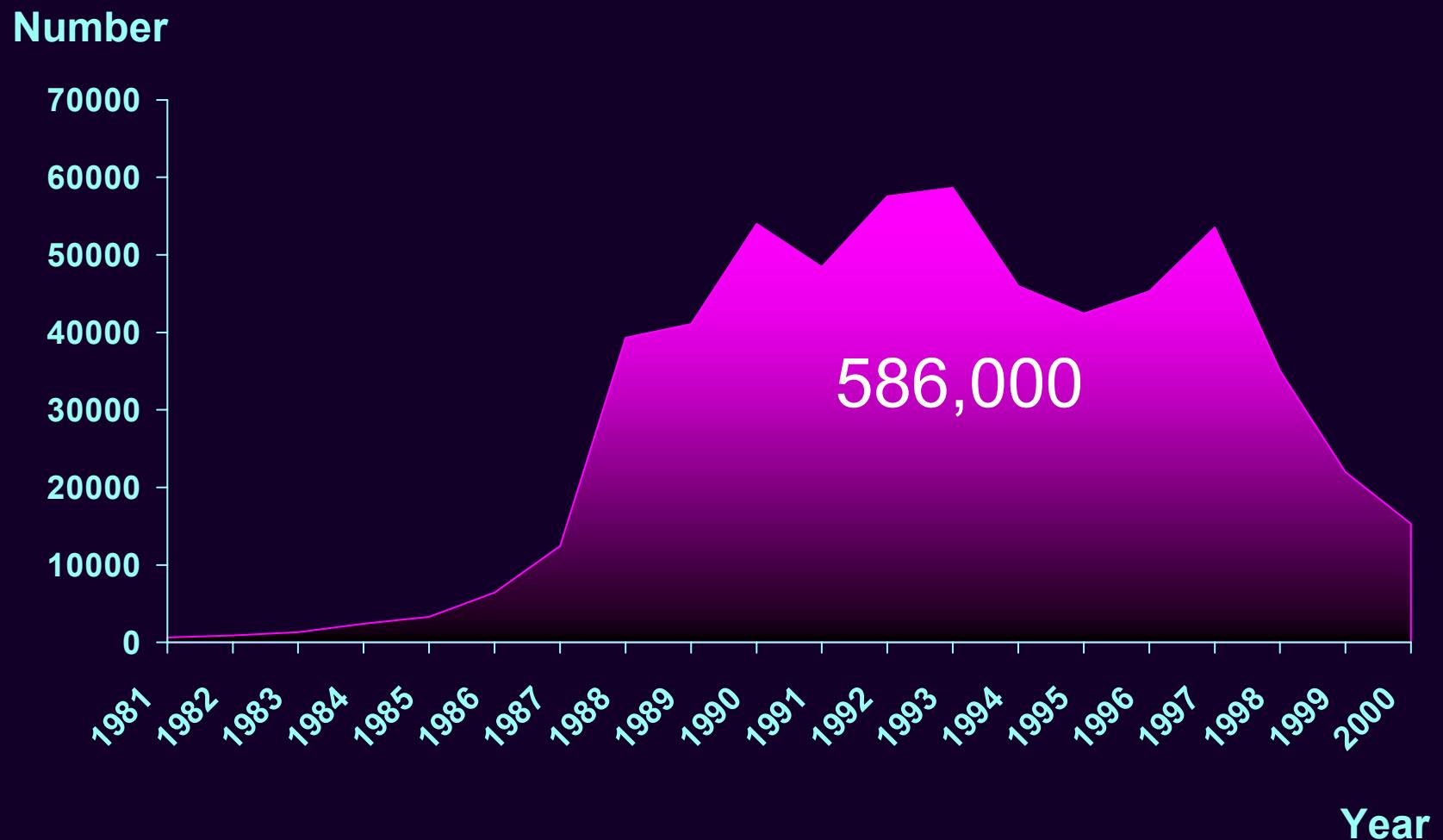
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Results - Illness due to IFSE4



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Results - Illness due to IFSE4



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Results - Health impact of IFSE4

- ii 419,000 patients presenting to family doctors
- ii 18,000 hospitalizations (acute phase)
- ii 104,000 patient days in hospital (acute phase)
- ii 1,300 deaths

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Results - Illness due to IFSE4

Number

70000

60000

50000

40000

30000

20000

10000

0

1991 1992

1993

1994

1995

1996

1997

1998

1999

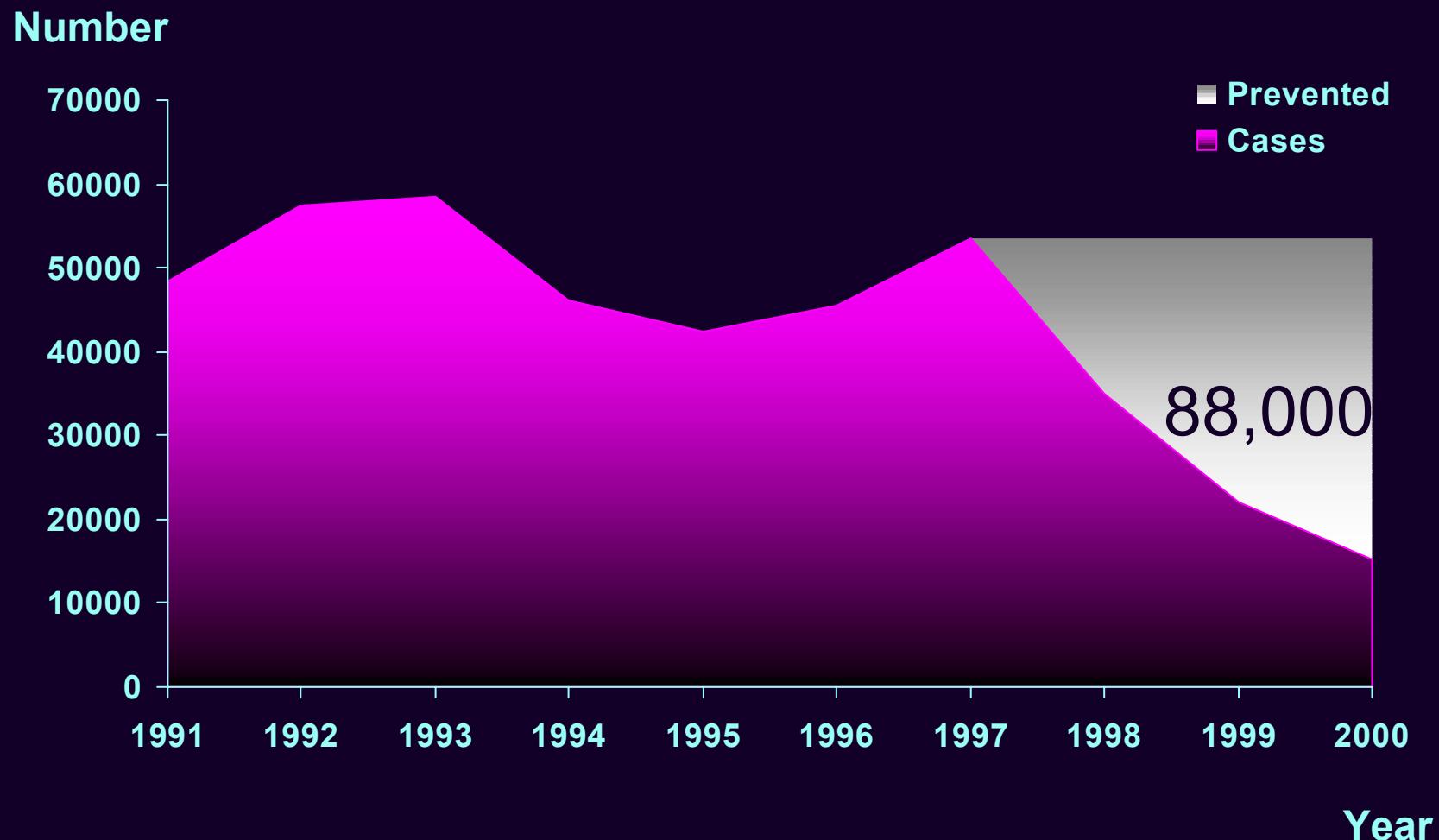
2000

Year



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Results - Illness prevented



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Results - Impact 1998 - 2000

Estimated prevention of:

- ii 80,000 illnesses
- ii 63,000 people presenting to family doctors
- ii 2,700 hospitalizations
- ii 16,000 bed days
- ii 190 deaths

Estimated cost saving of: \$48,000,000 (1995 prices)

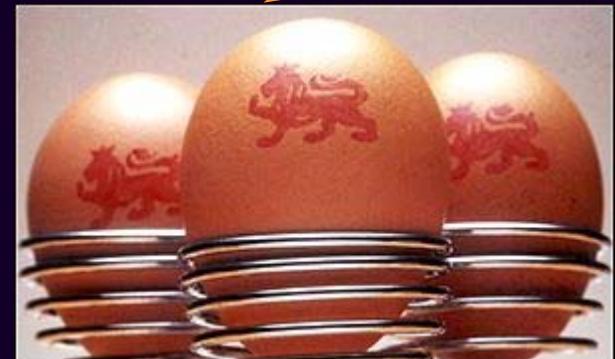
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Conclusions

- ii IFSE4 - profound impact
- ii Sharp decline following interventions by the food industry
- ii Benefits to individuals
- ii Savings to the Health Service

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Eggs follow hens



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Hens follow eggs



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Interventions should follow science



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Science should follow interventions



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Moral

Good science can
make a difference.

