



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



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**London**  
**United Kingdom**



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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

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# Background

**BBC NEWS**

## 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

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

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

## Relevant Stories

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# Background

**CNN.com** food > news

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

December 8, 2000

**CNNi**  
interactive  
CNN.com

food central > news > storypage

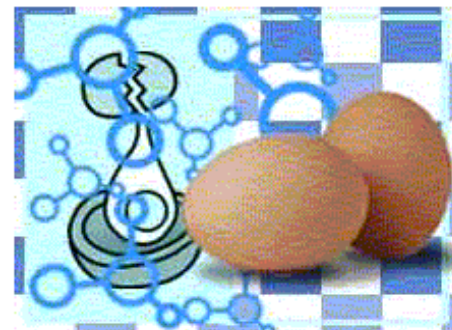
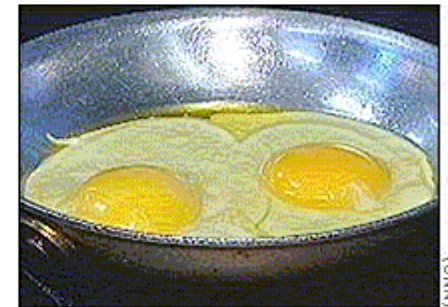
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## Egg-safety measures to be announced today

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.



# Background

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HEALTH LATEST

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

## Health

### Chickens to be vaccinated against salmonella

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Saturday, 10 February, 2001, 00:40 GMT

## Salmonella infection cases drop



Eggs from vaccinated hens have helped cut salmonella cases

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**See also:**

- 05 Feb 01 | Northern Ireland  
'One in ten' suffered food poisoning
- 06 Sep 00 | Health  
Food poisoning 'rife and under-reported'

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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.

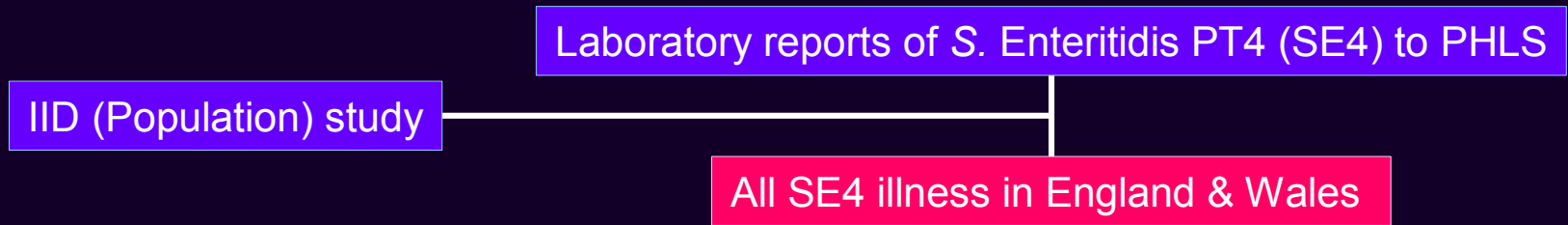
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# Methods

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

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# Methods





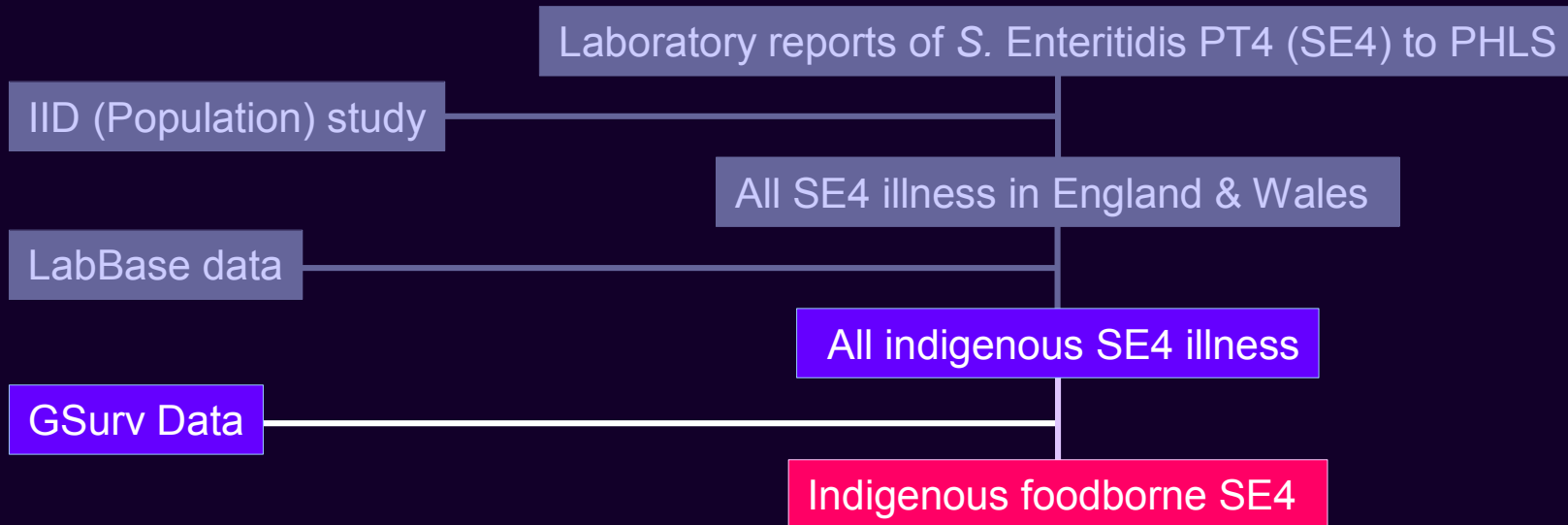
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# Methods



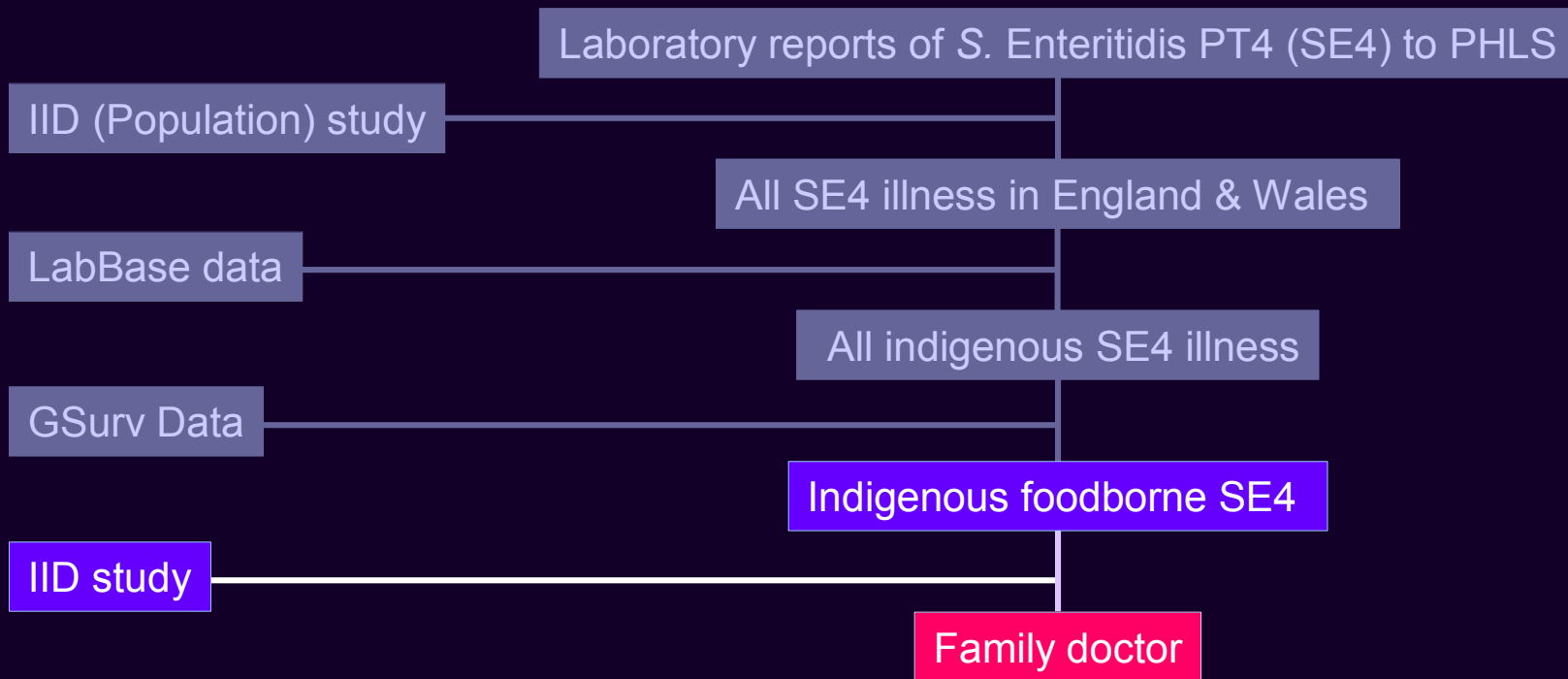
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# Methods

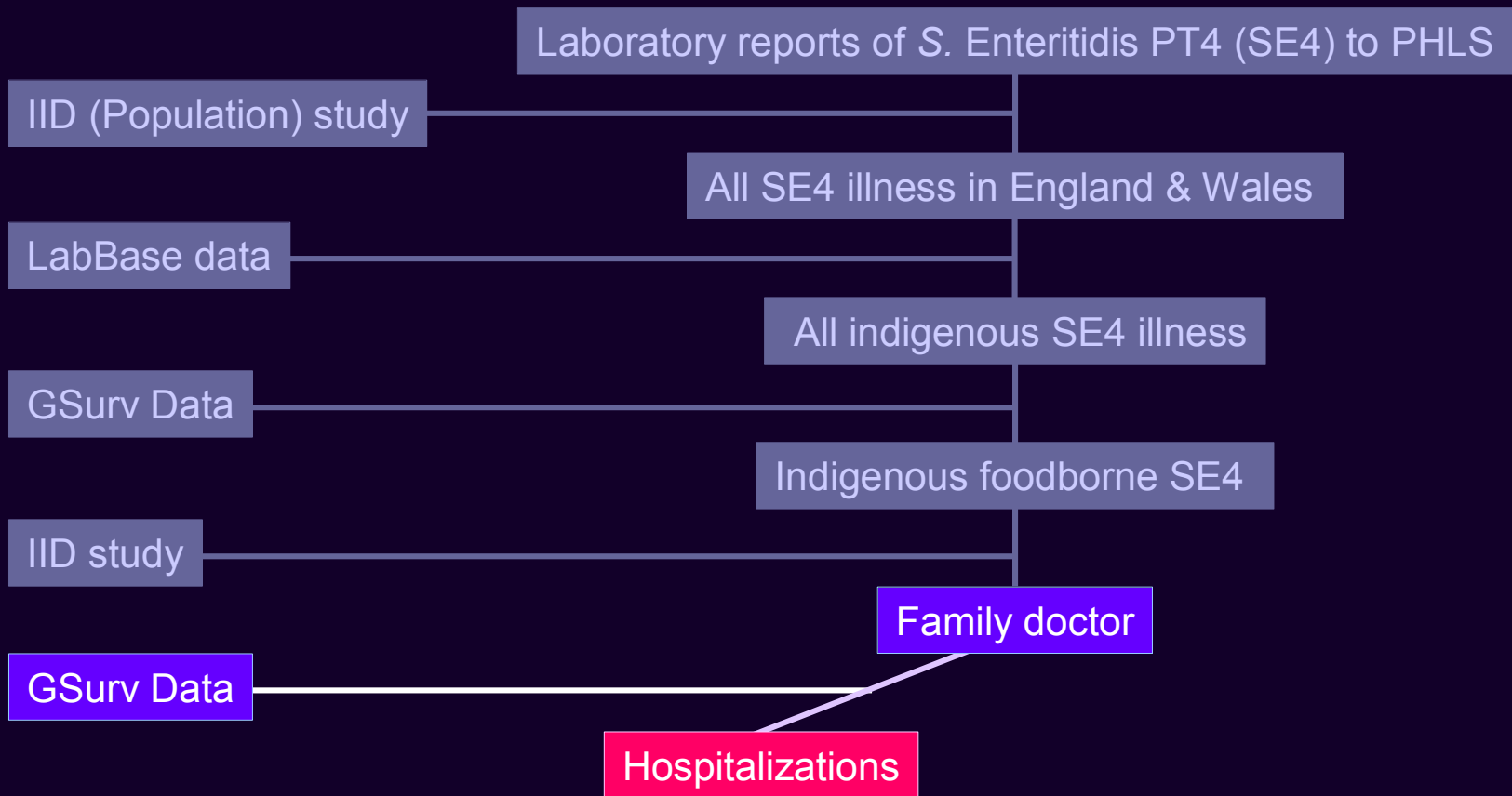


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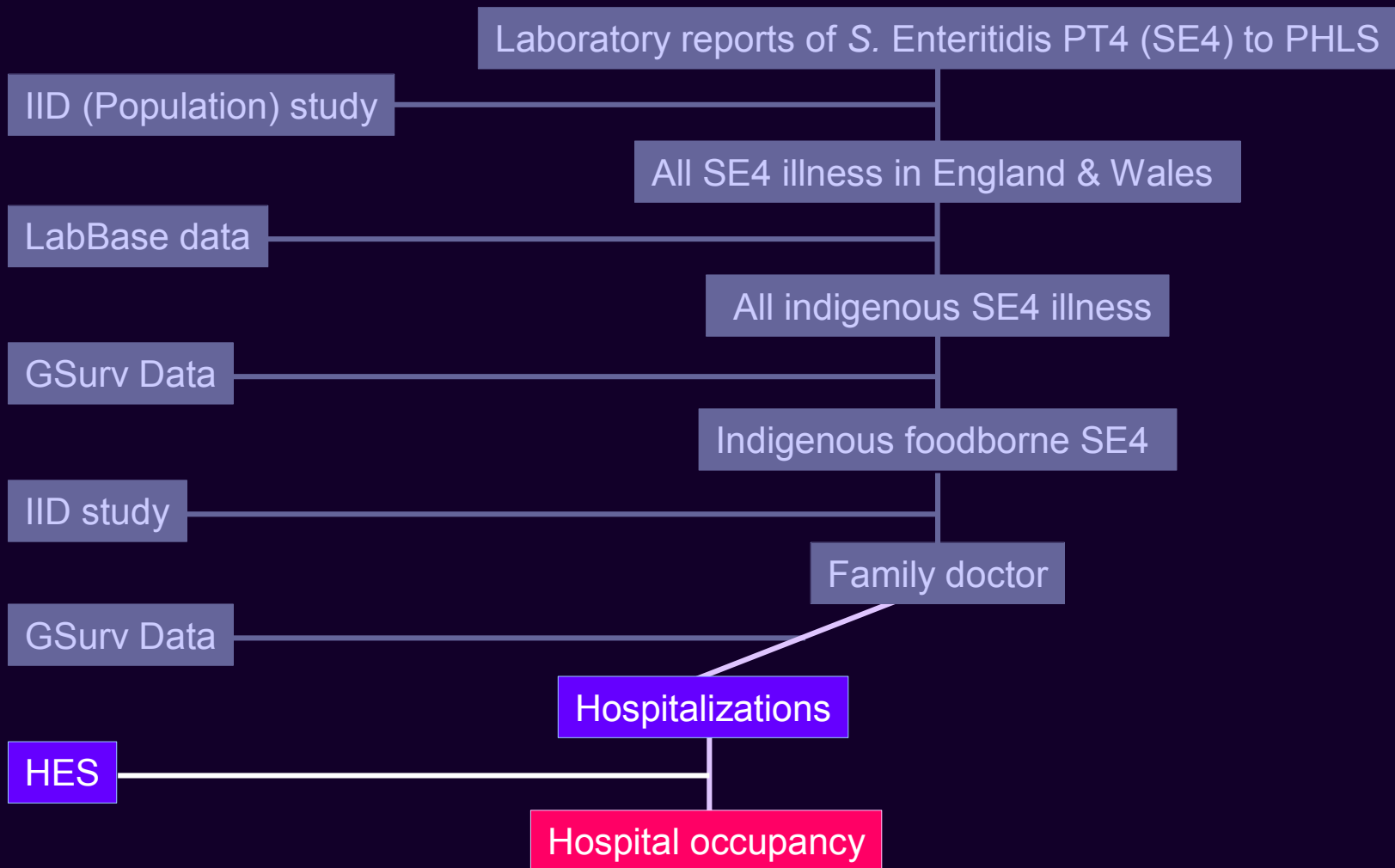
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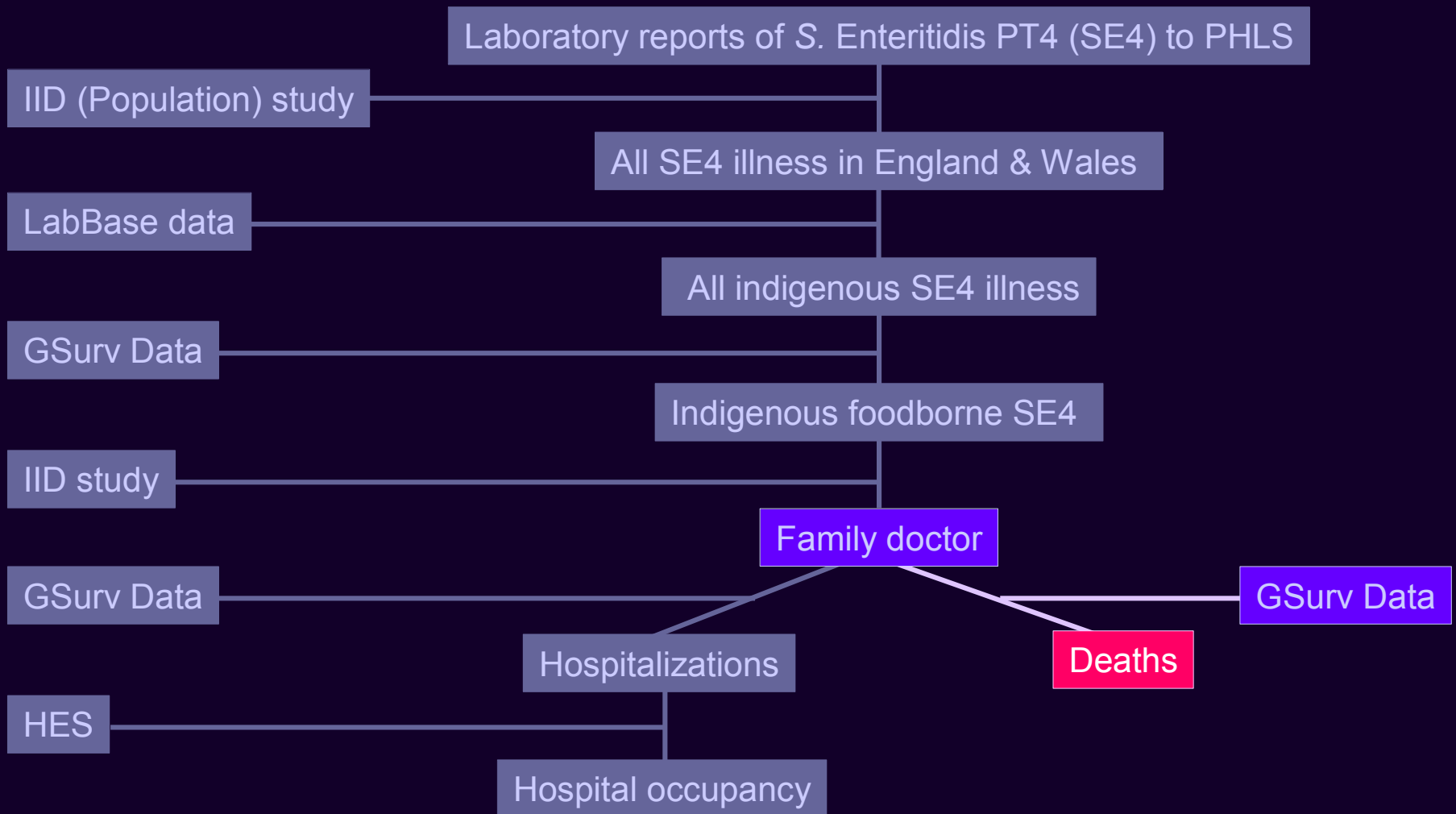
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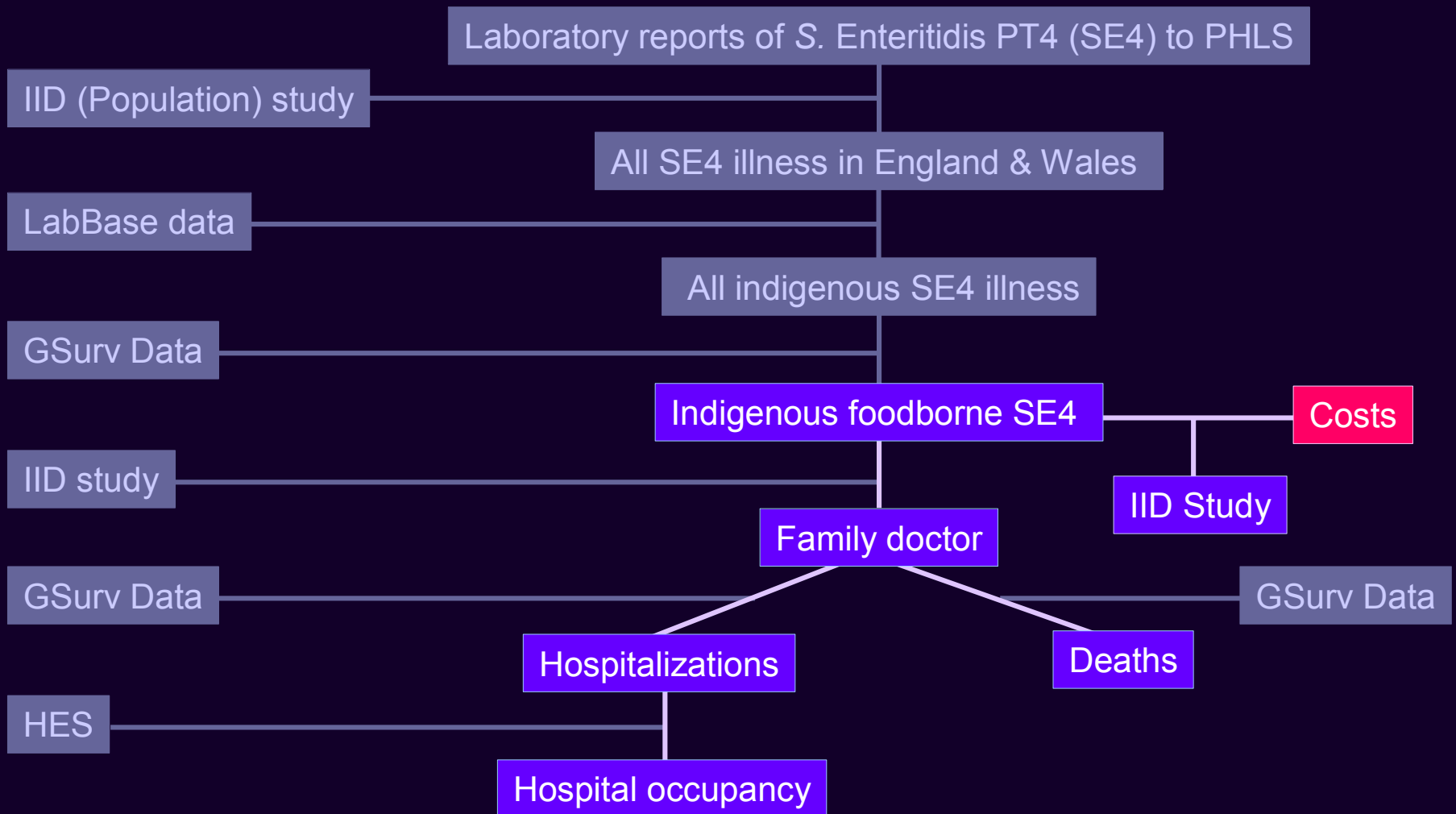
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# Methods



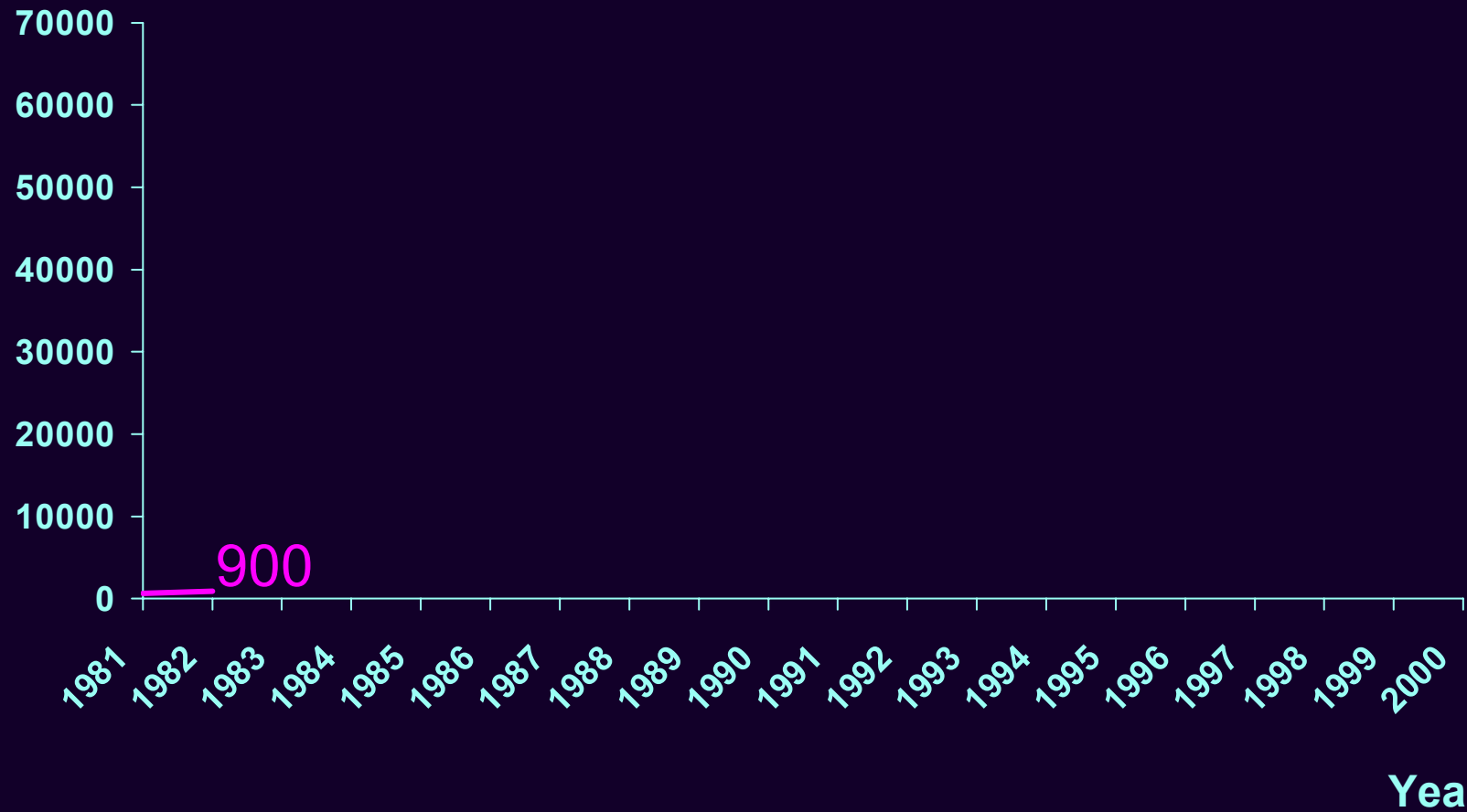
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# Results - Illness due to IFSE4

Number



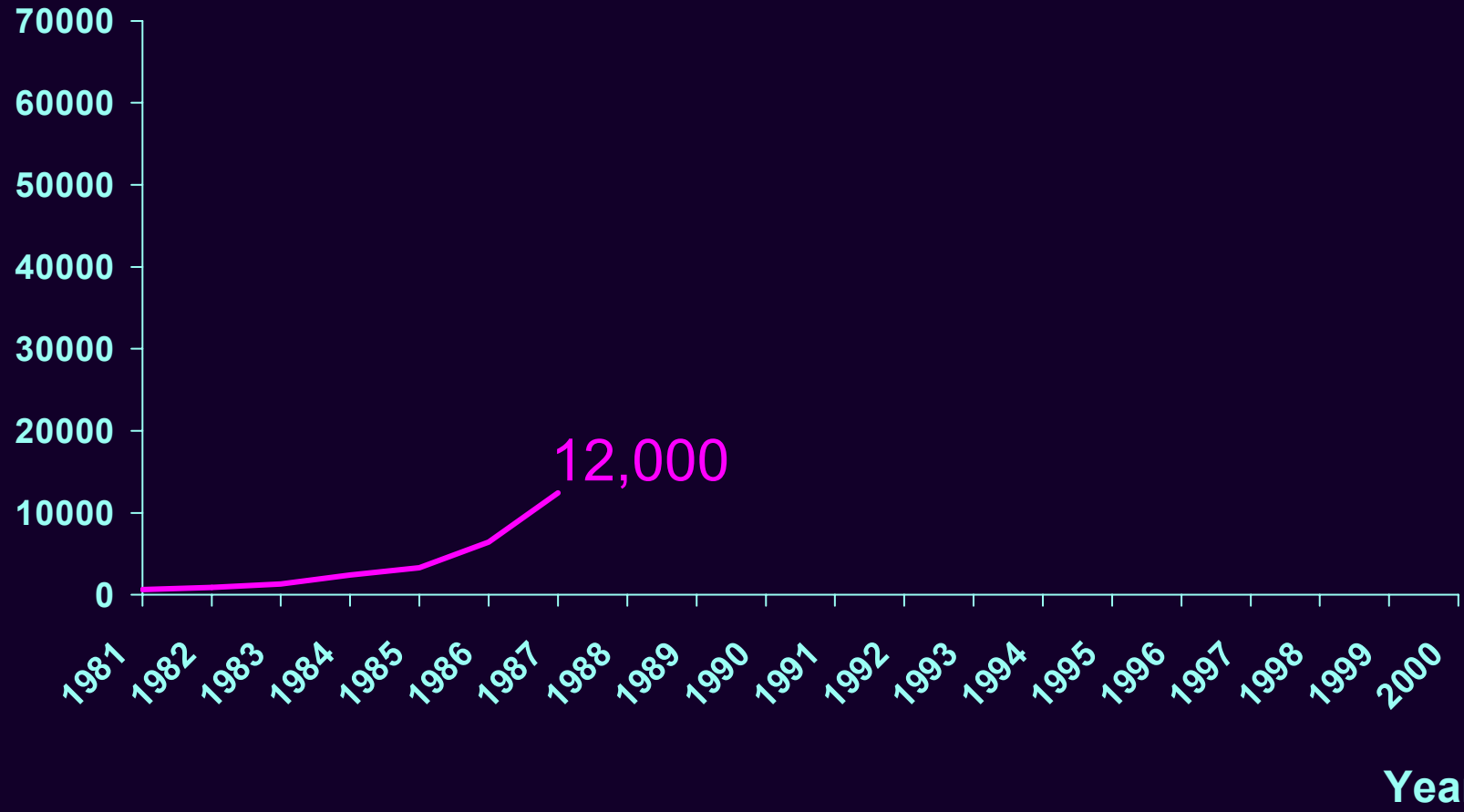
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# Results - Illness due to IFSE4

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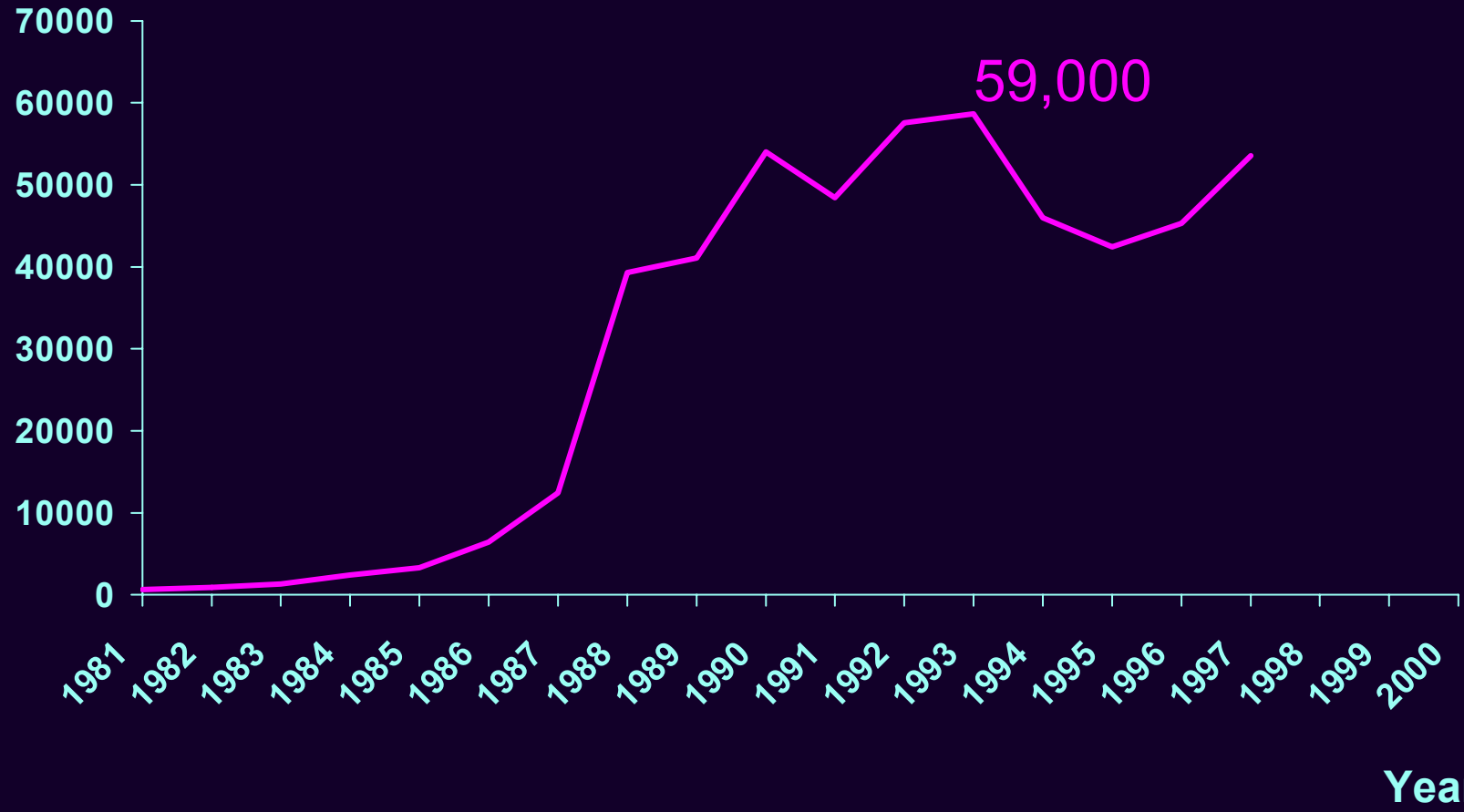


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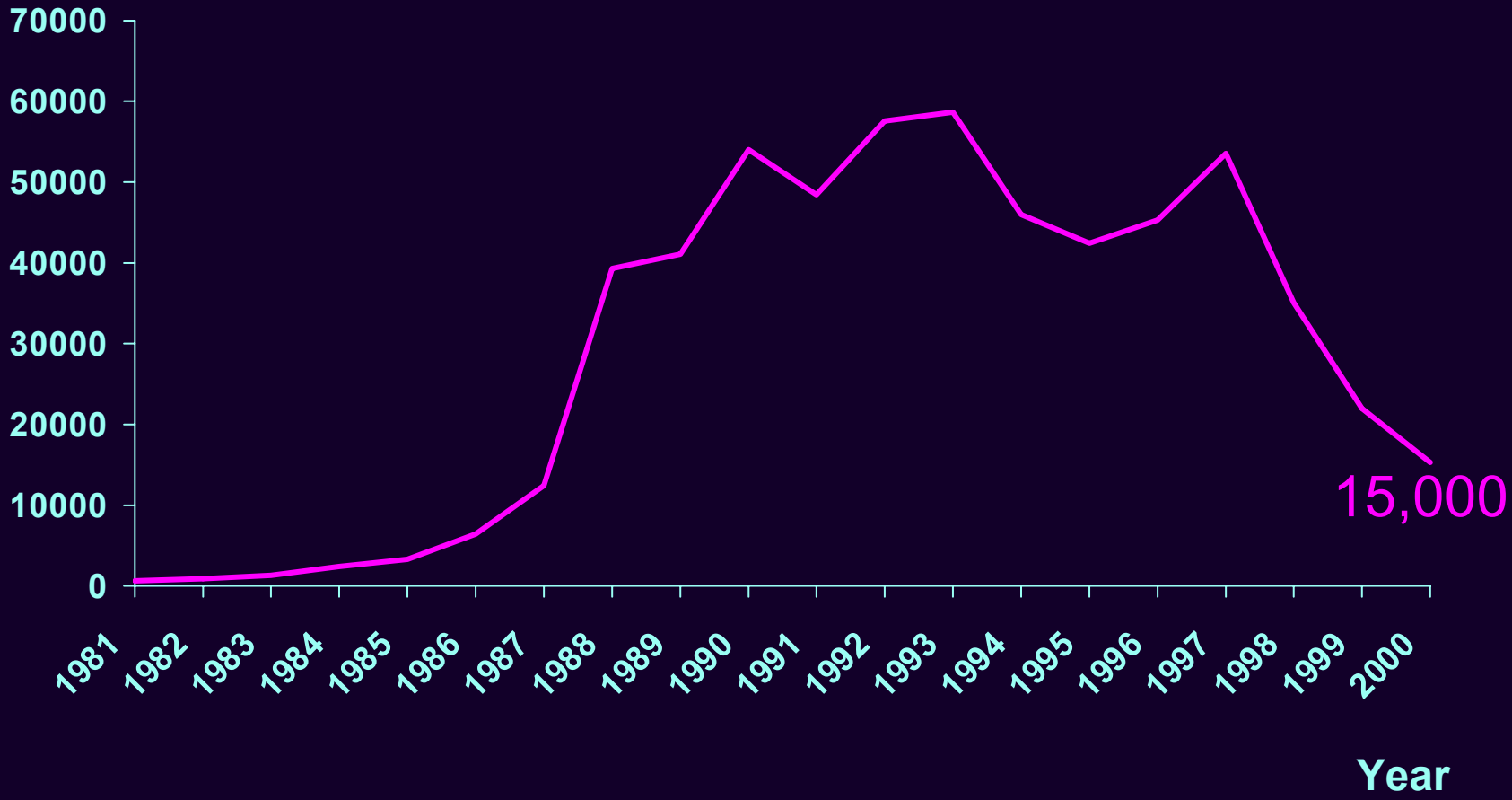


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# Results - Illness due to IFSE4

Number



15,000

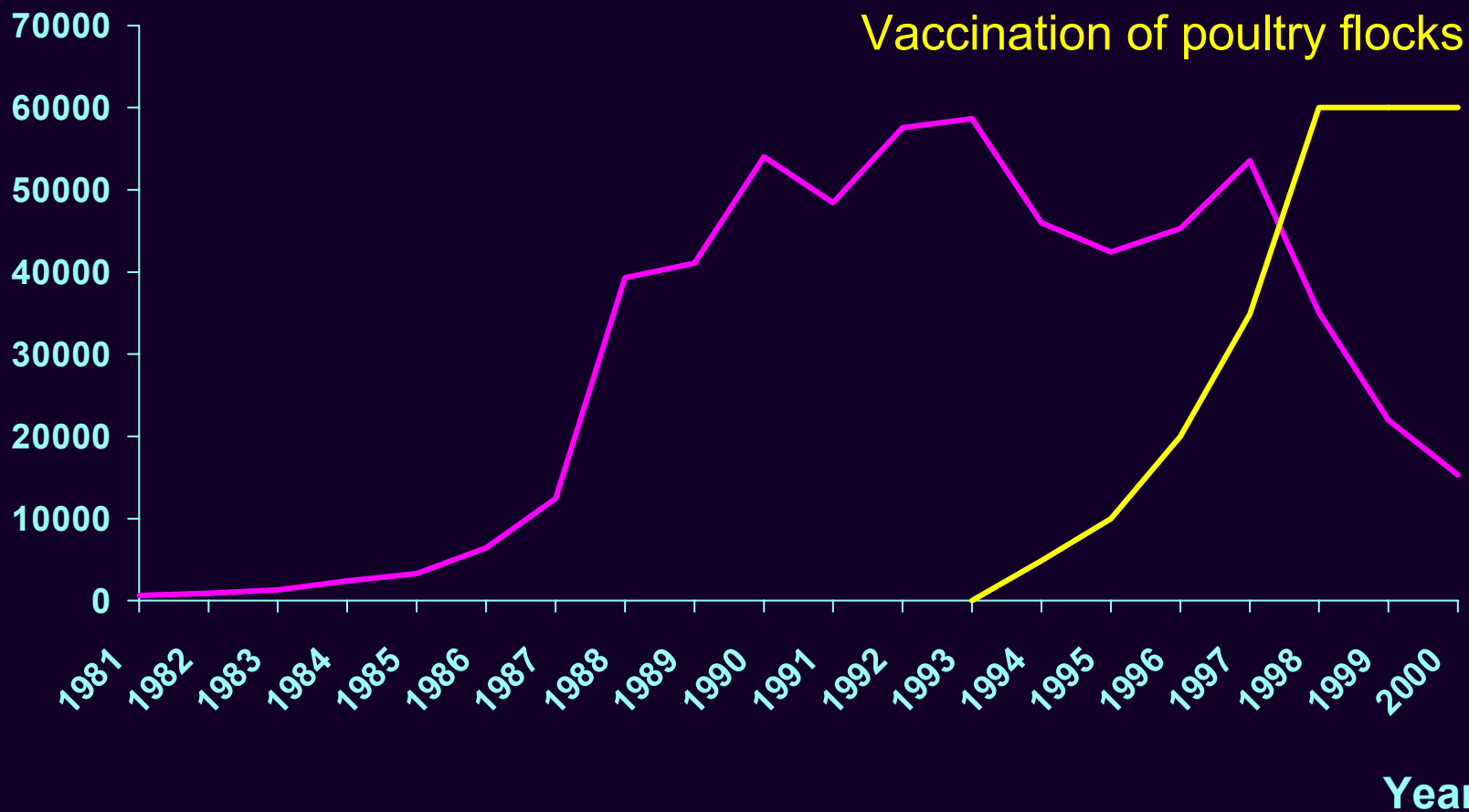
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# Results - Illness due to IFSE4

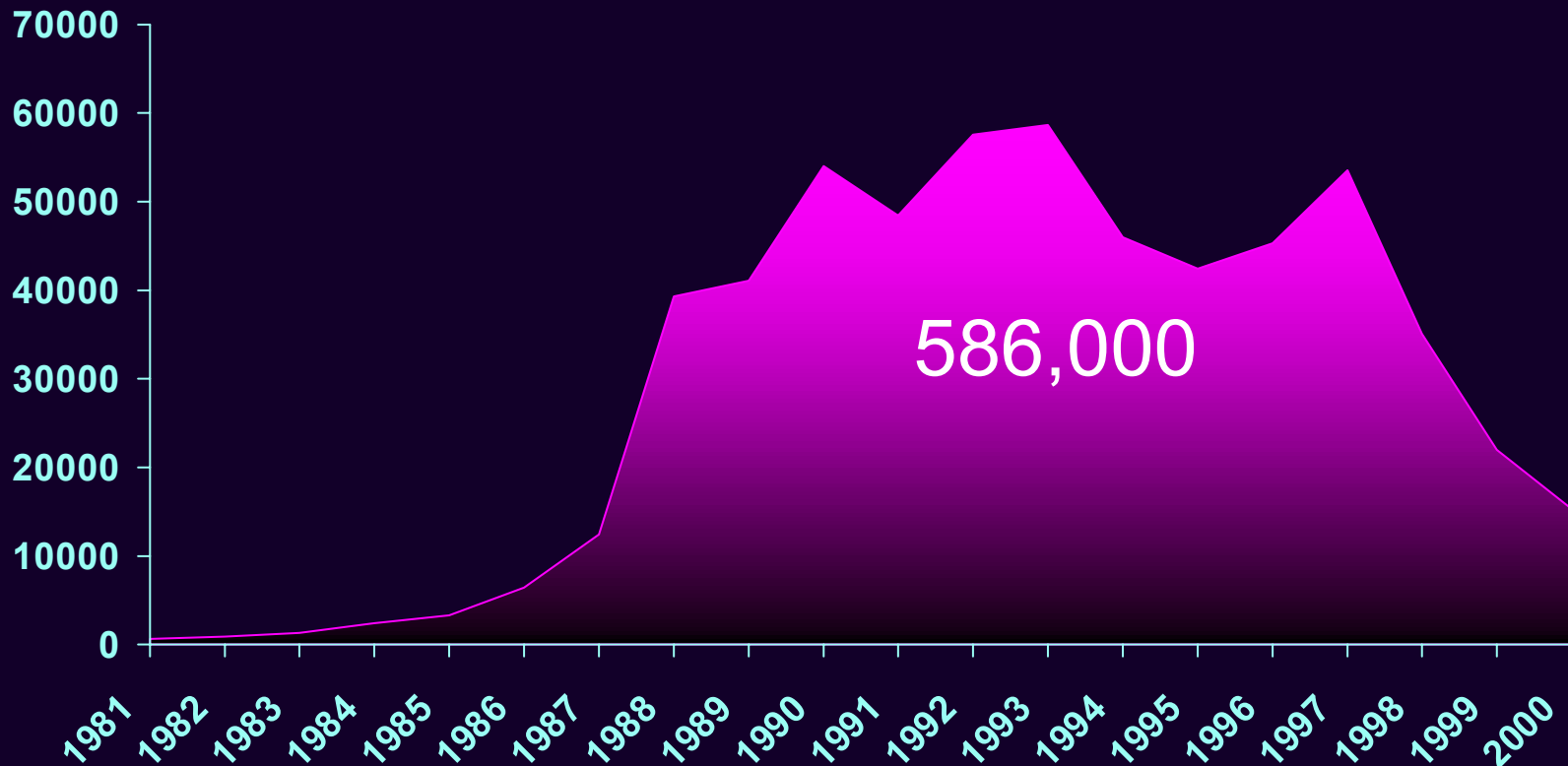
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# Results - Illness due to IFSE4

Number



Year

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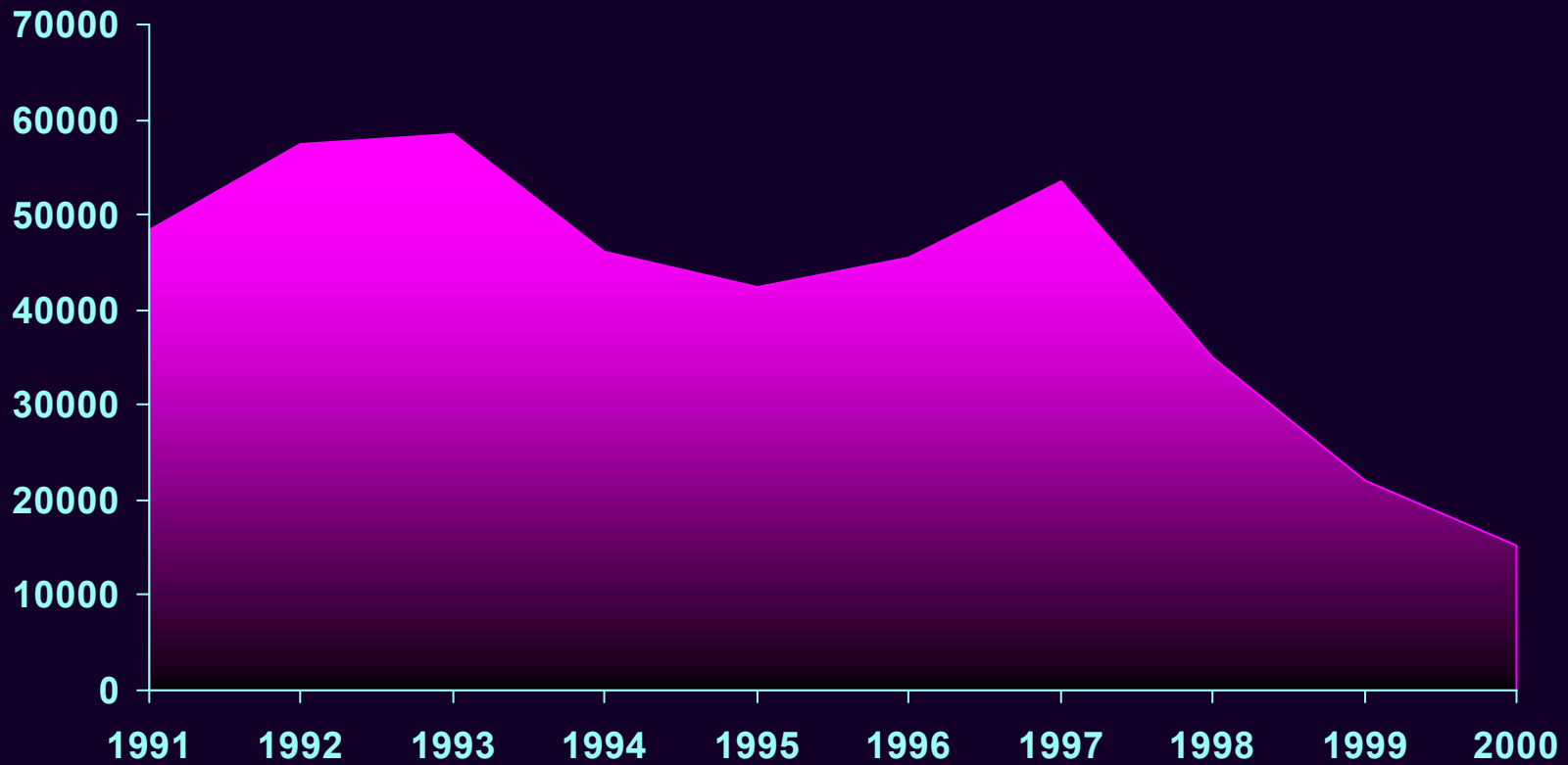
## Results - Health impact of IFSE4

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

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# Results - Illness due to IFSE4

Number



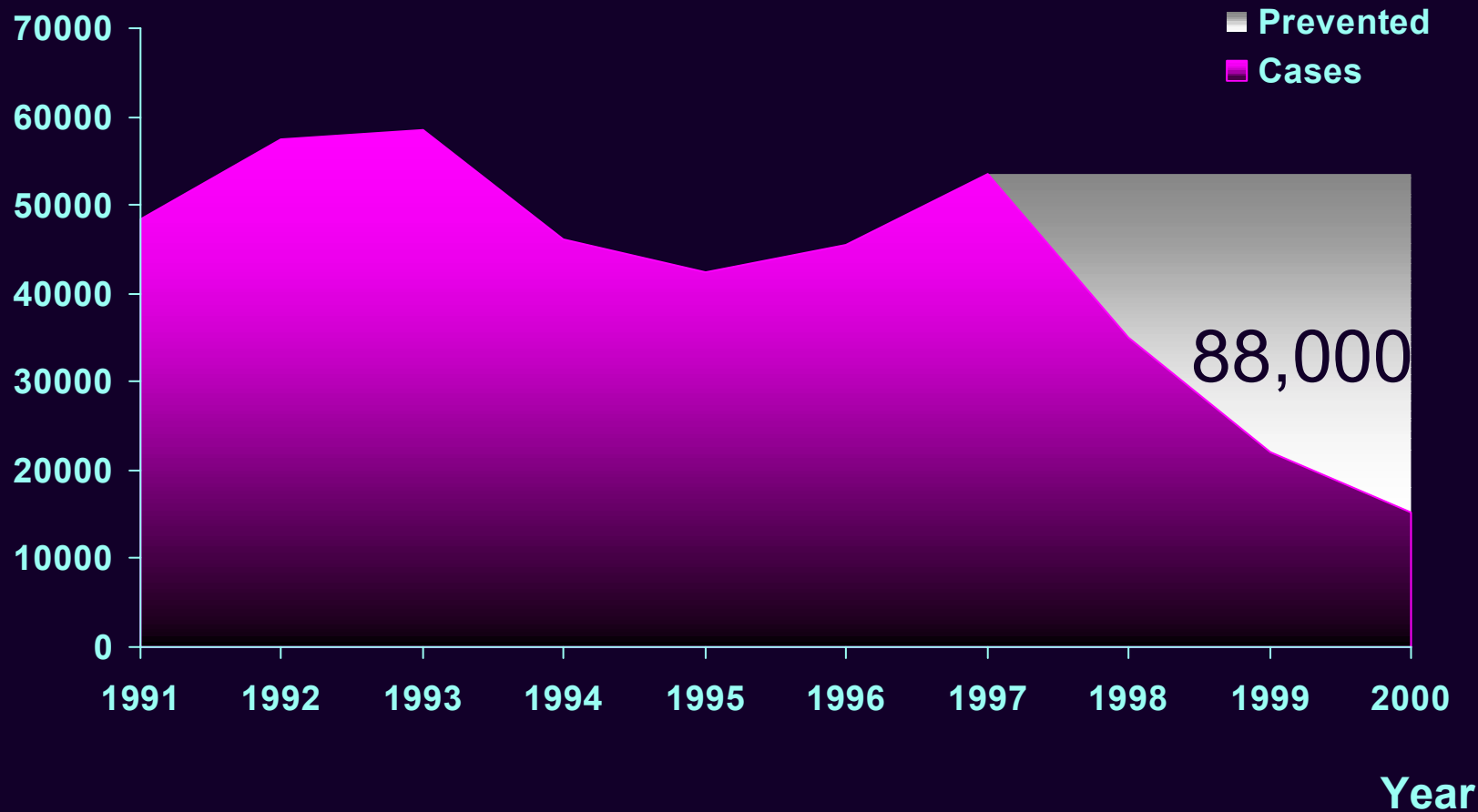
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# Results - Illness prevented

Number





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## Results - Impact 1998 - 2000

Estimated prevention of:

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

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

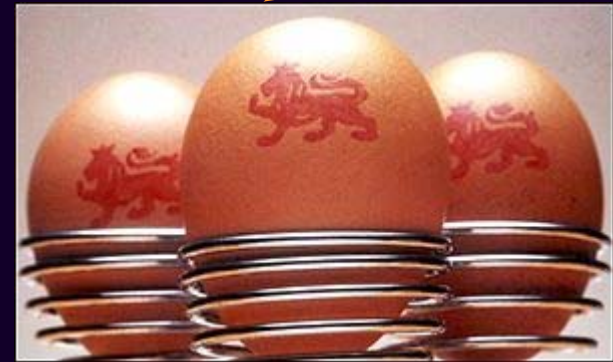
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# Conclusions

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

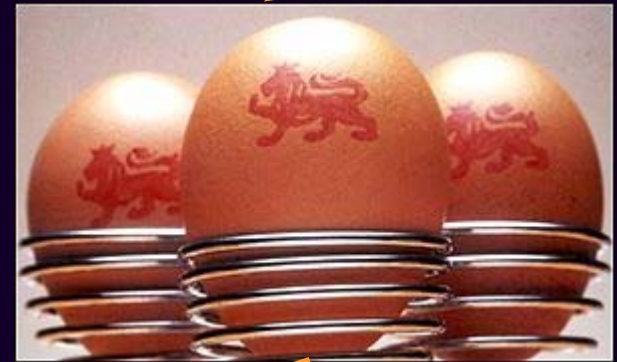
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# Eggs follow hens



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# Hens follow eggs



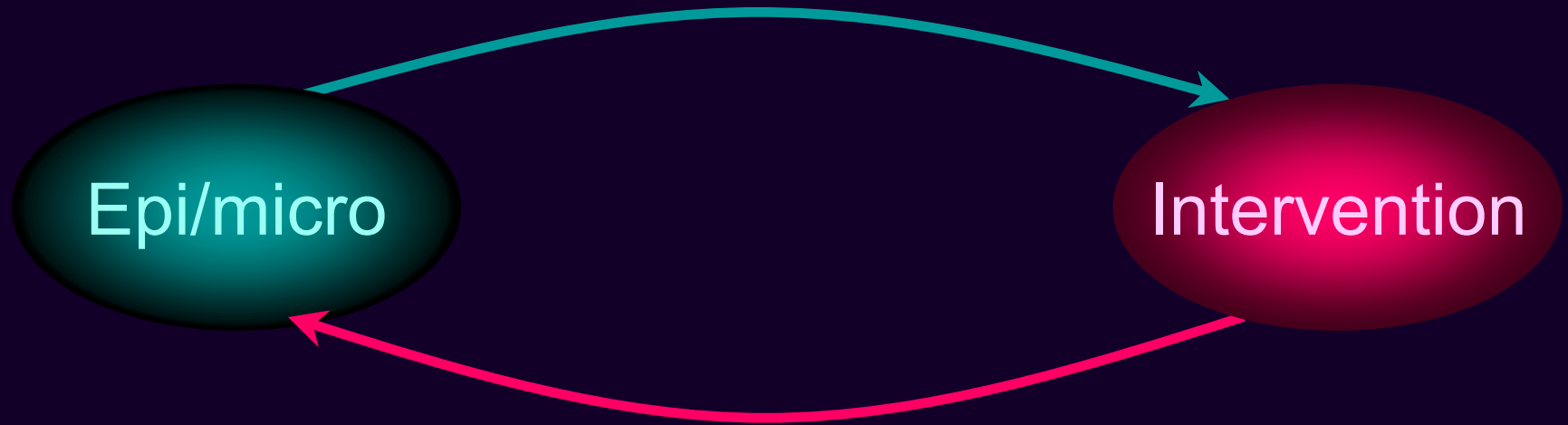
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# Interventions should follow science



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# Science should follow interventions



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Moral

Good science can  
make a difference.

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