



Review of cancer levels across the area of the South Essex Forum

November 2009



Essex County Council

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Preface

In December 2007 the Council adopted proposals for the modernisation of the Council's approach to Scrutiny, the aim of which was:

'to ensure the County Council's scrutiny committees are well-placed to adopt a challenging, outward looking approach which focuses on improving outcomes across public services in Essex; and ensuring consistency in approach and resourcing across a strategic scrutiny function, drawing on best practice both internally and externally.'

A Health Outlook event in December 2008 noted an appreciation of the potential for the Area Forums to work in partnership with the Health Overview & Scrutiny Committee to scrutinise local health issues, emulating the best practice of Commons Select Committees, in terms of forward planning, the calling of evidence, independent research, the publication of findings and publicity for the Forums' plans and findings.



At the South Area Forum meeting held on the 14 April 2008 a presentation was made by NHS South East Essex during which a resident of Canvey Island expressed his concerns over the incidence of cancers in both humans and animals in his area. The Chief Executive of NHS South East Essex agreed that this was worthy of further investigation and it was agreed that a joint study of the issue would be undertaken in collaboration with representatives of the Area Forum

Subsequently, I was asked by the Chairman of the Area Forum, Councillor Ray Howard, to chair a Task and Finish Group of Area Forum members to scrutinise incidence of cancers in South East Essex with a particular focus on possible environmental factors and their impact on parts of Canvey Island. The Group also included representatives from Southend-on Sea Borough Council and NHS South East Essex. The Group had the invaluable and essential support of a Public Health Consultant and a number of health specialists whose work provides the core of this report.

As Chairman of the South Essex Cancer Scrutiny Task and Finish Group, I am pleased to present the final report into the findings of the scrutiny.

I'd like to thank all those who have given their time to help the investigation; the members of the Task and Finish Group and health colleagues and in particular Dr John Harvey, our Public Health Consultant, whose patient and thorough professionalism has helped us understand the complex issues involved in this scrutiny.

Glossary of terminology

| | |
|------------------|--|
| BC | Borough Council |
| CfPS | Centre for Public Scrutiny |
| COPEs | Cervical, Ovarian, Perennial, Endometrial Support |
| Dept | Department |
| DSR | Directly Standardised Rate - (incidence in this report) is calculated by dividing the number of new cases by the actual number of people in a particular age group of the local population to calculate the age-specific rate, multiplying that rate by the numbers of people in the particular age group in a standard population to estimate expected new cases, and summing across all the relevant age groups. The rate is calculated by dividing that total by the standard population, and is usually expressed per 100,000. |
| ECC | Essex County Council |
| ECRIC | Education Resource Information Centre |
| GPs | General Practitioners |
| IMD | Index of Multiple Deprivation |
| LAQN | London Air Quality Network |
| LNG | Liquefied Natural Gas |
| LPG | Liquefied Petroleum Gas |
| LSOA | Lower Super Output Areas - made up from groups of Census Output Areas, with an average of 1,500 residents and nest within wards |
| LSP | Local Strategic Partnerships |
| MOD | Ministry of Defence |
| SE | South East |
| South East Essex | The area for which the NHS South East Essex is responsible for i.e. the Essex districts of Castle Point and Rochford and Southend Borough Council |

Summary

This report details the work of a Panel established by the South Essex Area Forum to review stated public concerns that there may be higher than average levels of cancer within parts of Canvey Island. The findings and recommendations as summarised opposite demonstrate that this is not the case.

These positive findings and recommendations should serve to reassure residents in South East Essex that they are at no greater risk of developing cancer than anywhere else in the County, or indeed the Country. Concerns expressed in relation to environmental pollution have not born out by the facts.

The study did however highlight three Lower Super Output Areas (LSOAs) where the incidence of cancers was on average over the last 20 years marginally higher than the national average.

Two LSOAs in Winter Gardens Ward have a slightly higher incidence of breast cancer than the national average. However, two LSOAs, one also in Wintergardens Ward and the other in South Ward, have lower than the national average incidence of breast cancer. There are no known environmental factors thought to affect breast cancer and thus it will be important that women should continue be encouraged to take up the opportunities offered by the South Essex Breast Cancer Screening service commissioned by NHS South East Essex.

There is also a LSOA in Central Ward where the incidence of lung cancer is definitely higher than the

Findings

1. That in general cancer levels are no higher across the area of NHS South East Essex than the average for England.
2. The panel supports the Consultant's conclusion that there is no evidence of an excess of cancer in the Canvey population attributable to environmental causes.
3. The limited response from the twenty six organisations who were sent a copy of the Consultant's report is an indication that the report has offered a degree of reassurance to the people of Canvey Island.
4. None of the individual LSOAs is significantly different from other areas of Canvey Island. However, two areas are statistically slightly above the national average in relation to lung cancer and breast cancer. However, it should be noted that smoking is a causal factor in relation to lung cancer and that there are no known environmental causes for breast cancer.

Recommendations

1. That NHS South East Essex, Castle Point District Council and Essex County Council should consider whether more could be done to promote healthy life styles including stop smoking campaigns in particular on Canvey Island.

Implementation Review Date: March 2010

Impact Review Date: December 2010

2. That NHS South East Essex should continue to encourage women to take up the opportunity offered by the breast cancer screening programme and also continue to monitor incidence of breast cancer with a specific focus on Canvey Island.

Implementation Review Date: March 2010

Impact Review Date: December 2010

national average. Lung cancers are largely attributable to smoking and there are a number of existing initiatives aimed at reducing smoking. However, NHS South East Essex, Castle Point Borough Council and Essex County Council should consider how more can be done to target the promotion of healthy life styles and stop smoking campaigns on Canvey Island.

Finally, all organisations have a responsibility to convey the message in respect of these marginally higher than average rates of cancers responsibly and clearly in the context of the generally very positive findings of this scrutiny. This report will be widely shared to ensure that that this positive message is clearly broadcast to the community.

Introduction

The South Area Forum Cancer Scrutiny Panel was formed after concern about apparently high numbers of cancers occurring in both humans and animals in particular geographic areas of South Essex were expressed at a meeting of the South Area Forum in April 2008.

In discussion with NHS South East Essex it was agreed that the issue warranted further investigation and it was agreed by the Health Overview & Scrutiny Committee that this investigation be undertaken on its behalf by the Area Forum. The panel was charged with undertaking a detailed study regarding cancers in South East Essex by exploring the geographic and demographic spread with a view to identifying potential causes and recommending mitigating measures.

A copy of the scoping document which details the Panel's remit can be found in Appendix 1.

Membership

The panel comprised:

- Chairman: Councillor Anthony Hedley, Essex County Council
- Councillor Sandra Hillier, Essex County Council
- Councillor Jillian Reeves, Essex County Council
- Councillor Colin Riley, Essex County Council
- Councillor Mavis Webster, Essex County Council
- Mr Tony Le Mesurier, NHS SE Essex (non-executive director)
- Councillor Alan Crystall, Southend on Sea Borough Council.

In addition, the Chairman of the South Area Forum, Councillor Ray Howard, attended meetings in an ex-officio capacity.

Independent Advice

In addition to the officer support provided to the Panel (see box above), an independent public health consultant was contracted by NHS South East Essex to analyse cancer data for the area. Dr John Harvey also consulted a number of other experts as detailed in Appendix 2.

Issues covered by the review

- The health indicators for the residents of Southend, Castle Point and Rochford areas
- Cancer prevalence, types and demographic spread and perceived 'hot spots'
- Epidemiology of cancers
- Issues that might impact on general health and cancers in particular; for example, socio-economic/ environmental factors
- Identification of possible expert sources of information to consult
- Review of existing research

Officer Support

- Sallyanne Thallon
Area Co-ordinator for South Essex (ECC)
- Dr Andrea Atherton Director of Public Health NHS South East Essex and Southend-On-Sea Borough Council
- David Moses
Head of Member Support and Governance (ECC)
- Antoinette Mortley

Approach

The panel approached their task by first of all commissioning Dr. Harvey's analytical review of cancer levels across the area of the review and then providing an opportunity for representative organisations and members of the public to question the report's findings. This was done at a hearing in public on 21 September 2009.

As the initial analysis of cancer incidence across South East Essex indicated they were similar to national levels, the main focus for the investigation became the examination of the rates for the five common cancers at LSOA level on Canvey Island. The evidence for this is contained in the next section of this document which contains the full text of the report prepared by Dr. Harvey.

Consultant's report

Introduction

Cancer is one of the main causes of death in England. One person in three is likely to develop cancer at some time in their life and one in four deaths are primarily due to a cancer.

Cancer is a general term for diseases where there is uncontrolled cell growth that is a result of a mutation in the genes of the cell. It may be caused by exposure to carcinogens (substances that increase the risk of cancer e.g. cigarette smoke).

Cancer is not a single disease and different types of cancer occur in any organ of the body.

It is known that people from more deprived backgrounds are more likely to suffer and die from cancer than others, mainly owing to lifestyle factors such as:

- Smoking
- Diet
- Levels of physical activity.

Smoking is the cause of a third of all cancers. After smoking, what people eat is the next biggest contributor to cancer deaths, and may be responsible for up to a third of all cancer deaths.

Following a verbal presentation at the South East Area Forum that people living in parts of South East Essex experience higher than expected rates of cancers, Essex County Councils' Health Overview and Scrutiny Committee established a group to examine this. A scientific investigation method was used to analyse the incidence of cancers (using registration data) and to describe the possible impact on health of the local environment. This report summarises the key findings.

Cancer Facts

- One person in three is likely to develop cancer at some time in their life
- One in four deaths are primarily due to a cancer
- $\frac{1}{3}$ of all cancers are attributed to smoking,
- $\frac{1}{3}$ to dietary factors
- $\frac{1}{3}$ are caused by other factors including genetics .

Analysis of the potential environmental factors

The perceptions of the residents in the west of Canvey in respect of their concerns over cancer levels were expressed as a problem relating to potential environmental factors adjacent to Canvey.

Canvey Island is a reclaimed marshland island located on the north bank of the Thames and lies almost entirely below highwater.

The long term possible environmental sources of risk to health consist of petrochemical facilities, landfill sites, and overall air quality. Pictured on the next page is a diagrammatic illustration of the history of these sites. Other sites e.g. Pitsea landfill site, are outside the borough. The Pitsea site was licensed to receive a range of commercial and industrial waste including hazardous liquid waste but this (latter) type of waste has not been included since 2007.



The Canvey Island site was the first international LNG import terminal in the world. The first shipment was in 1959 and the Canvey Terminal continued to operate as an LNG facility until 1990 when the availability in the UK of natural gas from the North Sea led to its eventual closure. The site was acquired by Calor and converted for the importation, storage and exportation of LPG in 1998. The site was originally chosen for its deep water access for LNG carriers, good proximity to the North Sea and closeness to largest centre of demand (Greater London), and the connection to the national pipeline system.

The Haven Road facilities were established in the 1930's for oil and chemical storage, and were used for storage of aviation fuel by the MOD. In the 1990's the tanks were used to store tallow from burning carcasses during the BSE outbreak. Oikos (formerly London and Coastal Oil Wharves) manage these facilities which store products including aviation fuel.

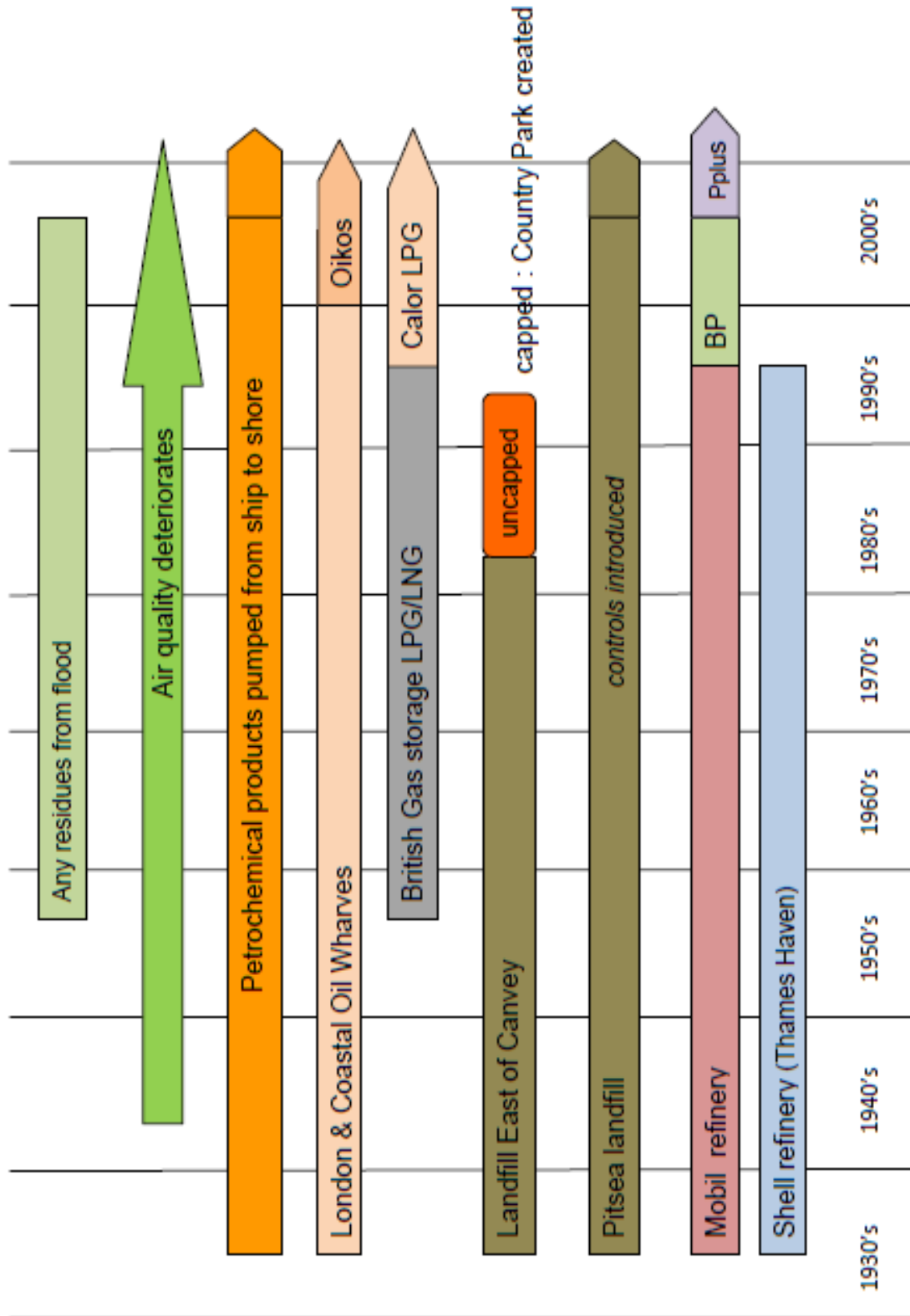
The residues from the petrochemical facilities have been burned constantly, and the emissions from this process may constitute a hazard which could lead to chronic exposure.

Other environmental issues

Air quality is affected by the prevailing wind direction. The higher land to the north causes eddies of air flow and the island is subject to mists. Castle Point Borough Council produces regular reports on air quality. Air quality is monitored by the London Air Quality Network which included a monitoring site in Castle Point on Canvey. Historical data available on the LAQN website does not show any times of high increase in pollution levels.

The residents complain frequently of odours. Complaints are common in the UK

Canvey island environmental exposures over time



associated with similar installations. The information on complaints about odours held by Castle Point BC has been examined for patterns in time or space. There was a five-fold increase in the number of complaints in 2003 when the lagoon at the Clearaway site turned septic. Remedial action was successful. The odour complaints are largely in three categories – oily, sewage, and sweet/chemical. The larger proportion appear to be related to sewage.

Routine monitoring data is held by the regulatory agencies, and it is assumed that any major breach of standards would have been known to the local authority.

However relevant data will continue to be reviewed.

The theoretical causal pathway would involve exposure to hydrocarbons, and possible health impact being seen in other conditions besides cancer. However to demonstrate actual harm, proof of exposure to specific chemicals would be required, but this has not been demonstrated.

Patterns of cancer incidence

In order to understand whether there is an excess of numbers of people who live in Canvey developing cancer, the investigation looked at data on two levels. All cancers are registered and the registration rate is an excellent proxy for the incidence rate (the rate of new cases in a given time period).

The higher level information available on the National Cancer Intelligence Network website does not show an obvious problem in Castle Point. Three year Directly Standardised Rates (per 100,000 standard population) for all cancers show downward trends for males and females since 1993.

The latest rates are shown in Table 1, for all cancers, and leukaemia's. These are shown alongside similar coastal areas, the regional and national figures for comparative purposes. Two coastal areas are shown for comparison, one of which (New Forest) is the location of the Fawley oil terminals.

Table 1 Directly Standardised Rates (DSR) for all cancers 2003-5

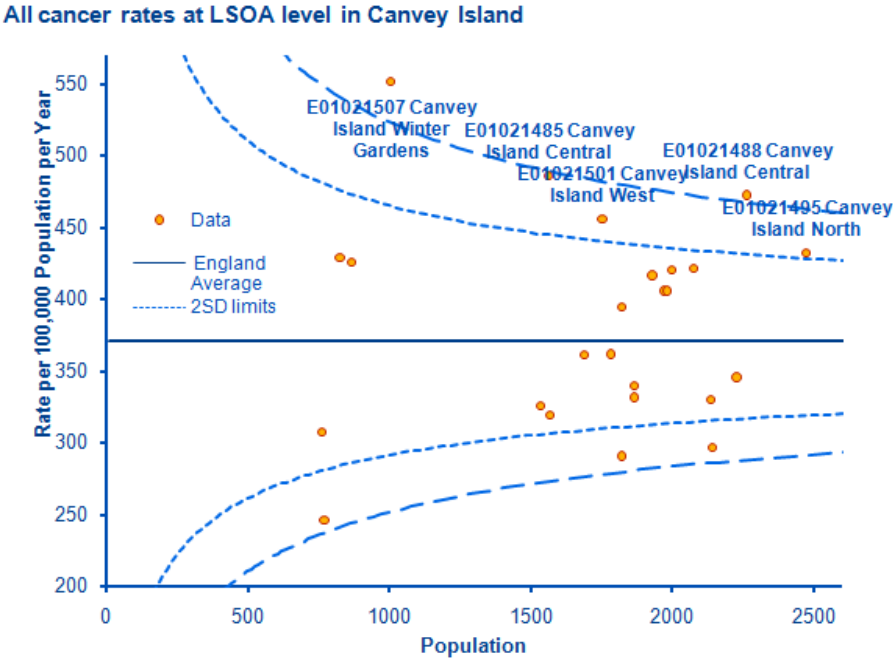
| | DSR males | DSR females | DSR leukemias |
|-----------------------|-----------|-------------|---------------|
| Castle Point | 372.9 | 327.6 | 7.1 |
| Gt Yarmouth | 402.2 | 349.7 | 12.3 |
| New Forest (Fawley) | 430 | 369.6 | 9.7 |
| East of England | 382.3 | 334.5 | 9.0 |
| England | 407.2 | n/a | n/a |

Source: Cancer e-Atlas. http://www.ncin.org.uk/index_files/eatlas.htm (accessed 4 August 2009)

It is possible that the rates for the whole population of Castle Point mask differences in smaller populations in the borough. Therefore a further analysis of cancer registration data was undertaken by the Eastern Region Public Health Observatory and Eastern Cancer Registration and Information Centre. The rates were derived for Lower Level Super Output Areas (LSOAs) in Canvey aggregating the numbers of cases over 20 years. LSOAs are made up from groups of Census Output Areas, with an average of 1,500 residents and nest within wards. It was noted that there

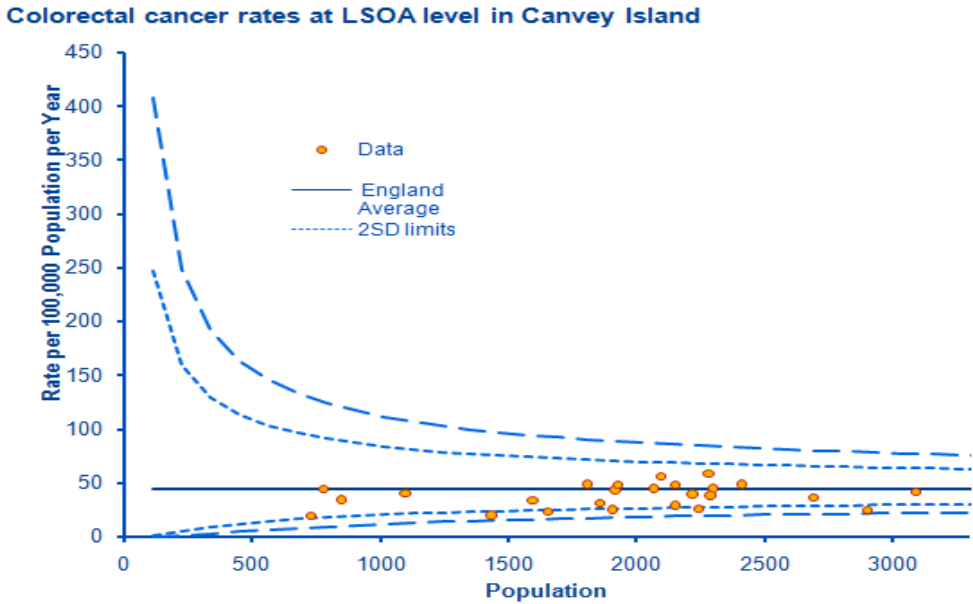
had been no major change in the local environmental factors over that period. Rates were examined for the five common cancers and leukaemia. (See figures 1-4.)

Figure 1 There are 2 LSOAs - one in Winter Gardens and one in Central, where the cancer incidence has on average over the last 20 years been higher than the national average.



Source: ECRIC
Note: Population is adjusted due to Standardisation Calculations

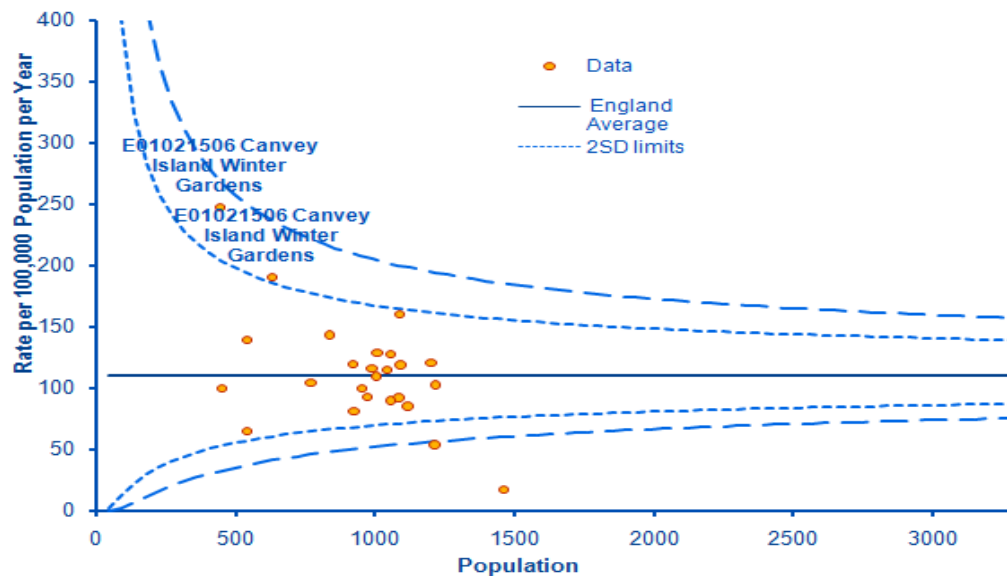
Figure 2 There is no evidence of excess cases of colorectal cancers.



Source: ECRIC
Note: Population is adjusted due to Standardisation Calculations

Figure 3 There are 2 LSOAs (Both in Winter Gardens) where breast cancer is slightly more common than the national average and 2 LSOAs where breast cancer is definitely less common than the national average.

Breast cancer rates at LSOA level in Canvey Island

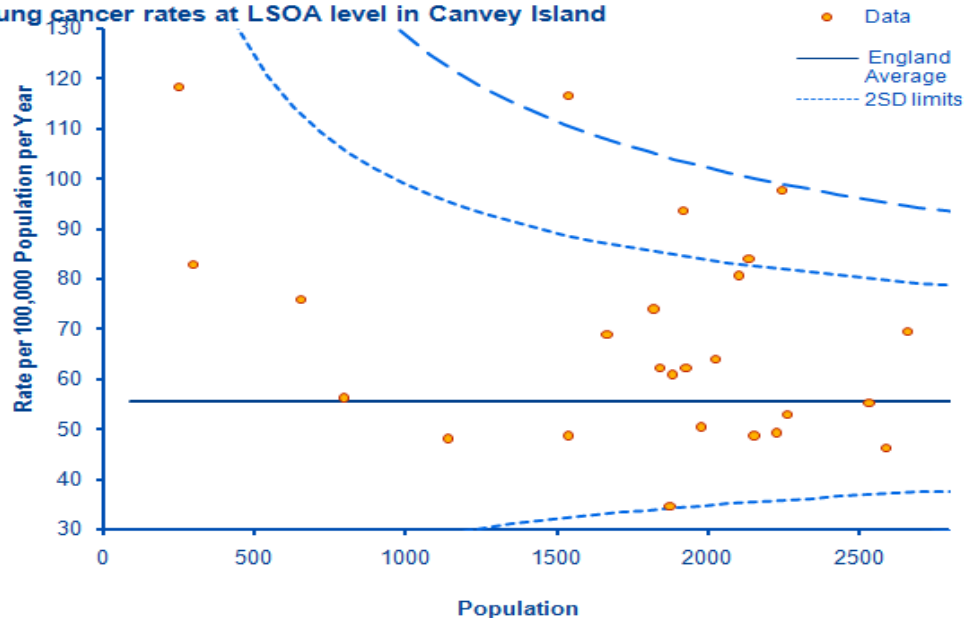


Source: ECRIC

Note: Population is adjusted due to Standardisation Calculations

Figure 4 Lung cancer incidence is definitely high in one LSOA

Lung cancer rates at LSOA level in Canvey Island



Source: ECRIC

Note: Population is adjusted due to Standardisation Calculations

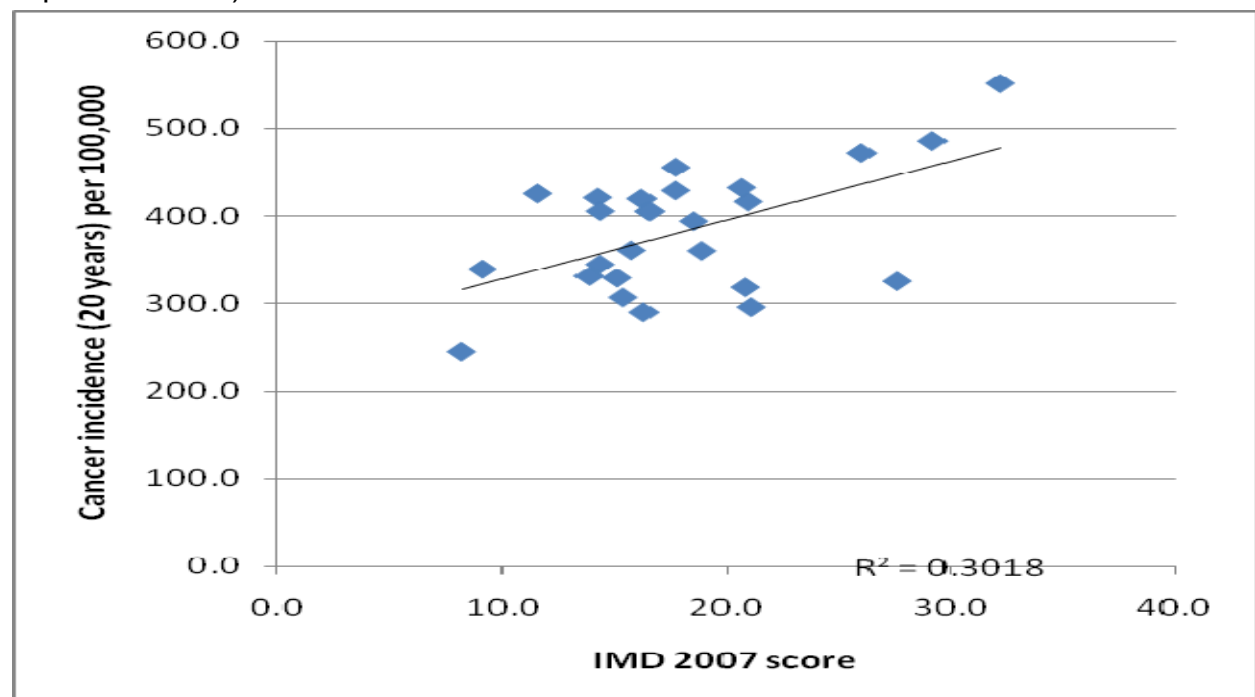
There are 2 LSOAs - one in Winter Gardens and one in Central, where the cancer incidence has on average over the last 20 years been higher than the national

average. Both have high deprivation scores. The incidence of cancer is strongly associated with deprivation. See Table 2 and Figure 5 below

Table 2 LSOAs with significant differences to England rates by type of cancer and IMD scores.

| Area | All | Lung | Breast | Prostate | Colorectal | IMD 2007 | IMD 2007 | All cancer i |
|--|--------------|--------------|--------------|----------|-------------|----------|----------|--------------|
| E01021484 Canvey Island Central | | | | | | 13.9 | 19289 | 331.7 |
| E01021485 Canvey Island Central | High (0.025) | High (0.001) | | | | 29.2 | 8531 | 486.3 |
| E01021486 Canvey Island Central | | | Low (0.001) | | Low (0.025) | 27.6 | 9233 | 325.8 |
| E01021487 Canvey Island Central | | | | | | 18.6 | 15025 | 394.5 |
| E01021488 Canvey Island Central | High (0.001) | High (0.025) | | | | 26.1 | 10005 | 472.6 |
| E01021489 Canvey Island East | | High (0.025) | | | | 15.8 | 17412 | 361.5 |
| E01021490 Canvey Island East | | | | | | 21.0 | 13146 | 416.8 |
| E01021491 Canvey Island East | | | | | | 14.3 | 18911 | 421.3 |
| E01021492 Canvey Island East | | | | | | 15.2 | 18036 | 329.7 |
| E01021493 Canvey Island North | | High (0.025) | | | | 16.3 | 17020 | 420.1 |
| E01021494 Canvey Island North | Low (0.025) | | | | | 16.4 | 16931 | 290.5 |
| E01021495 Canvey Island North | High (0.025) | | | | | 20.7 | 13343 | 432.5 |
| E01021496 Canvey Island North | | | | | | 19.0 | 14734 | 361.0 |
| E01021497 Canvey Island South | | | | | | 14.4 | 18782 | 405.9 |
| E01021498 Canvey Island South | | | | | | 16.6 | 16682 | 405.7 |
| E01021499 Canvey Island South | | | | | Low (0.025) | 14.4 | 18789 | 345.4 |
| E01021500 Canvey Island South | Low (0.025) | | Low (0.001) | | | 21.1 | 13054 | 296.3 |
| E01021501 Canvey Island West | High (0.025) | | | | | 17.8 | 15692 | 456.1 |
| E01021502 Canvey Island West | | | | | | 9.2 | 24892 | 339.7 |
| E01021503 Canvey Island West | | | | | | 20.9 | 13227 | 318.8 |
| E01021504 Canvey Island Winter Gardens | Low (0.025) | | | | Low (0.025) | 8.2 | 26110 | 246.1 |
| E01021505 Canvey Island Winter Gardens | | | | | | 11.6 | 21820 | 425.9 |
| E01021506 Canvey Island Winter Gardens | | | High (0.025) | | | 17.8 | 15700 | 429.4 |
| E01021507 Canvey Island Winter Gardens | High (0.001) | | High (0.025) | | | 32.3 | 7260 | 551.7 |
| E01021508 Canvey Island Winter Gardens | | | | | | 15.4 | 17775 | 307.3 |

Figure 5 Cancer Incidence rates by deprivation scores (Index of Multiple Deprivation IMD)



There are no important differences or significant patterns at LSOA level, except in two types of cancer; there are a few LSOAs which have significantly higher than expected rates for lung and breast cancer. Lung cancer rates are strongly

associated with smoking, and high deprivation levels, and this pattern is seen to explain the difference. No environmental cause has been proven to contribute to attributable risk for breast cancer.

Consultant's Findings

The Consultant concluded that there is no evidence of an excess of cancer in the Canvey population attributable to environmental causes.

As mentioned during the introduction, an invitation was extended to the organisations listed opposite to provide either written or oral representation in respect of the Consultant's findings.

Each organisation was provided with a copy of Dr. Harvey's report and offered the opportunity to address the hearing in public. They were also provided with a guide to giving evidence which detailed the remit of the investigation.

A press release was also issued which resulted in good newspaper coverage throughout the area. This provided an invitation for individual members of the public to make representations.

Initially it was planned to hold the hearings in public over two days on the 22 and 23 September 2009. Only three requests were received from organisations to give oral evidence and two of these were refused as they wished to address issues outside the scope of the review.

The evidence session was therefore limited to the 22 September and held in Committee Room 1 at County Hall, Chelmsford. Proceedings were web cast to allow anyone unable to attend to view the meeting on line. The recording will remain viewable at www.essexcc.ukcouncil.net until 22 March 2010.

Associations invited to give evidence

- North & South Essex Local Medical Committees
- Essex & Southend LINK
- Southend Old Peoples Assembly
- People Against Methane
- Canvey Island Town Council
- Rochford Hundred Association
- Castle Point Association of Voluntary Services
- Rayleigh, Rochford & District Association for Voluntary Services
- Southend Association of Voluntary Services
- CastlePoint Borough Council
- Rochford District Council
- Southend-on-Sea Borough Council
- Hawkwell Residents Association
- Hockley Residents Association
- Daws Heath Residents Association
- Bosom Friends (Basildon & Thurrock)
- Bosom Pals (Southend)
- Cadgers – Urology Cancer Support Group
- COPES (Cervical, Ovarian, Perennial, Endometrial Support)
- Helen Rollason Billericay Group
- Lymphoma Support For You
- South East Essex (Southend on Sea) Lymphoma Support Group
- South Essex Cancer Network
- Southend Lung Cancer and Mesothelioma Support Group
- Stoma Care Support Group
- The Tomorrow Club

People Against Methane

Mr George Whatley, Chairman of People Against Methane had submitted a number of questions which his organisation would like to be asked in respect of the Consultant's report. These are contained within Appendix 3, together with the answers provided by Dr Harvey at the Panel's meeting on 9 October 2009.

Mr Whatley suggested that evidence could be provided to show an increase and clusters of cancers in areas with chemical installations and made reference to American studies showing toxic hot spots; affective up to 30 kilometres from a chemical installation.

Mr Whatley advised the panel of 11 deaths from cancer on his estate over the last 10 years as well as four animal fatalities and questioned why other illnesses were not included in this study. In conclusion Mr Whatley highlighted that residents of Canvey Island have had to endure smog and fumes drifting in from the Thames area for the past 70 years.

Dr. Harvey responded to this number of occurrences by explaining that in a population of 400 people (assuming the same age structure as the general population) there would be 4 deaths per year, or 40 over 10 years. 25% would be due to cancer, i.e. 10 deaths over the period, or one per year.

Councillor Howard commended the efforts of Mr Whatley as a constituent, friend and passionate community minded individual. Councillor Howard emphasised the need to reassure the public with the findings of the report. Mr Whatley was grateful for the opportunity to speak the words of the people of his area and agreed that the report would help reassure those with concerns.

Findings and recommendations

Following a careful consideration of the Consultant's report and conclusion Members of the Panel were in agreement that the evidence before them led to four important findings, as detailed in the box opposite.

Two recommendations were developed from these findings and are listed on the next page. They will be considered by the South Area Forum before being submitted to the December 2009 meeting of the Health Overview & Scrutiny Committee.

Each recommendation will then be monitored as part of the ongoing scrutiny review process. Initially this will be to identify whether they

Findings

1. That in general cancer levels are no higher across the area of NHS South East Essex than the average for England.
2. The panel supports the Consultant's conclusion that there is no evidence of an excess of cancer in the Canvey population attributable to environmental causes.
3. The limited response from the twenty six organisations who were sent a copy of the Consultant's report is an indication that the report has offered a degree of reassurance to the people of Canvey Island.
4. None of the individual LSOAs is significantly different from other areas of Canvey Island. However, two areas are statistically slightly above the national average in relation to lung cancer and breast cancer. However, it should be noted that smoking is a causal factor in relation to lung cancer and that there are no known environmental causes for breast cancer.

have been accepted by the organisations referred to, then at a later date to assess their impact .

Recommendations

1. That NHS South East Essex, Castle Point District Council and Essex County Council should consider whether more could be done to promote healthy life styles including stop smoking campaigns in particular on Canvey Island.
2. That NHS South East Essex should continue to encourage women to take up the opportunity offered by the breast cancer screening programme and also continue to monitor incidence of breast cancer with a specific focus on Canvey Island.

Conclusion

The very positive findings and recommendations in this report should serve to reassure residents in South East Essex that they are at no greater risk of developing cancer than anywhere else in the County, or indeed the Country. Concerns expressed in relation to the impact of possible environmental pollution have not been born out.

Cancer is a very emotive illness and it is important that the publicity around the findings and recommendations in this report, particularly the marginally higher than average rates of cancers identified in three localities is handled in a responsible manner. This places a serious responsibility on the public agencies and community organisations to reassure the public and to work together to promote healthy life styles and the need for breast cancer screening.

Finally, Members of the Panel would like to thank everyone who contributed to this report and acknowledge the willingness of NHS South East Essex to both participate in the review and fund the work of the Consultant.

Appendix 1 - Scoping document

| | | |
|---|---|------|
| Committee | South Essex Area Forum | |
| Topic | Incidence of cancers in South East Essex | Ref: |
| Objective | To undertake a detailed study regarding cancers in South East Essex by exploring the geographic and demographic spread with a view to identifying potential causes and recommending mitigating measures. | |
| Reasons for undertaking review | <p>Concern about apparently high numbers of cancers occurring in both humans and animals in particular geographic areas of South Essex was expressed at a meeting of the South Area Forum in April 2008.</p> <p>In discussion with NHS South East Essex it was agreed that the issue warranted further investigation and it was agreed by the Health Overview & Scrutiny Committee that this investigation be undertaken on its behalf by the Area Forum.</p> | |
| Method <ul style="list-style-type: none"> <i>Initial briefing to define scope</i> <i>Task & Finish Group</i> <i>Commission</i> <i>Full Committee</i> | <p><u>Initial Briefing to Define Scope – in advance of first Panel meeting on 30 April 2009</u></p> <p>Areas to be covered:</p> <ul style="list-style-type: none"> The health Demographics of the Southend, Castle Point and Rochford areas Population projections going forward Cancers prevalence, types and demographic spread and 'hot spots' were they exist / are known Epidemiology of cancers Issues that might impact on general health and cancers in particular; for example, socio-economic/ environmental factors Identification of possible expert sources of information to consult Review of existing research <p>To include : NHS SE Essex Essex County Council Consultant</p> | |

Evidence Gathering (Consultant with Professionals)
March to July 2009

Areas to be covered:

1. An epidemiological analysis of the perceived problem.
2. Analysing the available data to establish the patterns of cancer incidence
3. an analysis of the possible health impacts of the local environment
4. Describing the environmental hazards
5. Defining a plausible model of risk
6. Agreeing the case definition(s)
7. Examining the data for clusters.

Consultant, meeting with officers from Essex County Council and castle Point Borough Council to develop a view of the area to be studied and become familiar with the context for the study.

Panel meetings to consider emerging findings – number and frequency of meetings to be agreed

Purpose:

To explore the evidence and Consultants findings and receive initial report of findings

1. To share the report with the South Essex Area Forum
2. To hear evidence from appropriately constituted organizations and individuals with a legitimate interest in the subject

Structure of proposed approach

The process will be multi stage:

1. Identification of the base information

An analysis taking account of patient records covering (at least):

- Cancer type
- Geographical location and period of residence
- Age
- Gender

Incidence of cancers in animals – via local Vet Surgeries

2. Interpretation of the evidence

The Consultant will facilitate and advise the Panel in relation to the data, its statistical validity and what it indicates in relation to cancers in the population.

3. Hearing of Witness evidence

The Panel will hold sessions where organizations will have the opportunity to present their views, having previously submitted evidence of their views in advance

| | |
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| | <p>4. Report Recommendations Meeting <u>October 2009</u></p> <p>Final meeting of the Working Group to reflect on all evidence received to identify and agree any recommendations to be put forward that will underpin an approach to addressing incidence of cancers in SE Essex</p> <p>5. Reporting Mechanism</p> <p>To provide a preliminary report to the South Area Forum in November prior to submission to the Health overview and Scrutiny Committee of Essex County Council in December – NB subject to dates for meetings to being set post County Council Elections in June.</p> |
| <p>Membership <i>Only complete if Task and Finish Group or Commission</i></p> | <p><u>Panel Membership:</u></p> <p>Councillor Anthony Hedley, Essex County Council (Chairman) Councillor Bill Archibald, Essex County Council Councillor Jillian Reeves, Essex County Council Councillor Colin Riley, Essex County Council Councillor Mavis Webster, Essex County Council and Rochford District Council Mr Tony Le Mesurier , NHS SE Essex Non-Executive Director Castle Point Borough Council representative to be confirmed Southend on Sea Borough Council representative to be confirmed Councillor Ray Howard (Ex Officio member as Chairman of the South Area Forum)</p> <p><u>Supported by</u></p> <ul style="list-style-type: none"> • Consultant – Dr John Harvey • Sallyanne Thallon - Area Co-ordinator for South Essex (ECC) • NHS South East Essex - Andrea Atherton • Toby Allanson - Senior Communications Officer (ECC) • Antoinette Mortley Committee Officer • Owen Bennett – Committee Officer South Essex Area Forum |
| <p>Terms of Reference for the Panel</p> | <p>To meet as necessary to:</p> <ol style="list-style-type: none"> 1. Agree the scope of the study and provide ongoing supervision to the scrutiny process 2. Agree a communications strategy for the Scrutiny 3. Establish a detailed information base regarding cancers in South East Essex using professional advice and expertise as advised by supporting officers and as needed. 4. Explore the geographic and demographic spread with a view to recommending mitigating measures. 5. Consider an epidemiological analysis of the perceived problem |

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| | <ol style="list-style-type: none"> 6. Agree basis for witness evidence to be heard 7. Hear evidence from interested organisations 8. Evaluate the evidence and agree and provide a written report to the South Area Forum recommending next steps 9. Produce a final report to the Health and Overview Scrutiny Committee from the South Area Forum identifying remedial actions as necessary 10. Oversee delivery of agreed actions |
| Sources of Evidence and witnesses | <p><u>Background Information / Evidence</u></p> <p>Outcome of research from Consultant including:</p> <ul style="list-style-type: none"> • Data provided by the Cambridge Cancers Registry in relation to types and clusters • Dialogue with local GPs and Vets • Dialogue with residents • Other research and expertise as is available to inform as complete a picture as possible of the current and historic position <p><u>Witnesses</u></p> <p>Basis on which organizations and individuals to be eligible to give evidence to be agreed but as a minimum:</p> <ul style="list-style-type: none"> • Evidencing a legitimate representational role within the community • Valid evidence to present to the Panel |
| Work Programme | Refer to section titled 'Method' |
| Indicators of Success | <ol style="list-style-type: none"> 1. Establishment of a clear set of data to enable an understanding regarding incidence of cancers in South East Essex 2. Clarity as to whether there are issues which require further action - and if this is the case 3. A series of recommendations to address the identified issues to the benefit of the local community in South East Essex |

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| Meeting the CfPS Objectives <i>Critical Friend Challenge to Executive</i> <i>Reflect Public voice and concerns</i> <i>Own the scrutiny process</i> <i>Impact on service delivery</i> | TBC and Agreed | | |
| Date agreed by Committee | | | |
| Future Action | TBC and Agreed | | |
| Chairman | Councillor Anthony Hedley | Area Co-ordinator | Sallyanne Thallon |
| Lead Organisation | South Essex Area Forum | | |

Appendix 2: Independent experts consulted as part of the review

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| Ian Burchill | Director of Community and Environmental Services, Castle Point Borough Council |
| Julian Flowers | Director, Eastern Region Public Health Observatory |
| David Greenberg | Senior Analyst, Eastern Cancer Registration and Information Centre |
| John Harvey | Interim Consultant Public Health Medicine, NHS South East Essex |
| Giovanni Leonardi | Consultant Epidemiologist, Health Protection Agency |
| Stephen Smith | Head of Health Protection, States of Jersey |
| Rhonda Ware | Director, Tiger Health Ltd |

Appendix 3: Answers to questions tabled by People Against Methane

1 Why does it seem we are already at a steady higher level of cancer than the norm?

Castle Point has an overall incidence of cancer which is less than the national average rate, and the rate has fallen over the past 10 years. The rates at Lower Level Super Output Areas vary across Canvey, and those significantly higher than the national average have been identified in the report. The difficulty here is that to obtain large enough numbers to make comparisons the data from 20 years has been aggregated. So trends over time cannot be calculated at that level. The reasonably wide range of incidence rates between LLSOAs is not unexpected with such small areas and does not indicate abnormal rates.

2 Why is there no evidence for normal rates of cancer for like for like environments?

We have looked at rates for two other coastal areas including the local authority where the Fawley refineries are located, and the overall rates are higher than those of Castle Point. Middlesbrough which is known to have a poor environment has higher rates and the rates have been increasing over the past 10 years, unlike Castle Point.

3 Why is it considered that a “no evidence of an excess of cancer” exists, surely this is because the high level is the norm for people exposed to petrochemical emissions and the excess has been masked?

There is no evidence of a high level of incidence of cancer compared to the national average as a normal rate.

4 Dr Harvey implies that these emissions could be responsible for other chronic illnesses other than cancer, why has this not been considered to be environmental

If people living in Canvey had been exposed to harmful chemicals over the years, we might expect to see other conditions than cancers being diagnosed more frequently. But there in discussion with GPs on the island no condition or group of conditions were identified as a problem.

5 Why has the Dutch Village Estate area not been included in the findings by Dr John Harvey, yet the NHS group in their original presentation to the Area Forum highlighted this area as having a large number of clusters of cancer?

The Dutch Village estate was included in as the analysis was at Lower Level Super Output Area. These are areas of about 1500 people, 6-700 households.

6 Why has no consideration been taken into the epidemiological aspect of what seems to be a high concentrations of cases of cancer in humans and in animals on and near the Dutch Village Estate Canvey Island?

The study was entirely epidemiological. The team collaborating on the study included two epidemiologists, one an expert in environmental epidemiology.

7 Why has an epidemiological veterinary expert not been consulted as to the reason behind the high concentrations of deaths due to cancer in animals on Canvey Island in general?

A local vet was consulted and explained that animals live longer and are more likely to develop a tumour as they get older (like humans). One explanation of an apparent increase is that biopsies are carried out more frequently now. However there is no systematic recording of cases which could be used to do an epidemiological study.

8 Where is the air polluting monitoring stations for Canvey Island situated?

In Southwick Road. There are also now several diffusion tube monitoring stations installed this year.

9 Why have no consideration been given to the prevailing winds which are South-Westerly which puts Canvey Island and particularly the Dutch Village Estate in the windward path from the Thames-side Industries?

The wind direction was considered, and the airflows which are determined by the higher ground in Hadleigh. The facilities described in the report are recognized as being to the west and the prevailing wind direction is as Mr Whatley says.

10 Why when data gathering process is used for monitoring and auditing, there is no planned review process?

There is a case for closer monitoring of the data on the environment and health indicators to reassure the community.

11 “The residues from the petrochemical facilities have been burned constantly (for over 70 years) and the emissions from this process may constitute a hazard which could lead to chronic exposure” why then is this not considered to be an environmental issue

See answer to question no.4.

12 Why have no considerations been taken into account of the American investigations that have found that Oil Refineries are a significant source of air pollution and produce significant carcinogenic air pollution?

Why have no questions been raised about constant reporting of oil industry by-product being hazardous to humans?

Knowing that unreported fugitive emissions have substantial impact on air pollution, why has this not been taken into consideration in the investigations?

Having stated “a hazard which could lead to chronic exposure” what guidance does the government give to avoid that exposure?

The standards for emission from facilities such as oil refineries are constantly reviewed in the light of all available international evidence by the Environment Agency.

13 Why have the details of the other nasty illnesses caused by these emissions been omitted?

See answer to question 4.

14 How do ordinary people get proof of chronic exposure to these specific chemicals that are known to be carcinogenic when suffering long, painfully and frightening illnesses and then dying?

If chronic or acute exposure is suspected, biomedical tests can be undertaken to check whether a person has been exposed. The proof of exposure includes defining the chain from the source to the individual.

15 Why has the monitoring system not flagged up these pollutants that cause chronic exposure to carcinogenic? What happens to the information collated by the monitoring system and why is this information not released to the general public?

There is a regular meeting of an Environmental Monitoring Group for South East Essex.

**16 Why has there been a general observation that concluded that cancer in the area is due to poor education and deprivation which is being offered up as the main reason in Dr John Harvey's report? There has been an inference that the New Forest area is more deprived and less educated than Canvey Island because it has a higher rate of cancers, can this be explained? The Dutch Village Estate area contains people from all walks of life that have moved into the area and all have different types of jobs why do you consider them all poorly educated and deprived? How do you come to the conclusion that deprivation and poor education is the reason for the many cases of cancer on Canvey Island and not some underlying environmental reason?
Is the reason that deprivation and poor education is being used as an excuse to do nothing about the environmental carcinogenic exposures?**

There is a known strong association between ill-health and levels of deprivation in all populations. The index used to score deprivation looks at a number of factors such as income levels and housing, and educational attainment. The same association holds for cancers in general. The report on Canvey points out that there are a wide range of different cancers, with different main causes. Smoking remains a big factor, and not just for lung cancer, as does diet. The variation between rates in different populations is largely explained by lifestyle and socio-economic factors, but not all the variation is explained.

17 Dr Harvey's report mentions that all cancers have shown a downward trend since 1993. Why has it not been identified that this downward trend coincides with the closing of the Landfill East of Canvey - The storing and processing of LNG at the British Gas terminal – The closing of Shell Refinery (Thames Haven) – Mobil Refinery was sold to BP? This being a significant element in a reduction of the cocktail of environmental pollutants

The downward trend may have started before 1993 but the available data on the national cancer intelligence website does not go further back.

This report is issued by

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