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Consultation response on buffer no-spray zones from Pesticide Action Network UK

Dear Caroline

Pesticide Action Network *UK* has unique expertise, networks, and resources, in pesticide-related health issues. Our aims are to eliminate the hazards of pesticides, to reduce dependence on pesticides and prevent unnecessary expansion of use, and to increase the sustainable alternatives to chemical pest control. We are committed to equal opportunities and to raising awareness of gender-specific pesticide problems.

The Action on Pesticide Exposure (PEX) project of PAN *UK*, which began in 1998, provides advice and information to those affected by exposure through a helpline, and a quarterly newsletter. We refer chemically exposed people onto sympathetic medical help; assist in forming support contacts; maintain a database of pesticide exposure cases, comprising over 1500 entries; liaise between exposed people and researchers, and carry out policy advocacy on the basis of research findings.

Proposals for buffer zones between spraying areas and residential properties in England and Wales

PAN *UK* supports these proposals, and also advocates that fields crossed or skirted by rights of way should become buffer no-spray zones.

We believe that overall UK pesticide usage is unacceptably high: the recent report by the Organisation for Economic Co-operation and Development (OECD), Environmental Performance Reviews, 2002, indicates that more chemicals are used to grow food in Britain than in any other major industrialised country – more than twice the OECD average. According to Central Science Laboratory Pesticide Usage Survey Group data, 31,129 tonnes of pesticides (includes sulphuric acid) were used in Great Britain in 2002. Pesticide usage reduction as part of the government's national Pesticides Strategy is urgently needed as a precautionary measure. We regard the introduction of buffer no-spray zones as one of a number of interim measures towards achieving a coherent public health strategy.

We believe the proposed measures are needed:

- **to protect people's health**
- **because people have the right not to be exposed to toxic chemicals, which enter their bodies, without their consent, and, often, without their knowledge.**

We would draw your attention urgently to the findings of the pioneering biomonitoring survey of chemical body-burdens carried out by the Worldwide Fund for Nature, announced this week, as part of their Chemicals and Health Campaign. Of 155 people tested, everybody had some degree of bodily contamination with chemicals, including pesticides, and some had excessively high levels. Long-term health impacts are unknown but may include chronic diseases including cancer. Buffer no-spray zones are an essential precautionary measure to reduce people's overall exposure to pesticides.

Pesticide-users, including farmers and growers, will not necessarily be disadvantaged by buffer zones. High agrochemical costs will be reduced and time saved. PAN UK has advocated to the multiple retailers that they support consumer interests over this issue. Progressive company initiatives have already been made; for example, Vitacress have chosen to convert two of their UK farms to organic partly because there are nearby residents.

PAN UK urges the PSD to engage directly with a wide range of stakeholders over these proposals, including unions, people living next to sprayed fields, and regular users of rights of way. Public participation in decision-making over the issue has been limited by a relatively low level of awareness of the proposals. PAN UK and others have committed significant resources to publicising them, but we estimate that only a fraction of the relevant people, who will be most directly affected, know about them.

Discussion paper

Do you feel that the present risk assessment adequately addresses the risks posed by pesticide spraydrift? If not, what additional criteria should be covered?

We do not accept that current 'bystander' risk assessments adequately estimate either exposures or potential health effects to either adjacent residents, or users of rights of way. We do not accept that risk assessment calculations based on exposures to a person for a three month period equivalent to a (potentially) lifetime's exposure to person without PPE. We also identify the following data gaps.

1. Biological monitoring data, as requested in the proposed DEFRA study 'Biomonitoring for pesticide exposures (CTD 0301). Statistically valid data from annual surveys of biomarkers of exposure should inform the approvals process. The WWF biomonitoring survey provides an example.
2. Air monitoring data should also be available. In the USA, Toxic Air Contaminant sampling data is collected; in the report *Secondhand Pesticides by Californians for Pesticide Reform* this data reveals that safety levels for exposures are routinely exceeded because the extent, and effects, of drift are under-estimated.
3. No monitoring data on pesticide residues carried on dust and pollen, eg oilseed rape, is used by regulators.
4. The effects of mixtures are not taken into account, and research has only recently been commissioned by the Food Standards Agency (RRDD11/T10/D) as part of work on the Working Group on Risk Assessments of Mixtures of Pesticides (WiGRAMP).
5. The effects of pesticide-pharmaceutical interactions are not taken into account in the regulatory process. Tackling health inequalities is a top government priority. A person already disadvantaged by illness and taking medication can be put at much higher risk than one who is not by pesticides sprayed next to their homes.

We are also concerned by the common assumption that single exposures to pesticide spray-drift or vapour, in a 'bystander' scenario, are harmless. In the recent Florida case, Castillo vs Du Pont, which has been decided in favour of the plaintiff, it has been proven that a woman who was exposed once only to Benlate (active ingredient benomyl), at a critical point in pregnancy, gave birth to a son suffering microphthalmia. She was walking near her home on a right of way. The birth defect was caused by dermal exposure to Benlate at a concentration of less than 20 parts per billion.

Yet when Mrs Castillo's claim was brought to the attention of the Advisory Committee on Pesticides, before the legal outcome, they decided it did not justify a review of the fungicide. The case indicates that pesticides can harm the foetus at extremely low doses, and that current risk assessments do not adequately take this into account.

It should also be noted that even when individuals' progeny suffer such a distinctive and appalling disorder such as microphthalmia, like Mrs Castillo's son, tracing a causal link with a pesticide was only possible after a ten-year legal battle and financial resources which were considerably greater than those of most people. Disease caused by 'bystander' exposure can very rarely be proven, and therefore it is imperative that regulators take a precautionary protective approach.

Do you feel that the present advice and guidance in the 'Green Code' is adequate? What, if anything, could usefully be added to it?

Buffer no-spray zones between spraying areas and residential properties, and rights of way, should have **statutory status**.

Notification and on-site information provision should have **statutory status**. As per our response to the *Consultation on plans for greater access to information about crop spraying*, dated 29th September 2003:

There should be both advance notification, and signs on site, in the form of PSD-produced pro forma posters (equivalent to the Health & Safety At Work, etc Act poster), giving **dated** information, or an access point to it, such as a website, and always including a telephone number. This information should be posted at points nearest human habitation and at all access points to rights of way when they cross sprayed fields. People affected should be notified in advance about the posting of the information and its location.

We recognise that weather and labour conditions can be unpredictable, and that pesticide-users cannot reasonably be expected to give precise scheduling information. However, website or ansaphone information can and should give general information about a user's intentions regarding spraying, including a provisional schedule.

Residents and users of rights of way should also be given at least a full *week's* notice (with dated information, on a PSD-produced pro forma) of the *first spraying*. Updated versions, and date of last spraying, should be made available via the access point as above. Updates and notification alerts can be done by ansaphone message, email lists, mobile phone texts, or wipeboards, for example, and should be within at least 24 hours of spraying.

Existing requirements for notification under COPR (for aerial spraying, for sulphuric acid, and to bee-keepers) should be improved in these respects and brought into line.

The on-site information should comprise, at minimum:

1. Intended dates of spraying.
2. Name of active ingredients or products intended to be used (first or next spraying).
3. Re-entry interval when a condition of use.
4. Name of pesticide-user, and contact telephone number: this should be large and legible at a reasonable distance.
5. Access point to full updated spray-schedule information: website, email address or ansaphone telephone number.
6. Name of land-owner or tenant farmer.
7. Contact details of the Pesticides Safety Directorate, with an indication that evaluation information on the pesticide is available from PSD.
8. Date of posting of information.

The website information should comprise the same details, plus, with the PSD details, a link to the pesticides' evaluation material.

The imposition of no-spray buffer zones is not justified solely on scientific grounds. What, if any, public interest justification is there is for introducing them?

PAN UK is of the opinion that no-spray buffer zones are fully justified as a precautionary measure to protect public health. We note that the British Medical Association and the UK Public Health Association support this position.

PAN UK is very concerned about serious weaknesses in current surveillance of pesticide-related disease. Under-reporting to the Health & Safety Executive's Pesticide Incidents Appraisal Panel (PIAP) scheme is a major problem, and the figure of 'a dozen' reports to PIAP is highly inaccurate: there are 60 alleged ill-health incidents in the PIAP report for 2002/2003. Recent actions by the Advisory Committee on Pesticides have addressed only the issue of acute pesticide exposure incidents, and chronic health effects are not taken into account.

PAN UK's PEX project regularly receives enquiries from people whose health has been harmed by acute and chronic exposures to pesticides. We hold detailed case histories of individuals whose health has been severely and permanently damaged following exposure, which have not entered official records as being pesticide-related.

If no-spray buffer zones are to be introduced, what sizes do you believe these should be? Should they all be of a single uniform size or would they need to be of varying size to take into account different application equipment and different crops?

The size should be decided in consultation with the people affected, and recorded and coordinated by the local authority Environmental Health department. Exacerbating factors such as sloping fields, and different crops and spraying regimes, need to be taken into account. Buffer no-spray zones between spraying areas and residential properties, and rights of way, should have statutory status.

The introduction of **mandatory buffer no-spray zones** should be a statutory distance, with a recommendation for no-spray zones in **whole fields adjacent to residential areas, or in which there is a right of way**, whichever is the larger area.

In view of the potential losses of cropping land, do you feel, in the absence of any confirmatory scientific information, such losses are warranted? For example, would the environmental benefits gained from no-spray zones mitigate in some way for the 'loss' of cropping land?

PAN UK does not accept that cropping land will be 'lost': it will be cropped without the use of agrochemicals as part of a whole farm plan. Excessive pesticide usage and spillage around the headlands of fields will be reduced, and there will be benefits to farmland biodiversity, including threatened species of farmland birds and insects identified in the government's Biodiversity Action Plans.

What are your thoughts on the estimated areas given in the above table? Do you have any data/information yourself that either confirms the above or arrives at different values?

We request that PSD provides the references for these figures and that an independent audit is commissioned based on authoritative accepted research data. We do not accept that cropping land will be 'lost' to cultivation.

Partial regulatory impact assessment

Are the figures of 5 million and a quarter of a million above accurate?

PAN UK's figures were drawn from Office for National Statistics data from census for England and Wales of 1991 (latest data available at that date). The first was taken directly, and the second was extrapolated from statistics for villages comprising 1,000 homes, assuming conservatively that 5 per cent of houses are adjacent to sprayed fields.

Precise information on the numbers of people living adjacent to sprayed fields is already available. As we advocated at the Advisory Committee on Pesticides' Open Meeting in 2002, the PSD needs to obtain Land Cover Map 2000 data, which is produced by the Centre for Ecology and Hydrology (www.ceh.ac.uk/data/#LCM), using a combination of GIS and field survey information. This clearly shows cropped land and housing. The government should urgently carry out a study to calculate the numbers of people involved. Studies considering risks of exposures to potentially much higher numbers of people beyond the immediate area should also be examined and initiated.

DEFRA is a Consortium Member of the Land Cover Map project and therefore has access to this data. We understand that Porton Down/Health Protection Agency has already obtained Land Cover Map information to inform its work.

[As above] If no-spray buffer zones are to be introduced, what sizes do you believe these should be? Should they all be of a single uniform size or would they need to be of varying size to take into account different application equipment and different crops?

The size should be decided in consultation with the people affected, and recorded and coordinated by the local authority Environmental Health department. Exacerbating factors such as sloping fields, and different crops and spraying regimes, need to be taken into account. Buffer no-spray zones between spraying areas and residential properties, and rights of way, should have statutory status.

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Are there any other direct or indirect benefits you think may accrue as a result of no-spray zones being introduced?

- Risks to public health will be reduced.
- The routine violation of people's right not to be exposed to chemical contaminants without consent, will be reduced.
- Air contamination with toxicants will be reduced.
- People's right to peaceful enjoyment of their property will be strengthened.
- Biodiversity will benefit.
- Pesticide usage reduction, as part of the government's national Pesticides Strategy, to commence in November this year.
- The introduction of no-spray buffer zones would also be consistent with two important European initiatives:

Convention on access to information, public participation in decision-making and access to justice in environmental matters, the 'Aarhus Convention', June 1998.

www.unece.org/env/pp/documents/cep43e.pdf This recognises the right of every person to live in an environment adequate to his or her health and well-being. It strengthens the presumption in favour of public participation in decision-making, accessible information-provision, and of increased transparency and accountability.

A European Environment and Health Strategy, the 'SCALE' initiative.

http://europa.eu.int/comm/press_room/presspacks/pdf/com_en.pdf

This aims to tackle a growing number of environmentally-related health problems in Europe, especially among children. It recognises that 25 to 33 per cent of the total burden of disease in industrialised countries can be attributed to environmental factors (World Health Organisation: European Health report 2002). The initial cycle, 2004–2010, will focus on:

- Childhood respiratory diseases, asthma and allergies
- Neurodevelopment disorders
- Childhood cancer
- Endocrine disrupting effects

Are you aware of any areas of the country that are likely to be disproportionately affected were no-spray buffer zones to be introduced?

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Are you able to provide any cost estimates of the likely impact on growers of the introduction of no-spray zones? General or sector specific figures would both be helpful.

This is a national health protection issue and the government should view cost estimates strategically. Cost benefit analyses should take account of consumer demand for residue free food, an objective of the Food Standards Agency. Crops from no-spray zones could be marketed advantageously in this respect, as proposed in detail by Dr Charlie Clutterbuck.

Costs to growers, and variation in yield, will differ by farming areas, and conversion opportunities will also be determined by different factors.

Grant aid proportionate to the extent of human habitation/rights of way adjacent to a holding should be made available to farmers and growers, especially for small-scale producers, including for the provision of equipment such as poster/boards, ansaphones, and IT.

We would welcome any information from small businesses on how they would be affected were no-spray buffer zones to be introduced.

N/A

What do you believe the competitive effect on UK growers would be compared to their EU counterparts were no-spray buffer zones to be introduced?

PAN UK has raised this issue in the European Parliament, and believe it should be addressed on a Europe-wide basis.

Enforcement

There needs to be a strategy for enforcing these proposals and appropriate resourcing. Public concern expressed in the responses to this consultation indicates that a review of regulatory resourcing levels, and policies and culture regarding public protection from pesticides, is needed.

We hope this submission is constructive and look forward to hearing from you.

Yours sincerely

Alison Craig
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