



**Pesticides
Action
Network**
Europe

Newsletter

Spring 2009

PAN Europe News

Anne Ferriera and PAN Europe screen *Nos Enfants nous Accuseront* in the European Parliament

On the 7 January, a week before the European Parliament vote on the pesticide package, French Socialist MEP, Anne Ferriera, in collaboration with PAN Europe, arranged a screening of the French film 'Nos Enfants nous Accuseront' ('Our Children will Accuse us' in English) in the European Parliament in Brussels.

The film, a documentary by French director Jean Paul Jaud, examines the consequences of intensive agriculture and explores possible alternatives. It was made with support and inputs from both MDRGF and WWF France.

PAN Europe, who took care of the organisation of the event, brought together the director of the film, Jean Paul Jaud, the president of MDRGF, Francois Veillerette, and the president of WWF France, Serge Orru, for the screening. Jean Paul Jaud introduced the film while the two presidents chaired a debate afterwards.

MEPs, including the Socialist Shadow Rapporteur of the pesticides package dossier, Dan Joergensen, and their assistants, European Commission officials, Belgium parliamentarians, NGOs and farmers unions were at the screening as well as representatives from the German chemical industry, BASF and the European Pesticide Association.

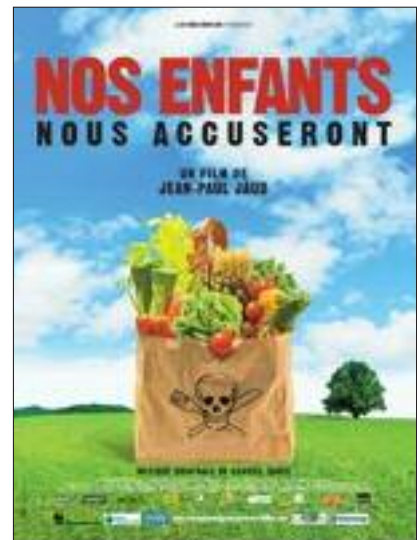
In addition, PAN Europe used the fact the film and its director were in Brussels to establish a collaboration with the Cancer Support Group of the European Commission, with the result that 200 European civil servants saw the film free of charge the following day.

What did PAN Europe gain by showing the film?

Anne Ferriera mentioned the film screening during the plenary debate before the vote on the pesticides package and, as the screening was done at a good time it is likely that it helped to raise awareness and start a European willingness to make a change to pesticide legislation.

The film is unique as it raises awareness of a very complicated and complex situation but also proposes solutions. In short, it shows how it is possible to combat intensive agriculture, it highlights the problems that pesticide can cause, and proposes local organic solutions. The subtitled trailer for the film can be found at: <http://www.nosenfantsnousaccuseront-lefilm.com/>

Since the presentation, Henriette Christensen, PAN Europe's policy advisor, has been contacted by a number of people who are keen to make sure that the film will also be shown in their local cinema.



Poster to advertise *Nos Enfants nous Accuseront*

The film was released in French cinemas last November and in Belgium this April. Talking in Brussels Jean Paul Jaud explained that the film had received much more attention than he had ever hoped for, and that the local mobilisation 'caused' by this film has been enormous, with people calling for local action on pesticides. Recently, the film was shown in Namur, as part of the launch of the Wallonian 'Semaine sans Pesticides'. What about bringing the film to your town/country? If so, just email henriette@pan-europe.info.

PAN Europe workshop on implementation of the Framework Directive of Sustainable use of Pesticides, Integrated Pest Management and the future of the Common Agricultural Policy: Brussels 21-22 January 2009

The success of the pesticide package still depends on the seriousness of its implementation. The implementation of the framework directive on sustainable use of pesticides will, to a large extent, depend on Member States willingness to take serious action.

The European Commission will not guide Member States on implementing the directive which calls for the establishment of an overall reduction target to be reached through methods such as the establishment of buffer zones and the protection of water bodies. It is mandatory for farmers to apply integrated pest management from 2014. Instead the European Commission's role will be limited to monitoring and control once the framework directive has been implemented at national level.

This is why the board of PAN Europe decided to arrange a workshop on National Action Plans (NAPs), Integrated Pest Management (IPM) and the Common Agricultural Policy (CAP) to verify if PAN Europe members were willing to engage in the future in this debate and therefore allow PAN Europe to work for a serious implementation of the directive at Member States level.

The workshop was held on 21-22 January 2009 in Brussels and was divided into several sections: On the first day the framework directive and its implementation was explained by European Commission, DG ENVI. Then an explanation on the different models for pesticide use reductions across the EU was given. The third topic was on how IPM is applied across Europe (including Switzerland). On the second day, the CAP was explained by European Commission, DG AGRI. Participants heard about the Swiss system which gives specific attention to integrated production in all parts of its policies. They were also given news from ENDURE, a European funded research project on IPM.

PAN Europe organised the meeting in only eight days, but was still able to mobilise around 40 people to take part in different sections of the meeting. Participants included not only around 15 PAN members but also representatives from the European Commission (DG AGRI), from national administrations (from Italy and Switzerland), national researchers (from France, Denmark, Germany and the Netherlands), as well as the European Water industry and other European NGOs (EEB, Birdlife international, HEAL).

This large participation shows that there is a strong interest across a range of organisations to start debating more on agricultural and pesticide related issues. However, the biggest success of the meeting remains that every single person took an active part contributing their knowledge and making the meeting really dynamic with a lot of exchanges and interactions which went beyond the official programme.

The establishment of a NIC working group

The meeting ended with an internal discussion on how to proceed from here and all PAN Europe members present agreed to continue to work on agricultural matters. It was agreed a new working group would be established called NIC standing for NAPs, IPM, and the future of the CAP.

A work programme for the next six months was set out defining not only what to do but also who should do it. The work programme for the Spring concentrated on the following activities:

1. Assess the present situation in (at least) 10 EU-countries on NAPs and the future topics of NAPs in these countries.
2. Prepare a "good example" NAP to be promoted among Member States
3. Develop a short proposal for how a CAP could be developed

after 2013 promoting seriously integrated production, and

4. Comment on Commission guidelines of DG Environment (on IPM, indicators, monitoring and control).
5. Fundraising for the work to continue

After the meeting PAN Europe contacted each national PAN Europe member to find out if more members would decide to join. 15 members from 15 different member states have agreed to take part.

What has happened since the workshop?

In February PAN Europe forwarded a questionnaire to each of the members who agreed to join the working group. The objective was to get an overview of what is really going on in Member States, including information on actual levels of pesticide use. By this PAN Europe hope to obtain a baseline, which will give a tool to measure implementation of NAPs against in the years to come. The answers are now starting to arrive and PAN Europe is analysing them to try and to find good examples, and over the summer will make some kind of overview comparison

PAN Europe hopes to be able to identify a number of examples of good practice among its members over the coming weeks and are asking other NGOs to give examples of actual practices already being applied in Member States as well as give good examples of EU policies which could help to ensure successful implementation of NAPs.

PAN Europe aim to present these good examples firstly, at the DG ENVI conference on 4 June where PAN Europe will give a presentation (around 100 participants are expected from national ministries and other organisations), and secondly, as a best practice publication to be distributed to 27 Member States in late June.

Next steps for the NIC working group

The new framework directive states that Member States need to involve national stakeholders in the development of the national/regional NAPs. So, as well as serving as inspiration for national governments, the best practice publication mentioned earlier could help PAN Europe national members in promoting good practice at a national level. PAN Europe plans to hold the next NIC meeting in conjunction with the AGM in September, dedicating a day to training PAN Europe members for national/regional stakeholder meetings.

After the initial workshop PAN Europe have been contacted by a number of the organisations and individuals present asking to be involved in future work. This includes IOBC, who PAN Europe met in April in Wädenswil Switzerland, to discuss potential joint work; and GAWI, who has invited PAN Europe to farm visits on Integrated Production. PAN Europe has also been invited by GlobalGAP to speak about IPM in Köln in June this year.

As a result of this interest PAN Europe has established an external joint mailing list, agriculture@pan-europe.info

[europe.info](mailto:agriculture@pan-europe.info), to send information on matters that could be useful to anyone wishing to be involved. The list is currently sent to around 50 addresses. PAN Europe hopes to find a good way to make use of this interest, especially as a number of experts are interested in PAN Europe's work on IPM.

To sum up, the NIC working group has started very successfully. Any ideas on how to take forward our work in this area are more than welcome. If you have any suggestions please email henriette@pan-europe.info

ANNUAL CONFERENCE: Towards Sustainable Pesticide Use Reduction Across Europe: from Words to Action
PAN Europe's 2009 Annual Conference takes place in Sofia, Bulgaria on 4 & 5 September. For more information, or to request a pre-registration form, please contact pan-agm@friends-of-earth.org

News from the Network

Semaine sans Pesticides special

Fourth annual Semaine sans Pesticides a great success

The 4th annual *Semaine sans Pesticides* ('Week without Pesticides' in English) took place from 20th-30th March 2009 and included over 700 events. The majority of the activities took place in France with 550 events, followed by Belgium with 120. Coordinated initiatives also occurred in Germany, Italy, Macedonia, Mauritania, New Caledonia, Quebec, Slovakia, Slovenia, Tunisia and the United Kingdom. Moreover, thanks to the partnership with French NGO Cour de Forêt guided visits were possible in some of the countries where their "water guardians" project is running: Brazil, Cameroon and Guyana.

This year's *Semaine sans Pesticides* has been notable for the diversity of groups taking part: in addition to NGOs these included 139 garden centres and shops, 63 local communities and institutions as well as 57 schools.

These hundreds of organisations held a wide range of events to

educate the public on health and environmental risks due to pesticide use and to prove that viable alternatives to chemical treatments exist. In France the range of activities recorded were:

- 118 movie projections, of which 77 were followed by debates;
- 114 training workshops - 79 at conferences and round tables;
- 56 events in markets or schools;
- 53 visits to farms or green spaces;
- 51 stands or exhibitions;
- 50 organic meals; and
- 11 shows

This year is also notable for the huge community involvement. Villages, towns and cities recognised the 'Week' as a chance to inform citizens about how far their collectives engaged with pest management. The Week was used as a communication tool to highlight the efforts of conscientious collectives and to encourage others to move to becoming pesticide free.



2009 Semaine sans pesticides poster

The Paris municipality became a strong partner promoting the Week, directly scheduling and financing several initiatives, including an animated clip on pesticide issues. The clip is currently available on Doncvoila's website, the professional studio in charge of producing the clip (www.doncvoila.net).

Semaine sans Pesticides epitomises both a big media event and a regional based campaign punctuated with grassroots events. The weekend of the launch of *Semaine sans Pesticides* grabbed the headlines, gathering several mentions in major French newspapers and news.

Looking to the future, the campaign's first target is to keep with this momentum in order to reach out to a wider audience still. Started in 2006 by the French

Citizen's Action for Pesticides' Alternatives, a civil society network initiated by MDRGF in 2004, *Semaine sans Pesticides* began to expand abroad from its third year and more and more NGOs are now looking to use this effective concept that has gathered so much success over the last four years. Then, it will be easier to look towards a "year without pesticides"...

For more information about this year's events visit www.semaine-sans-pesticides.com



Campaigner taking part in a *Semaine sans Pesticides* event in France

HEAL launch postcard and poll for *Semaine sans Pesticides*

For this year's *Semaine sans Pesticides* HEAL started two actions in France and in the UK as part of its Pesticides and Cancer campaign.

In France HEAL launched a 'go pesticide-free' postcard at the opening press conference of *Semaine sans Pesticides* in Paris. In conjunction with MDRGF, HEAL produced the postcard to encourage people to ask their local authorities to go pesticide-free in public places such as parks, school grounds and sports facilities.

In the UK, HEAL and its partner organisations (PAN UK, Cancer Prevention and Education Society, and Women's Environmental Network) commissioned a poll to find out people's attitudes towards pesticides. The poll, carried out in March by GfK NOP for the UK Sick of Pesticides Campaign, revealed that half the UK population is concerned about pesticides, not only on their food but also in parks and other public places. The poll showed that:

- 59% of those interviewed are worried that food and drink may be contaminated (strongly agree 24% plus slightly agree 35%);
- 48% of respondents believe that parks, sports grounds and playgrounds may pose a risk

HEAL's 'go pesticide-free' postcard distributed as part of *Semaine sans Pesticides* 2009

because of pesticide use in green spaces;

- 65% supported a ban or reduction in the use of pesticide in public places as soon as possible.

Vicki Hird of HEAL's Sick of Pesticides Campaign said

"The public are unmistakably and rightly concerned about pesticides. Governments across Europe must act fast and firmly to eliminate avoidable cancer risks by phasing out the most hazardous pesticides now and bringing bans on spraying in public places"

HEAL's demand for pesticide-free public spaces follows its advocacy work during the EU discussions on the pesticides policy package. The new Directive includes a ban, or severe restriction of, pesticides use in public spaces which needs to be implemented by Member States. This is why HEAL is promoting action for swift implementation of the Directive at a national level through strong and ambitious National Action Plans for Pesticides Reduction. HEAL hopes its action will help to create a 'critical mass' around these issues and promote more protective legislation of our and our children's health.

MADE raise awareness of the hazards of pesticides at a local level

Macedonian Association of Doctors for the Environment (MADE) took part in *Semaine sans Pesticides* for the first time this year. Activities were organised by the group for every day of the campaign starting on 20 March with an interview for a local TV station about their plans for the week.

On 21 March members of MADE visited an agricultural pharmacy to raise awareness and inform the workers there about the consequences of careless pesticide use. This visit was important because, in Macedonia, it is very easy for farmers to buy pesticides. They are available without restrictions from any agricultural pharmacy. MADE used the visit to highlight to the workers the dangers of pesticides to people, animals and plants.

MADE also visited village farmers to see what their pesticide storage facilities were like. They found pesticides were stored in unspecialised containers in areas everyone has access to, including children. MADE advised the farmers to improve their pesticide storage by keeping the chemicals in a secure area, away from homes and animals.

In advance of local elections, on 25 March MADE organised a round table event with local mayoral candidates to find out their views and ideas on organic food production. Overall they were impressed with the candidates whose ideas included giving incentives to farmers to farm organically. MADE encouraged the candidates to strengthen their views in this area and discussed with them the benefits of organic produce.

Also related to organic food, MADE visited a green market to find out farmers knowledge and views on organic production. They found the farmers at the market were not very well informed on this subject though they were aware of the potential negative consequences of using pesticides. Farmers agreed with the principle of pesticide-free growing but said it was just not economically viable for them to do this in practice.

On 27 March members of MADE carried out a collection of out of date pesticide bottles in their houses. In total 78 bottles and boxes were collected. Members labelled the bottles as 'toxic' and

arranged for a company that collects dangerous waste from hospitals to safely dispose of the chemicals.

For *Semaine sans Pesticides* MADE also

- took part in a country-wide campaign to mark the first day of Spring called 'Plant a tree, plant your future';
- published an article in the local paper about the week without pesticides;
- held educational classes at
 1. Koco Racin Primary School, Kumanovo on the use of pesticides in agriculture
 2. Kumanovo's General Hospital informing doctors about the consequences of accidental pesticide poisoning in the home.



MADE collected out of date pesticide bottles and had them disposed of safely.

PAN Germany: Happy without Pesticides

For the fourth annual *Semaine sans Pesticides* PAN Germany launched a badge bearing the slogan 'Happy without Pesticides'. The campaign behind the badge aims to raise public interest in pesticide issues and to inform the public about alternatives. The badge was initiated in partnership with three other European NGOs: ECHO in Slovenia, Armenian Women for Health and Healthy Environment in Armenia, and Friends of the Earth Bulgaria in Bulgaria.

PAN Germany distributed the badges together with a short information card highlighting the dangers of pesticides as well as listing the alternatives that exist. Badges can be ordered by email free of charge from info@pan-germany.org (maximum 20 per order).

More information on PAN Germany's work and their happy without pesticides campaign can be found at www.pan-germany.org.



PAN Germany distributed badges displaying the message 'Happy without Pesticides'

VACANCY: PAN Germany is looking for a project officer for lobbying and public relations on the topic 'Revision and development of the EU legal framework on biocides – authorisation, market and use of biocidal products in the European Union'.

Further information at: http://www.pan-germany.org/download/job_announcement_project_officer.pdf

CEPTA call for food producers to decrease pesticide use

For this year's *Semaine sans Pesticides* CEPTA took part in the annual meetings of both the IP wine and vegetable producers. CEPTA took this opportunity to promote IPM; introduce PAN Europe's work; and discuss the new EU pesticides package with both groups of producers. CEPTA plan to follow up this meeting by organising training courses for the producers later in the year and in 2010.

CEPTA also organised a public meeting to discuss local and pesticides-free products, including Community Supported Agriculture (CSA). The meeting was held together with activists from the French group URGENCY and included tasting of local and regional products.

On 23 March Daniel Lesinsky from CEPTA represented the

organisation at the Ministry of Agriculture's Monitoring Committee meeting for the Rural Development Plan 2007 – 2013. The committee supports integrated production in Slovakia and has more than 30 members deciding on how the money for the Rural Development Plan should be spent. Daniel called for measures to be introduced to make IP more green either

- through the use of more strict conditions and compulsory controls such as pesticides residues control; or
- by cutting IP subsidies and moving the money to support organic farming.

CEPTA also arranged an all-evening radio discussion with farmers to be broadcast on the national radio station Radio LUMEN. CEPTA will use the

broadcast to promote farming with low pesticide inputs and other European initiatives to reduce pesticide use.

Following on from *Semaine sans Pesticides* CEPTA are planning to issue a press release focusing on the impact of pesticides on health with specific reference to the School Fruit Scheme supported by EU promoting residue-free fruit for Slovakia's children.



Participants at the annual vegetable producers meeting attended by CEPTA

Adalia campaigns for pesticide-free Wallonia

The Wallonian region of Belgium has taken part in *Semaine sans Pesticides* for the second year running. The campaign was coordinated by the Adalia association with the support of the Wallonian Ministry of Environment. The objectives of all the events organised were simple: to inform about the dangers of pesticides and show that there are efficient alternatives to their use.

To begin this year's *Semaine sans Pesticides* the Adalia association organised an opening evening on the grounds of the Acinapolis cinema complex in Jambes with a preview of the film "Nos Enfants nous Accuseront" (Our Children will Accuse us). The film was followed by a lively debate involving many questions from the audience.

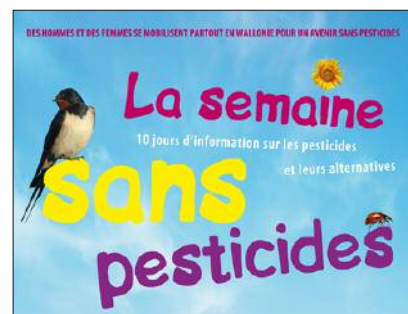
The ten days included a great variety of activities and organisations from all over the Wallonian territory. About 120 events were organised:

- 33 by communities and provinces;
- 30 by environmental associations;
- 12 by schools; and
- 42 by professional groups, especially garden-centres.

Activities included:

- 28 conferences and debates, of particular note were those given by Mrs Edith Smeesters, a spokesperson for Équiterre and expert on environmental horticulture;
- 20 open house or festive events;
- 15 shows in schools by students or external groups;
- 38 information stands, many in garden-centres; and
- 5 articles were published.

The Adalia association are hoping to repeat the campaign next year and show that it is possible, even crucial, to live in a pesticide-free



Detail from Adalia promotional material

environment. This year's results highlight the expectations of the groups involved and of the Wallonian population as a whole to be informed when it comes to pesticides.

For more information about the Adalia association's work for this year's *Semaine sans Pesticides* visit www.semainesanspesticides.be. If you would like to know more about the Adalia association itself see www.adalia.be.

PAN UK compares pesticide policies of UK supermarkets

PAN UK are often asked 'which UK supermarkets are the best on pesticides'? So, on Wednesday 25 March PAN UK published a comparison of UK supermarket pesticide policies. This new comparison, undertaken over six months, shows which supermarket companies are taking the most positive steps for change: the three doing most to address different issues of concern on pesticide use and contamination of food are The Cooperative, Marks & Spencer, and Sainsbury's. At the other end, Aldi, Lidl and Morrisons appear to be doing nothing. In the middle, Asda, Somerfield, Tesco and Waitrose are making some efforts but could go a lot further, particularly on removing specific hazardous pesticides from use and reducing residues in their food.

PAN UK welcomes targets and actions to reduce levels of pesticide contamination in food, however, residues are just one part of the picture. It is just as important to consider pesticide exposure of farmers and farm workers, wildlife and the environment. Taking measures to phase out or eliminate specific hazardous pesticides makes a real contribution to reducing health and environmental impacts. We are disappointed that no retailer has yet prohibited the use of the insecticide endosulfan or the herbicide paraquat, both toxic and highly problematic pesticides. Although neither is now permitted for use in the EU, there is widespread use in other parts of the world, linked to high levels of poisoning in developing countries, which is why PAN globally is campaigning for their banning. PAN UK calls on retailers to provide more information on plans,

Pesticide policy criterion	ALDI	ASDA	CO-OP	LIDL	M&S	MORRISONS	Sainsbury's	Somerfield	TESCO	Waitrose
Publish its residue testing results?	Red	Red	Yellow	Red	Green	Red	Yellow	Red	Red	Red
Action plans to tackle residue problems beyond legal compliance?	Red	Red	Yellow	Red	Green	Red	Green	Red	Red	Red
Commit to phase out specific hazardous pesticides?	Red	Red	Green	Red	Green	Red	Yellow	Red	Red	Red
Stated aim and actions to reduce use of pesticides?	Red	Yellow	Green	Red	Green	Red	Green	Yellow	Yellow	Yellow
Pest management strategy promotes alternatives to pesticides?	Blue	Yellow	Green	Blue	Green	Blue	Green	Green	Yellow	Green
Technical support for growers to reduce reliance on pesticides?	Blue	Yellow	Green	Blue	Green	Blue	Green	Blue	Yellow	Green
Information for consumers on pesticide use issues?	Red	Red	Green	Red	Yellow	Red	Yellow	Red	Red	Red
Engage with consumers on unnecessary use of pesticides for cosmetic appearance of fruit & vegetables?	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red

PAN UK comparison table of UK supermarket policies

progress, successes and challenges in pesticide hazard and use reduction.

One area that all companies do badly on is reducing use of pesticides to produce cosmetically perfect fresh produce. Many agronomists agree that less pesticide could be used if retailers and consumers were more willing to accept minor blemishes or spotting in their produce such as on citrus fruit and apples. PAN UK is keen to explore ways of educating consumers and buyer staff in supermarkets on this issue and to support ways for growers to sell more of any cosmetically imperfect produce at a fair price. Nick Mole, Policy Officer at PAN UK, is calling for supermarkets to improve their stance on pesticides:

“supermarkets lower down the PAN UK league table need to find means and ways of improving their performance. All supermarkets need to look again at reducing pesticide residues in food items by supporting farmers in cutting back on pesticide use throughout the supply chains.”

To reduce reliance on pesticides and promote safer alternatives, growers need technical advice and a supportive relationship with their retailer customers to help them change practices. Setting up action groups of growers and crop advisors to work together and test different methods for phasing out particular problematic pesticides and develop effective Integrated Pest Management strategies is one of the most useful ways to do this, as well as funding research. Experience sharing and developing best practice for pesticide reduction in specific cropping systems is much needed since all European growers will need to adopt Integrated Pest Management by 2014 under new EU legislation.

Supermarkets that PAN UK have spoken to were very supportive of the study and, since publishing the comparison table, two further UK supermarkets have established contact with the group and agreed to be interviewed.

For more information and copies of the comparison tables please visit www.pan-uk.org/Supermarkets

USA: Toxic pesticide residue risk from flea and tick collars

24 April

Some flea and tick collars leave highly toxic pesticide residues that can remain on an animal's fur weeks after the collar has been applied according to the Natural Resources Defence Council in America. This poses a particular risk to children whose bodies are still developing and are more at risk from ingesting the chemicals after stroking an animal. The residues were shown to contain the neurotoxins and known carcinogens propoxur and tetrachlorvinphos and, in some cases at levels up to 1000 times higher than the acceptable levels recommended by the Environmental Protection Agency.

USA: Pesticides linked to Parkinson's disease in humans

18 April

People who have lived close to fields where the pesticides maneb or paraquat were sprayed are, on average, 75% more likely to develop Parkinson's disease according to a study published in the latest issue of the *American Journal of Epidemiology*. The study examined over 300 individuals who lived near to fields where the pesticides had been sprayed and compared them with a similar sized control group. It found not only were these individuals significantly more likely to develop the disease than the control group but also that exposure to either maneb or paraquat made them twice as likely to develop the early-onset form of the disease with this rising to four times as likely if they were exposed to both pesticides.

ARGENTINA: The herbicide glyphosate may cause birth defects

16 April

An Argentinian study on amphibian embryos has shown that exposure to glyphosate results in brain, intestinal and heart defects. Scientists say the results are comparable to what would happen in a human embryo and are cause for concern in Argentina where glyphosate is used on genetically modified soy, Argentina's main crop. Farmers use 180 to 200 million litres of glyphosate a year. Researchers found defects occurred on exposure to glyphosate lower doses lower than those used in pesticide treatments.

AUSTRALIA: Dangerous levels of herbicides found in Great Barrier Reef

9 April

The Australian Centre for Tropical Freshwater Research has found dangerous levels of herbicides such as diuron, atrazine and ametryn present in the

wet season run-off of the catchment area to the Great Barrier Reef. In a four year study the Centre has found levels of these pesticides often exceeded Australian freshwater guidelines for species protection.

USA: Pesticides may be responsible for brain cancer in children

7 April

Children of parents who use pesticides in the home are twice as likely to develop brain cancer than children who live in pesticide free homes, with herbicide use causing a particularly increased risk, according to a recent study published in *Environmental Health Perspectives*. The research was carried out on over 800 fathers and 500 mothers in four states on the Atlantic Coast of the USA and showed the risk of cancer development in children of fathers who washed immediately after pesticide exposure or wore protective clothing was much lower than for those with fathers who never or only rarely took precautions.

Herbicide imazethapyr may cause cancer

1 April

A study of more than 20 000 pesticide workers reported in the *International Journal of Cancer* has shown that exposure to imazethapyr greatly increases the likelihood of developing certain cancers. Workers exposed to the highest levels of imazethapyr were twice as likely to develop bladder cancer than those not exposed to the herbicide at all and, in addition, had a 78% increased chance of developing colon cancer.

UK: Pesticides leaks pose big risks

30 March

A recent leak of the pesticide Fenpropimorph into the River Lark in England killing hundreds of crayfish has prompted the Environment Agency (EA) to highlight the risks involved in pesticide use, and the importance of locating pesticide handling areas in suitable locations. The source of the leak was shown to be via a surface water drain close to where farm sprayers were being filled with Fenpropimorph. The EA has stated it is very hard to remove contaminants such as pesticides from groundwater which is a vital consideration when two-thirds of the UK's drinking water is taken from groundwater supplies.

KENYA: Pesticide used to poison lions

29 March

Livestock herders in Kenya are poisoning large numbers of lions. It is suspected the pesticide furadan is being used as the poison. Furadan is a pesticide

designed for use on crops but it is cheap, widely available and highly toxic and is commonly used to kill animals.

USA: Pesticides linked to birth defects

27 March

Recent research published in *Acta Paediatrica* has highlighted that babies conceived in spring and early summer are more likely to be born with a birth defect such as spina bifida, Down Syndrome or a cleft palate, than those conceived at other times of the year. The increase in birth defects coincides with an increase in groundwater pesticide levels due to the spring/summer planting season.

USA: Prenatal DDT exposure may promote obesity in women

24 March

A study published in this month's issue of *Occupational and Environmental Medicine* has shown prenatal exposure to the now banned insecticide DDT may result in obesity in women in later life. The daughters of 250 women who ate fish from Lake Michigan during pregnancy in the early 1970s were tested for DDE exposure. DDE is a breakdown product of DDT, an insecticide commonly used in the area at the time. The study found women with intermediate levels of DDE in their bodies gained an average of 13 pounds of excess weight. Women with higher levels of DDE gained more than 20 pounds of excess weight. Although DDT is now banned traces of this insecticide is still found in fish species.

Fourth annual Semaine Sans Pesticides begins

20 March

Today sees the start of the fourth annual *Semaine Sans Pesticides* (Week Without Pesticides) in Europe. It will run until 30th March with organisations across France organising hundreds of events warning the public of the dangers of pesticides and providing education about alternatives. Elsewhere across Europe activities are being arranged in England, Italy, Belgium, Slovakia, Slovenia and Macedonia. The first *Semaine Sans Pesticides* was held in France in 2006.

USA: Pets at risk from flea and tick shampoos

19 March

An investigation in America into flea and tick shampoos containing pyrethrins and pyrethroids, the pesticides also found in other household pesticide products, has highlighted some animals have suffered seizures, vomiting and skin damage after application. Some animals have even died following their use. It is currently unknown to what degree these products can be toxic to pets.

USA: Treatment for termites linked to diabetes

13 March

Four recently published studies have revealed that insecticides present in fat deposits may be a risk factor in developing diabetes. The studies show the insecticides that had the greatest association with diabetes were all found in technical chlordane, a substance used to treat termite infestations until it was banned in 1988. Chlordane levels remain high in the air of treated homes 30 years and beyond after treatment. In addition to diabetes chlordane exposure has been linked to cancers and chronic diseases as well as headaches, lethargy and respiratory infections.

PHILIPPINES: Temporary ban placed on endosulfan

6 March

An immediate temporary ban has been ordered on the use, distribution and importation of endosulfan due to public safety concerns. The ban has been imposed after concerns following the capsizing of a ferry containing a consignment of endosulfan last year.

USA: Combining pesticides can prove deadly

3 March

Scientists have discovered some combinations of common agricultural pesticides can prove deadly to salmon as the chemicals accumulate in water. The study also showed the pesticides to be harmful at lower levels of exposure when combined than when present individually indicating the current practice of testing pesticides one at a time for fish mortality needs to be reviewed.

USA: Pesticide exposure linked to increased risk of Parkinson's disease in certain individuals

26 February

A study published in *Environmental Health Perspectives* has shown pesticide use can increase the risk of developing Parkinson's disease for individuals carrying certain genes. The study reported that people who have high occupational or residential exposure to pesticides and carry certain genes were 300 to over 400 percent more likely to develop Parkinson's disease.

SAUDI ARABIA: Two children die after inhaling pesticide fumes

24 February

Two Danish children have died and their parents are in intensive care after inhaling pesticide fumes coming from a house next door to where they were sleeping in Jeddah, Saudi Arabia. The house had

been sprayed with aluminium phosphide, a pesticide classified as dangerous and only permitted for agricultural use.

USA: DDT exposure can cause seizures in sea lions

12 February

Developmental exposure to DDT has been shown to increase the frequency and intensity of epileptic seizures in California sea lions according to a study published in *Environmental Health Perspectives*. The study has shown DDT interacts with domoic acid, a neurotoxin produced by algal blooms, to cause enhanced seizures and may cause similar affects in humans.

Termite insecticide shown to be powerful greenhouse gas

30 January

A study published in *Environmental Science and Technology* journal has shown sulfuryl fluoride, an insecticide used to remove termite infestations, persists in the atmosphere for at least 30-40 years and possibly up to 100 years. This is vastly higher than previous estimates of as low as five years and is a big cause for concern given sulfuryl fluoride is 4000 times more efficient at trapping heat than carbon dioxide.

IRELAND: Pesticide residues may cause long term health effects

21 January

The Irish Organic Growers Association has warned consumers may suffer long term health effects due to pesticide residues in food. The warning comes after official figures from the Department of Agriculture have shown 2008 pesticide MRLs have been exceeded for cabbage, chinese cabbage, turnip and parsley. Chinese cabbage was shown to contain 124 times the

legal MRL chlorothalonil. The organic growers association is concerned about the 'issues of a cocktail effect caused by consuming small amounts beneath the MRL over a lifetime'.

BOLIVIA: Eleven die after exposure to pesticide

20 January

Eleven people have died after spending the night in a lodge also used as a pesticide depot in La Paz, Bolivia. They were killed in their sleep due to chemical exposure after it is believed one of the eleven, a child, removed the lid from one of the pesticide bottles stored in the lodge.

USA: Pesticides effect women's fertility

15 January

Women who work or live near areas where pesticides are used take significantly longer to conceive than those in pesticide free environments according to a study published in *Journal of Occupational and Environmental Medicine*. The study examined pregnant women in California and found women who reported occupational exposure to pesticides were 30% less likely to conceive in any given month than those without occupational exposure.

European Parliament votes to tighten pesticide control

13 January

MEPs have voted in favour of tightening rules on pesticides in Europe. As well as a ban on cancer causing chemicals the draft legislation will prohibit or severely restrict the use of pesticides near schools, parks or hospitals. It will also ban aerial crop-spraying. From 2014 it will mandatory for all EU farmers to implement integrated pest management.

For latest news updates as well as links to original news sources visit the PAN Europe website at <http://www.pan-europe.info>

Academic Review

High incidence of pesticide poisoning in Nicaragua

Research was carried out to determine the incidence of human pesticide poisoning in Nicaragua in the year 2000. A nationally representative survey received 3,169 responses out of which 72 people reported at least one incidence of acute pesticide poisoning during the year in question. Most of the poisoning cases (90%, or 65) were due to occupational exposure while 5 cases (7%) were due to domestic exposure, and 2 cases (3%) were intentional.

Overall there were 2.3 incidents (95% CI 1.7-2.8) of acute pesticide poisoning per 100 people in Nicaragua which by extrapolation would suggest there were 66,113 cases (95% CI 51,017-81,210) in the whole country during 2000. This is an alarmingly high number demonstrating a high risk of acute pesticide poisoning. The highest rate was found among males in rural areas, particularly among farmers, agricultural and cattle workers. Comprehensive measures should be implemented to reduce their risk immediately.

Incidence of acute pesticide poisonings in Nicaragua: a public health concern, M Corriols, J Marin, J Berroteran, LM Lozano and I Lundberg, Occupational and Environmental Medicine, 2009, 66:205-210.

Pesticide exposure may lead to depression

A long term study in the USA, the Agricultural Health Study, enrolled pesticide applicators from the states of Iowa and North Carolina between 1993 and 1997. A total of 534 of these reported physician-diagnosed depression while 17,051 controls reported never having been diagnosed with depression and not feeling depressed more than once a week during the previous year. The pesticide exposure of both cases and controls was ranked into low (less than 226 days over their lifetime), intermediate (226-752 days) and high (more than 752 days over their lifetime). Two additional measures were used to indicate acute high intensity exposures: an unusually high pesticide exposure event (HPEE) and physician-diagnosed pesticide poisoning. Statistical analysis of the results suggested that both acute high intensity exposure and cumulative lifetime exposure to pesticides may contribute to depression.

Depression and Pesticide Exposures among Private Pesticide Applicators Enrolled in the Agricultural Health Study, CL Beseler, L Stallones, JA Hoppin, MCR Alavanja, A Blair, T Keefe and F Kamel, Environmental Health Perspectives, 2008, 116: 1713-1719.

Exposure to hexachlorobenzene in the womb may cause childhood obesity

An association has been found between prenatal exposure to the pesticide hexachlorobenzene (HCB) and being overweight or obese in childhood. The study looked at prenatal exposure of HCB in a general population and relied on body mass index (BMI), as a gauge of being overweight or obese.

In 1997, the research group began recruiting expectant mothers on the Spanish island of Menorca. They measured HCBs, PCBs, DDT, and the DDT metabolite DDE in umbilical cord blood from mothers of 405 children at birth. The children's height and weight was measured at birth and again at age 6.5 years.

Analysis showed that each doubling in cord blood HCB levels was associated with a weight increase of 1.14 kg, but the children's height did not differ significantly. The relative risk of being overweight was statistically significant, 1.7 times higher per doubling in cord blood HCB level. The association between HCB concentration and elevated BMI was independent of maternal socioeconomic status, weight, or education, or child's birth order or birth weight. There was no observed correlation between elevated BMI and PCBs, DDT, or DDE.

HCB is highly persistent and bioaccumulates in fat. It is now globally banned under the Stockholm Convention on Persistent Organic Pollutants. In humans, prenatal exposure to HCB has previously been shown to affect age at menarche and menopause, asthma, and fertility, as well as increase the relative risk of attention deficit/hyperactivity disorder. This new study now suggests it may also be linked with the rise in childhood obesity.

Exposure to hexachlorobenzene during pregnancy increases the risk of overweight in children aged 6 years, A Smink, N Ribas-Fito, R Garcia, M Torrent, MA Mendez, JO Grimalt, J Sunyer, Acta Pædiatrica, 2008, 97:1465-1469.

Pregnant women in the USA continue to use pesticides despite dangers

Widespread residential pesticide use throughout the USA has resulted in ubiquitous low-level exposure. However, concern over the developmental and reproductive impacts of some of the commonly used pesticides has resulted in regulations being tightened. Two of the pesticides that were commonly used in residential areas, chlorpyrifos and diazinon, were restricted; chlorpyrifos went off the market at the end of 2001 and diazinon at the end of 2002. Before this time chlorpyrifos and diazinon were the two most commonly used insecticides applied for indoor pest control. Permethrin (a pyrethroid) remains available for use.

A study was carried out to determine the impact of withdrawing these two pesticides on pest infestation levels, pesticide use and pesticides measured in indoor air.

A total of 511 pregnant women from inner-city New York were enrolled in the study between 2000 and 2006. Levels of permethrin, piperonyl butoxide (PBO; a pyrethroid synergist present in permethrin formulations), chlorpyrifos and diazinon in 48 hour prenatal indoor air samples were measured, along with information on pest infestation levels and pesticide use.

An alarming 88% of the women reported using pesticides during pregnancy with 55% reporting higher-exposure pesticide use (spray cans, bug bombs and/or professional pesticide applicators). Reported pest sightings and use of higher-exposure applications increased significantly after the regulations were implemented.

PBO, cis and trans-permethrin were detected in 75%, 19% and 18% of personal air samples, respectively. These detection frequencies increased significantly during the course of the study from 2000 to 2006. Detection frequencies were significantly higher among mothers reporting use of high exposure applications and lower in those using baits and gels. Chlorpyrifos and diazinon were found in more than 98% of air samples both before and after the phase-outs but levels decreased significantly over time.

For six months after chlorpyrifos went off the market, use of replacement pesticides fell, perhaps due to elevated awareness of pesticide dangers. But a steady, significant increase in sightings of cockroaches, the most commonly observed pest, was correlated with a steady, significant increase in the use of replacement pesticides for every six-month period from 2002 through 2006. Participants received regular newsletters containing pertinent information, including warnings about potential health effects of residential pesticide use and information on alternative pest control methods.

Data on health effects of these pyrethroid products at the measured concentrations are limited. However, there is growing evidence of health and environmental damage from these products, which are proving to be ubiquitous both indoors and out.

MK Williams, A Rundle, D Holmes, M Reyes, LA Hoepner, DB Barr, DE Camann, FP Perera and RM Whyatt, Changes in Pest Infestation Levels, Self-Reported Pesticide Use and Permethrin Exposure during Pregnancy after the 2000-2001 U.S. Environmental Protection Agency Restriction of Organophosphates, Environmental Health Perspectives, 2008, 116:1681-1688.

Children exposed to pyrethroids through head lice treatments

Both lindane and permethrin (a pyrethroid) are licensed for treatment of head lice in the USA. This study compared the exposure of children being treated for head lice (exposed) with those who did not have head lice and hence received no treatment (unexposed).

In 2001, 78 children between the ages of 6 and 10 were enrolled in the study. They were either from a school in Dawson county or one in Forsyth county. Urine samples were collected to establish baseline data.

During the course of the study 29 of the children (37%) were diagnosed and treated for head lice and urine samples collected from these children after treatment.

Fourteen of the 29 exposed children used prescription lice treatments (lindane or malathion); 25 of the 29 used over-the-counter permethrin treatment, either alone or in combination with the prescribed treatments. Exposed children in both counties had higher levels of pyrethroids although this was only significant in children from Forsyth county.

The results suggest that children are exposed to pyrethroid insecticides through the use of head lice treatments.

LP Naeher, DB Barr, N Rithmire, J Edwards, AK Holmes, LL Needham and CS Rubin, Pesticide exposure resulting from treatment of lice infestation in school-aged children in Georgia, Environment International, 2009, 35:358-362.

Pakistani agricultural workers suffer DNA damage from spraying pesticides

The study was carried out on 47 male agricultural workers involved in spraying pesticides in cotton fields. On average the workers had been involved in this type of work for just over 12 years and were exposed to mixtures of carbamates, organophosphates, organochlorines and pyrethroids. A control group of 50 men was also recruited from the general population in the area and had no occupational history of exposure to pesticides.

Blood samples were collected from the agricultural workers and the control group. The amount of DNA damage present in the blood cells of each group was measured using the comet assay. A statistically significant difference in DNA damage was found between the DNA of the agricultural workers and that of the control group. The study shows that chronic exposure to pesticides produces DNA damage. DNA damage is involved in the development of many cancers.

JA Bhalli, T Ali, MR Asi, ZM Khalid, M Ceppi and QM Khan, DNA Damage in Pakistani Agricultural Workers Exposed to Mixtures of Pesticides. Environmental and Molecular Mutagenesis, 2009, 50:37-45.

To request a quarterly listing of peer reviewed scientific articles relating to pesticides and their impact on health and the environment, please contact Pesticide Action Network UK (admin@pan-uk.org)

PAN Europe in the news

The articles below represent a selection of media coverage of PAN Europe and its activities over the past three months. Links to the full articles are available from our website.

Parliament clears final hurdle (13 January 2009)

BRUSSELS COVERAGE

The Parliament: **EU parliament backs pesticide regulations** (13 January)

Euractiv: **Parliament seals pesticides deal amid opposition** (13 January)

EU Observer: **Toxic pesticides banned in Europe** (13 January)

CZECH REPUBLIC COVERAGE

Ceské Televize: **EU zakáže nebezpečné pesticidy** (13 January)

FRANCE COVERAGE

France 24: **EU Parliament pushes for ban on toxic chemicals** (13 January)

Le Monde: **Le Parlement européen bannit 22 substances pesticides dangereuses** (13 January)

Nouvel Obs: **Les eurodéputés bannissent les pesticides les plus dangereux** (13 January)

LUXEMBOURG COVERAGE

Tageblatt: Les eurodéputés bannissent les pesticides les plus dangereux dans l'UE (13 January 2009)

NETHERLANDS COVERAGE

De Volkskrant: Voorkomen is nog steeds beter dan genezen (24 January)

VARA - vroege Vogels: Interview with Hans Muilerman, Natuur en Milieu and PAN Europe board member (18 January)

UNITED KINGDOM COVERAGE

BBC Radio 4 - Farming Today: Interview with Elliott Cannell, Coordinator, PAN Europe (17 January)

Nature: **Europe set to crack down on pesticides** (16 January)

BBC Radio 4 - Farming Today: Interview with Elliott Cannell, Coordinator, PAN Europe (14 January)

BBC TV 1: Interview with Elliott Cannell, Coordinator, PAN Europe (13 January)

BBC Radio 4 - PM News: Interview with Elliott Cannell, Coordinator, PAN Europe (13 January)

BBC Radio 4 - 6 o'clock News: Interview with Nick Mole, Policy Officer, PAN UK (13 January)

BBC online: **Balance elusive in EU pesticide debate** (12 January)

INTERNATIONAL COVERAGE

IHT: **European Parliament passes pesticides bill** (13 January)

Yahoo: **European Parliament passes pesticides bill** (13 January)

Guardian: **European Parliament passes pesticides bill** (13 January)