





# Six steps to pesticide reduction

A HEAL toolkit for communities and individuals wishing to reduce local pesticide use



## About this toolkit

Pesticides are chemicals designed to be toxic, and in many cases their toxic nature can be harmful to our health and the environment.

Mounting scientific evidence of the harm to human health and the environment from current pesticide use prompted the European Union (EU) to introduce a package of new laws to reduce our pesticide dependency. However, many Governments are being slow about carrying out the laws.

Authors: Gill Erskine, Genon Jensen, Anne Stauffer and Diana Smith (Health and Environment Alliance, HEAL).

Printed with vegetal inks on 100% recycled post-consumer paper without the use of optical bleaching.

The Health and Environment Alliance (HEAL) thanks DG Environment, European Commission and the Ministry for Housing, Regional Development and the Environment (VROM), the Netherlands, for their financial support in the production of this toolkit and our pesticides work.

The views expressed in this publication do not necessarily reflect those of the funders.

December 2010

www.env-health.org www.pesticidescancer.eu

### Who is the toolkit for?

This toolkit is aimed at anyone wishing to reduce the pesticide use in their community, from national non-governmental organisations and health or other groups to concerned citizens, mothers and families.

The Health and Environment Alliance (HEAL) is coordinating successful campaigns across five countries of the EU to help citizens and local authorities reduce their dependency on pesticides.

Six steps to pesticide reduction explains:

- What the European pesticides law means for your country
- What the scientists are saying about the links between pesticides, ill-health and the environment
- How to develop pesticide-reduction campaigns in your country.

We show tried-and-tested examples from our experience as well as case studies and demonstrate that strategic and imaginative approaches can change policy and practice to ultimately create a safer healthier environment for all.







# **Sick of Pesticides:**

### a Europe-wide campaign

Launched in 2008, HEAL's Sick of Pesticides campaign aims to raise public awareness that reducing pesticide use could help bring down cancer rates in Europe, to encourage pesticide-free public spaces, and to support countries in the setting up of National Action Plans (NAPs) for pesticide reduction by 2012.

HEAL works with partners in France, Hungary, the United Kingdom, the Netherlands and Belgium. Together with them, we aim to make sure the EU laws benefit local citizens and help local authorities to rapidly reduce pesticide dependency. We especially want to bring health groups and the health and medical community to the decision-making table.

The first activities started in the UK and France and later we expanded our efforts to Hungary, the Netherlands and Belgium. Working with partner organisations at national level, the Sick of Pesticides campaign acts as a platform to exchange information on the creation of pesticide-free areas; to establish the next steps as countries prepare their National Action Plans (NAPs); and to mobilise EU citizens to call on their governments to reduce pesticide dependency now.

www.pesticidescancer.eu www.twitter.com/healthandenv www.facebook.com (Sick of Pesticides)











# What's the problem?

### How do pesticides impact health?

Pesticides are chemicals designed to be toxic, and in many cases their toxic nature can be harmful to our health and the environment. In the EU, pesticides are used in all sorts of places and products. Everywhere we go, we are exposed to pesticides; from the parks and gardens we play in, to the food we eat, the clothes we wear. Residues from pesticides can be found in our drinking water, our food, the air we breathe, and even in our bodies.

Scientific evidence increasingly shows links between pesticide use, people's exposure and ill-health. Health impacts can include cancer, problems with fertility and reproduction, respiratory diseases, disruption of the hormone (endocrine) system, immune system, or nervous system, and cognitive ability.<sup>1</sup>

Vulnerable groups, such as children, pregnant women, the elderly or farm workers are the most at risk. Even the unborn child can be affected by parental exposure. A recent scientific review highlights that the increasing rates of childhood cancer - 1% a year in some European countries - may be linked to environmental exposure, such as exposure to pesticides.

There is also growing concern about the health effects from a mixture of pesticides – known as the "cocktail effect". Exposure to mixtures of pesticides can be far more damaging than exposure to just one.

### What needs to change?

The EU pesticides law has banned certain substances and recommended reductions in the use of pesticides. However, dangerous chemicals will only gradually disappear from the market, and governments are only very slowly developing plans for the sustainable use of pesticides which need to be adopted by 2012.

To speed up the process, citizens need to make their concerns heard and make it clear to politicians at all levels that this issue is a priority. By reminding governments of their obligation to create National Action Plans, we can all contribute to reducing pesticide use in the community, whether you are a concerned citizen, a farmer, someone whose health has been affected by pesticides, or a parent who worries about the health of their child.

# Find out which diseases are linked to pesticides

The Collaborative on Health and the Environment (HEAL's US partner) created a database that summarises links between chemical contaminants and over 180 human diseases or conditions. http://database.healthandenvironment.org

# Pin-pointing objectives

1. An immediate ban on avoidable, hazardous pesticides which cause cancer, damage the DNA and reproductive systems. Under the new EU law, these substances will no longer be allowed on the market. But it will take several years before they disappear from circulation altogether. We want to see the pesticides that the EU has defined as hazardous immediately removed from use.

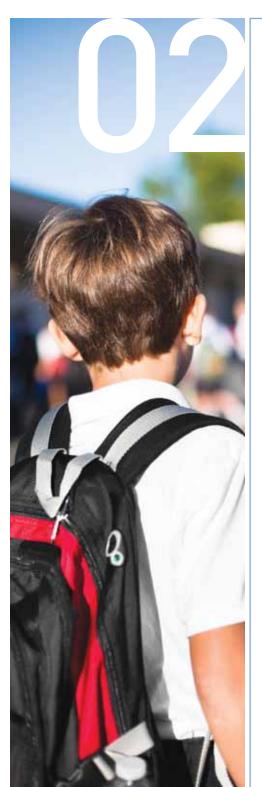
Identify exactly what you are aiming to achieve, which will also help to define your target audience. The Sick of Pesticides campaign has clearly defined objectives for what is required to protect health and the environment:

2. Targets to reduce the use of pesticides and eliminate or minimise exposure. To enable successful implementation, National Action Plans must include targets for use reduction with timetables.

3. Pesticide-free areas where children are most exposed, such as parks, schools, and sports grounds. With the goal of reducing exposure to prevent further ill-health, we should agree that in certain zones the "cosmetic use" of pesticides is stopped.

<sup>&</sup>lt;sup>1</sup>http://www.europarl.europa.eu/activities/committees/studies/download.do?file=22471

<sup>&</sup>lt;sup>2</sup> http://www.chemtrust.org.uk/documents/CHEM%20Trust%20Report%20-%20Pesticides%20&%20Cancer%20July%202010.pdf



# The lay of the land

Being informed and effective on how we can reduce pesticide dependency means understanding what the problem is and what is already being done. You can start at any level by investigating your local or national situation, and identifying useful resources and groups.

Create a picture of which groups are already working to reduce pesticide dependency.

**Example:** At the beginning of each national initiative, the Sick of Pesticides campaign identified NGOs already working at national level who could help coordinate the campaign.

**Action:** A good place to start would be to look at the members of the Pesticide Action Network that are based in your country.

Identify which pesticides are being used and information on how extensively people are being exposed.

To assess the level of exposure to pesticides or which preventative measures can be taken to protect children, it is possible to find out the pesticide exposure in your schools and food.

**Example:** HEAL initiated a questionnaire directed at the local authorities responsible for the schools themselves.

**Action:** Use our questionnaire template to send to your local authorities and find out what pesticides are being used in your area. www.pesticidescancer.eu

**Tip:** You can also find information on pesticide residue levels in food in your country through the EU monitoring survey which annually publishes results. See the website of the European Food Safety Agency EFSA: www.efsa.europa.eu

What does the public think about pesticides and health and which measures should be taken?

**Example:** We commissioned public opinion polls in our five campaign countries the UK, France, Belgium, Hungary and the Netherlands. The results for France showed that nearly all French people would like to see pesticide use halved.

Action: Find out what surveys have already been carried out in your country (check our Resources page). Several EU wide polls have been carried out which can highlight current attitudes and concerns about pesticide use (check our Resources page). Or why not conduct a small survey in your local community? See the questions we asked on www.pesticidescancer.eu.

**Tip:** Try to interest a local newspaper journalist in your results.

4. Health care strategies and national cancer plans that include plans to reduce pesticide exposure. Cancer is a growing public health problem in all EU Member states, and many countries already have in

place or are setting up action plans. But only by acknowledging the role of pesticides and other chemicals in cancer causation can these plans achieve their full potential.

### Good practice - towns go pesticide-free

In Belgium, a federal action plan has been working to reduce dependency on pesticides and its harmful effects. In Flanders and Wallonia, the cities of Grobbendonk, Hasselt, Ghent, Eupen and Rochefort have banned the use of pesticide in streets, parks, and cemeteries, but still need to ban them on football pitches.<sup>3</sup> In the Netherlands, Nijmegen, Amersfoort, Enschede, Haren, Utrecht and others are using alternative methods for weed control and minimising pesticides dependency.



 $<sup>^3</sup>$  http://www.pan-europe.info/Resources/Reports/NAP\_best\_practice.pdf



## Reaching your audience

Politicians will not act if they feel the issue is not a priority for their constituents. Campaigns are needed to raise awareness and to mobilise the public. The Sick Pesticides campaigns across Europe used many different communication methods to reach our key audiences – here are a few examples.

# SUPPORTIVE NETWORKS Websites and blogs – Sharing information and progress

Example: www.pesticidescancer.eu

The Sick of Pesticides multi-language, multicountry website strengthens the impact of the campaign. It provides updates, further research on pesticides and health and ideas for action at community level to reduce pesticide use.

### Example: steingraber.com/blog

HEAL partner, ecologist and cancer survivor Sandra Steingraber, writes a blog that raises awareness of the links between environmental pollution and our health.

**Action:** Tell your story - contribute articles to www.pesticidescancer.eu or start your own blog – they are free and easy to update.

## Social network – build your network locally, nationally and internationally

**Example:** Twitter has helped our campaign news spread quickly, easily and cheaply, and our Facebook group has allowed information sharing on pesticides reduction strategies from all over the globe.

**Action:** Follow us on www.twitter.com/ healthandenv or Facebook and share your news with our growing networks.

### **SCHOOLS**

Communicating the risk of pesticides

**Example: Postcards**, 'A vote for my child's health', produced for the French and UK campaign, list some of the known health consequences of pesticides.

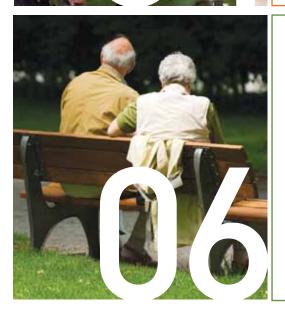
**Example: Poster**, '7 good reasons to choose sustainable and pesticides-free fruit and vegetables for European School Schemes', which draws on an article in the Lancet medical publication.

**Example:** Report, 'Pesticides - a toxic education?' a survey of pesticide use in UK schools.

Action: Use our postcards and posters to educate teachers and parents about the dangers to health caused by pesticides. We have also created a guide for schools on pesticide reduction. You can find them here www.pesticidescancer.eu.

### **HEALTH-AFFECTED GROUPS**

**Example:** HEAL and our French partner, Generations Futures are working with farmers claiming recognition for the effects of pesticides on their health – some have won legal claims that their cases of cancer were caused by working with pesticides. The farmers' video statements are available on www.victimes-pesticides.fr and supported by resources on alternatives to pesticides.



# Keeping up the momentum – sharing information

Join the movement and share your information on local pesticide use and on your government's preparation for the National Action Plan.

Sick of Pesticides has become a platform for information sharing and education about the effects of pesticides to health, and the alternatives that are available across the EU. You can join us too. Shout about your success stories or uncover your government's reluctance to act

Each month Sick of Pesticides produces a newsletter Pesticides and Health e-news. We have a growing audience of policy makers, NGOs, health professionals and concerned citizens from throughout the EU.

**Action:** Send us your stories and updates on reducing pesticide dependency, just email info@env-health.org for more information.

Example: With the support of the European Cancer Patient Coalition, we collected testimonies from cancer patients that show a need for better regulation against harmful pesticides. HEAL has used these testimonies on websites and in press releases to help personalise the messages see: www.env-health.org.

**Action:** Spread the word and use these powerful videos and testimonies in your campaigns.

# LOCAL AUTHORITIES Which pesticides are being used in your area?

**Example:** In France, Generations Futures produced a postcard for members of the public asking local authorities to protect children's health and reduce the use of pesticides in public spaces, such parks and schools. Over 25,000 postcards were distributed throughout France in garden shops, school and community centres. A similar postcard action took place in the Netherlands.

**Action:** Use the postcards as template to ask your local authorities about pesticide use and to raise awareness of the risks to health.

### NATIONAL AND EU POLITICIANS Respond to a government consultation

**Example:** Many governments are now asking the public for input about how to best reduce pesticide use. When the UK Government conducted a consultation, HEAL and many other organisations requested more protection from pesticides in public places.

**Action:** Check on your government's or ministry's website to see if they are conducting a consultation. If they are not, you can ask them to do so by writing to your politician or minister for environment.

**Tip:** Working with the media on EU and national press articles and sharing them helps to emphasise the message to politicians.

### **PUBLIC**

### Awareness raising events

**Example:** HEAL hosted a film screening of "Living Downstream" as a way of reaching new audiences. The film explains the problem and highlights solutions around pollution and health effects.

**Action:** Host a screening with your friends or wider community. Living Downstream and other resources are available on www.livingdownstream.com.

**Tip:** Remember to create awareness around any events you organise by telling your local or national media.

### **Publications**

**Example:** The French Cancer and Environment campaign launched an investigative study called 'Toxic Menu' showing the makeup of chemical substances in children's daily diets. This received coverage in all major French media and was translated into English. The cancer prevention policy recommendations in the report are being used to underpin a regional cancer and environment campaign in 2011.

**Action:** You can use the Toxic Menu for investigations in your country. Visit www.menustoxiques.fr and the Cancer and Environment campaign website,

www.environnement-et-cancer.com.

### Sharing ideas for change across Europe

HEAL now has a well established network of individuals and organisations working across Europe to reduce our pesticides dependency. The network has an active e-forum and meets often to exchange information on the setting up of pesticide-free areas and to establish the next steps as countries develop their NAPs. Our first meeting was held in November 2010.

**Action:** Join the network and continue to share expertise and experiences. Just email info@env-health.org

### Sharing the evidence of harm to health and campaign developments

HEAL provides updates on the latest scientific reviews of the association between pesticides and health and on developments related to the campaign. You can share these with partners and members.

**Action:** Consult the extensive compilation of scientific studies on pesticides and health on our website resource page.

**Action:** Find out which organisations are working on pesticides in your country by consulting our website.



# Sharing best practice and building momentum

Take time to consolidate information working with your local or national network. This will not only pool expertise but will aid outreach to your target audience.

# Share stories of action at local level and alternatives to pesticides use.

The Sick of Pesticides partner organisations in Hungary (Clean Air Action Group), Belgium (Inter Environnement Wallonie) and the Netherlands (Leefmilieu) organised workshops each with over twenty participants from national environment and health organisations, local authorities, and cancer groups. The meetings discussed alternatives to pesticides and shared national examples of pesticide reduction strategies.

**Action:** With all the information gathered, invite members of the growing network to a workshop to discuss next steps and possible actions.

## Resources, listed by section

### **N1**

### What's the problem?

The Collaborative on Health and the Environment (CHE) Toxicant and Disease Database: is a searchable database that summarizes links between chemical contaminants and approximately 180 human diseases or conditions. Diseases and or toxicants can be viewed by clicking on the diseases below or by utilizing the search engine in the column on the right. Available at:

www.healthandenvironment.org/tddb

# 02 The lay of the land

Pesticide Action Network that are based in your country: www.panna.org/our-community/pan-international

Questionnaire: Find out which pesticides your school is using – try our schools survey! HEAL questionnaire directed at the local authorities responsible for the schools themselves. The questionnaire is available for download at:

www.pesticidescancer.eu/spip.php?rubrique16

European Food Safety Agency EFSA is the keystone of European Union (EU) risk assessment regarding food and feed safety. Here you can find information on pesti¬cide residue levels on food in your country through the EU monitoring survey which annually publishes results.

www.efsa.europa.eu/en/publications.htm

**Pesticides & Cancer survey:** this survey was designed to help HEAL and its partners to give feedback to European, national and local politicians on policies related to chemicals. You can use our questionnaire template to send to your local authorities and find out what pesticides are being used in your area. The survey is available at:

www.pesticidescancer.eu/survey/questions\_en.html

### 03

### Reaching your audience

The Sick of Pesticides multi-language, multi-country campaign website: www.pesticidescancer.eu

Sandra Steingraber's blog raises awareness of the links between environmental pollution and our health. Available at: http://steingraber.com/blog/

Follow us on Twitter page:

http://twitter.com/healthandenv

Join the debate on the Sick of pesticides facebook page: www.facebook.com/pages/Sick-of-Pesticides/38411248553?ref=ts

HEAL Pesticides post card "A vote for my child's health" list some of the known health consequences of pesticides and is available at:

http://www.env-health.org/IMG/pdf/HEA\_013-07\_FINAL.pdf

### Poster:

www.env-health.org/IMG/pdf/Postcard\_pesticide\_free\_spaces\_FRENCH.pdf

**Report:** Pesticides - a toxic education? A survey of pesticides in UK schools and is available at:

www.env-health.org/IMG/pdf/UK\_survey\_final\_report\_220210.pdf

### 04

# Sharing best practice and building momentum

Cancer Testimonies – a collection of testimonies from cancer patient groups about cancer and the environment which is an initiative from the European Cancer Patient Coalition and the Health and Environment Alliance, available at:

www.pesticidescancer.eu/IMG/pdf/Living\_Downstream\_ Questions\_on\_cancer\_and\_environment.pdf

**HEAL hosts European film premiere:** Living Downstream - See how HEAL raise awareness through this event:

www.env-health.org/a/3605?var\_mode=calcul

### 05

# Keeping up the momentum – sharing information

Sick of pesticides monthly Newsletter:

www.pesticidescancer.eu/spip.php?rubrique20

# Other Resources on pesticides and health

A review of the role of pesticides play in some cancers: Children, farmers and pesticides users at risk?

CHEM Trust (2010). Available at:

www.chemtrust.org.uk/documents/CHEM%20Trust%20Report%20-%20Pesticides%20&%20Cancer%20July%202010.pdf

### **Beyond pesticides:**

www.beyondpesticides.org

### **Breast cancer resources:**

Breast cancer and exposure to hormonally active chemicals:
 An appraisal of the scientific evidence. Health and Environment Alliance (HEAL), Chemicals Health Monitor, CHEM Trust (2008). Report available at:

www.chemicalshealthmonitor.org/spip.php?rubrique100

- Factors influencing the risk of breast cancer established and emerging. Health and Environment Alliance (HEAL), Chemicals Health Monitor, CHEM Trust (2008). The briefing is available at: www.chemicalshealthmonitor.org/spip.php?rubrique100
- **Breast Cancer:** Preventing the preventable. *Health and Environment Alliance (HEAL), Chemicals Health Monitor, CHEM Trust (2008)*. The leaflet is available at:

www.chemicalshealthmonitor.org/spip.php?rubrique100

### Collaborative on Health and the Environment (CHE):

www.healthandenvironment.org

### Cancer Plan, France 2009 – 2013:

www.e-cancer.fr

Chemical Cocktails; Harmful Mixtures Upset Our Hormones, Health and Environment Alliance (HEAL), WWF, CHEM Trust (2010). The leaflet is available at:

www.chemicalshealthmonitor.org/spip.php?article148&var\_mode=calcul

Children Health and Environment: A Review of Evidence, WHO Regional Office for Europe and European Environment Agency. The benefits of strict cut-off criteria for human health (Health impact assessment of pesticides), European Parliamentary report (2002). The report is available at:

 $www.eea.eu ropa.eu/publications/environmental\_issue\_re-port\_2002\_29$ 

Collaborative on Health and the Environment (CHE), Portal to science is available at:

www.healthandenvironment.org/cgi-bin/portal.cgi

Cutting back on pesticides for healthier lives, New scientific understanding of health impacts of pesticides demands precautionary policy making. Health and Environment Alliance (HEAL) and PAN UK (2007). The report is available at:

www.env-health.org/IMG/pdf/Briefing\_Feb\_2007\_FINAL.pdf

Environmentally caused cancers are 'grossly underestimated' and 'needlessly devastate American's lives U.S. President's Cancer Panel (2010). Available at:

www.environmental healthnews.org/ehs/news/president scancer-panel

### **Environnement et Cancer (France):**

www.environnement-et-cancer.com

### **Eurobarometer:**

- What does the European public think about the health impacts of pesticides and chemicals? 72% of the EU consumers are worried about pesticide residues.
- ec.europa.eu/public\_opinion/index\_en.htm
- Which consumer products are seen to contain chemicals posing a risk to the users? 70% of EU consumers consider pesticides and herbicides for home use (in gardens and greenhouses) to pose a risk.

http://ec.europa.eu/public\_opinion/archives/ebs/ebs\_314\_en.pdf

**List of Lists:** A convenient reference for identifying those pesticides associated with particularly harmful health and environmental impacts. *Pesticide Action Network UK (2009)*. Available at: www.pan-uk.org/publications/list-of-lists-2009

### Living Downstream (US):

www. living downstream. com

### Male reproductive disorder resources:

- Male Reproductive Health Disorders and the Potential Role of Exposure to Environmental Chemicals. CHEM Trust (2009).
   Report available at:
- www.chemtrust.org.uk/documents/ProfRSHARPE-MaleRe-productiveHealth-CHEMTrust09.pdf
- Men Under Threat: A leaflet on the decline in male reproductive health, and the potential role of exposure to chemicals.
   Health and Environment Alliance (HEAL), Chemicals Health Monitor, CHEM Trust (2009). Report available at:

www.chemicalshealthmonitor.org/spip.php?rubrique118

NAP Best practice: Sustainable use of pesticides: implementing a National Action Plan. *Pesticides Action Network (2010)*. Report available at:

www.pan-europe.info/Resources/Reports/NAP\_best\_practice.pdf

Paris Appeal (2004), International Declaration on diseases due to chemical pollution. Signed by hundreds of scientists, close to 1,000 NGOs, more than 150,000 individuals and 2 million European doctors. Available at:

www.artac.info

Prague Declaration (2005), Prague Declaration on endocrine disruptors. Signed by hundreds of scientists and researchers. Available at:

www.ourstolen future.org/Consensus/2005-0620 prague declaration.htm

**State of the Art Report** on Mixture Toxicity. Prof. Dr. Andreas Kortenkamp (ULSOP); Assoc.-Prof. Dr. Thomas Backhaus (UGOT); Dr. Michael Faust (FBEC) (2009). Available at:

http://ec.europa.eu/environment/chemicals/pdf/report\_Mixture%20toxicity.pdf

Statement on the Control of Pesticides in the European Union, A call for action to protect human health (2008) by the Italian Collegium Ramazzini, an international academy of over 180 experts in environmental sciences and occupational health in 35 countries. Available at:

 $www.collegium ramazzini.org/download/13\_Thirteenth CRS tatement \%282008\%29.pdf$ 

The benefits of strict cut-off criteria on human health in relation to the proposal for a Regulation concerning plant protection products (September 2008). Requested by the European Parliament's Committee on the Environment, Public Health and Food Safety. Available at:

www.europarl.europa.eu/activities/committees/studies/download.do? file = 22471

### **Toxic Menu (France):**

www.menustoxiques.fr

### **World Health Organization (WHO):**

www.who.int/topics/pesticides/en/



For a full list of resources on pesticides and health please visit the library on www.pesticidescancer.eu

We are always interested to hear from other organisations working in the field of pesticides and health. If you would like to join our campaign, please send an email to info@env-health.org

# Other organisations working on pesticides:

### **Belgium**

Bond Beter Leefmilieu (BBL) www.bondbeterleefmilieu.be

Inter-Environnement Wallonie www.iewonline.be

### **France**

Generations Future (formerly MDRGF) www.mdrgf.org

### Hungary

Clean Air Action Group (CAAG) www.levego.hu

### The Netherlands

Vereniging Leefmilieu www.leefmilieu.nl

### **United Kingdom**

Alliance for Cancer Prevention http://allianceforcancerprevention. wordpress.com

Cancer Prevention and Education Society (CPES)

www.cancerpreventionsociety.org

### CHEM Trust

www.chemtrust.org.uk

Georgina Downs - UK Pesticides Campaign www.pesticidescampaign.co.uk

Pesticides Action Network (PAN) UK www.pan-uk.org

### Europe

Pesticides Action Network (PAN) Europe www.pan-europe.info and Germany www.pan-germany.org



The Health and Environment Alliance (HEAL) aims to raise awareness of how environmental protection improves health. It achieves this by creating opportunities for better representation of citizens' and health experts' perspectives in the environment and health-related European policymaking. Our membership includes a diverse network of more than 65 citizens', patients', women's, health professionals' and environmental organisations across Europe and has a strong track record in increasing public and expert engagement in both EU debates and the decision-making process.

www.env-health.org info@env-health.org



Health and Environment Alliance (HEAL)

28 Boulevard Charlemagne 1000 Brussels - Belgium Telephone: +32 2 234 3640 Fax: +32 2 234 3649 Email: info@env-health.org Website: www.env-health.org