Comments on
Terry Creek Superfund Site Outfall Ditch/Operable Unit 1
Proposed Plan Fact Sheet June 2015
Prepared by Environmental Stewardship Concepts, LLC
September 2, 2015

Introduction

This *Proposed Plan Fact Sheet* is a summary of the findings in the *Focused OU1 Remedial Investigation/Feasibility* released in December, 2014. ESC has commented previously on several documents leading up to this Proposed Plan and will repeat these comments here, where necessary. Overall, the major issues still exist and EPA is urged to not accept this cleanup option as adequate or final.

Regarding the cleanup options, the Proposed Plan still fails to offer as the preferred alternative a quadruple box culvert, increased amount of sediment removal, use of an activated carbon cap for deeper sediments, or consider biodegradation via bioremediation methods. EPA needs to address: **Why does the preferred alternative not include the four box culvert, relocation of the ditch, substantially greater sediment removal and biodegradation?**

The Remedial Investigation is wholly inadequate in determining the full nature and extent of the contamination in terms of spatial and depth distribution, chemical composition, toxicity, contamination distribution through all environmental media and risks to human health and ecological receptors. Bioassays need to be conducted for sediments (surface and deep), pore water, surface water, plant matter as food and prey items.

The *Feasibility Study* presumes a remedy in the design and stated purpose, and fails to offer a full range of remediation alternatives for analysis. In this regard, the Feasibility Study does not meet regulatory requirements.

Environmental Justice issues at Terry Creek

This Proposed Plan fails to meet the intent or specific requirements of the Environmental Justice Executive Order or the EPA Strategic Plan on EJ, or the practices that have been conducted by EPA at other CERCLA sites where there are EJ issues. There is no estimation of cumulative risks, no Environmental Justice Analysis, and no specific assessment of exposures and risks from contaminated fish (and other seafood) consumption to the fishing public. As a result, the Proposed Plan should be withdrawn and corrected in order to complete the necessary work to achieve EJ goals.

Why did EPA not conduct an EJ analysis?
Why did EPA fail to consider the fish consumption exposures of the African American community in Brunswick?
How will this Proposed Plan address EJ problems that exist in Brunswick now and in the future?

Presidential Executive Order 12898 of 1994 indicates that all federal agencies will take steps to achieve environmental justice and in section 1-101 directs:

"…each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations"

Section 3-3 specifically directs each agency to conduct analyses accordingly:

> "(b) Environmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures. "

The Executive Order further directs agencies to specifically address issues concerning consumption of fish and wildlife (in Section 4-4).

Brunswick is predominately African American, with 11% Latino, both minority communities. The US census for 2010 indicates that Glynn County is 33.3% non-white, but Brunswick City is approximately 59% African American, shown in the tables below.

Glynn County-Brunswick, GA Census Data
Glynn County
http://quickfacts.census.gov/qfd/states/13/13127.html
Brunswick
http://quickfacts.census.gov/qfd/states/13/1311560.html

Demographics (2010)	City of Brunswick	State of GA
White alone	31.4%	59.7%
Black/African American alone	59.2%	30.5%
Hispanic/Latino	11.3%	8.8%
White alone (not Hispanic or Latino)	27.5%	55.9%
Asian alone	0.6%	3.2%
American Indian/Alaska Native alone	0.3%	0.3%
Native Hawaiian/other Pacific Islander alone	0.1%	0.1%
Two or more races	2.0%	2.1%

Demographics (2009-2013)	City of Brunswick	State of GA
Language other than English spoken at home (age 5+)	13.9%	13.3%
High School graduate or higher (age 25+)	78.1%	84.7%
Bachelor's degree or higher (25+)	12.3%	28%
Per capita money income in past 12 months (2013 dollars)	$17,232	$25,182
Median household income	$29,106	$49,179
Persons below poverty level	37.9%	18.2%

The facts are that the population has been exposed to releases of contaminants from this site for a period approaching 100 years, exposures from all pathways over the entire period have not been characterized and are likely substantial, the population is predominately African American, fish consumption has not been analyzed at this site, all chemicals have not been assessed, notably dioxins, and the current Proposed Plan will leave substantial contaminated sediment in place.

In the professional judgment of ESC, LLC, the Plan will result in continued health risks to the population, disproportionately so for the African American anglers.

Chemical contamination at the Terry Creek Site, OU1

This particular site has been contaminated with pesticide residues, wastes, products and by-products of chemical synthesis and manufacturing processes conducted over a period of approximately 100 years. The RI/FS and Proposed Plan focus on a specific category of chlorinated camphenes with no consideration of other pesticide manufacturing processes, products, wastes or by-products. This omission is so serious that even known contaminants of chlorinated camphene production, i.e. dioxins, are omitted from serious consideration and evaluation at the site. For this reason alone, the RI must be considered inadequate and rejected until such time as all chemical contaminants, including and especially dioxins, are fully characterized at the site.

Why has EPA not included dioxins and furans in the RI analysis as contaminants?

Will EPA require measurement of dioxins/furans in sediment, soil and groundwater at the site?

Chlorinated camphene

Much is discussed in the RI, the FS and the Proposed Plan about toxaphene, a particular commercial formulation of chlorinated camphenes, in bulk synthesis. This discussion diverts the Agency and the public from the critical question of the toxicity of

the environmental media at the site. EPA needs to know the sediment toxicity, pore water toxicity, surface water toxicity, and biota toxicity to humans and the full range of ecological receptors (mammals, birds, fish, reptiles, invertebrates, etc.).

What is the toxicity of site environmental media, including sediment (surface and at depth), pore water, surface water, and biota?

Chlorinated camphenes are equated with technical toxaphene, erroneously; the two terms do not refer to the same chemical(s). Furthermore, the documents make a series of false assumptions about the chemical composition of sources, wastes, by-products, effluents and receiving waters over a period of many decades of activity at the plant that is the source of contamination at this site. Any estimate of current conditions based on past activities is mere speculation owing to the absence of critical information on the complete chemical composition of waste streams, receiving water hydrodynamics, pH, salinity, temperature, sediment load, dissolved organic carbon content, particulate organic carbon content and other factors. In short, the only scientifically defensible method to assess chemical contamination at the OU1 site is to make measurements using the EPA approved method.

Methods of measuring chlorinated camphenes (toxaphene)
The Proposed Plan seeks to continue the obfuscation of measuring chlorinated camphenes in the body of the text and in Appendix A of the RI/FS. Three different methods are available and have been used to measure concentrations of this group of compounds, Method 1, Method 2 and EPA Method 8276. Only one method, EPA Method 8276, is officially promulgated for applications such as Terry Creek. In fact, sediment samples from Terry Creek were used in the validation of the EPA Method 8276.

Appendix A of the RI/FS was conducted and prepared by Hercules consultants Geosyntec, with other labs completing the lab work. This Appendix indicates that EPA Method 8276 is the most sensitive method, but calls on using Method 2 in addition to Method 8276, because of consistency with historical sampling that used Method 2. The problem lies in the cover letter that states the Appendix recommended against using Method 8276, when such a statement is not made in the Appendix. This document is not Agency policy and not an official document on measuring chlorinated camphenes.

The body of the Proposed Plan continues the obfuscation in text that the risks and toxicity is overly complicated. The complication is created by the PRP. EPA has an approved method (Method 8276) and the data obtained by other methods is insufficient for an accurate site assessment, a point supported by the RI/F Appendix A data.

All of the data given in the Proposed Plan were obtained using Method 1 or Method 2, or both, and thus underestimates by 4-10 fold. These data are clearly inadequate to make remedial design conditions, and not sufficient for estimating health risks.

Why does EPA accept the data using measuring methods that are inaccurate and that underestimate concentrations of contaminants?

Will EPA use EPA Method 8276 exclusively for this site in the future?
Given that most of the data in the RI are not accurate measures of environmental contamination, how will EPA handle the inaccurate data to determine remediation requirements?

Dioxins/furans
The documents ignore dioxins and furans, known contaminants of the processes at this facility at this site and listed in the documentation for the waste disposal pit 009 for this plant. Reports from the waste pit show elevated levels of dioxins/furans in the solid/sludge material and even in groundwater. Dioxins/furans do not dissolve in groundwater because they do not dissolve in pure or distilled water; dioxins are highly hydrophobic and dissolve in organic solvents, such as the benzene that contaminates groundwater at the 009 site. The presence of dioxins/furans in sludge waste and groundwater at the disposal site indicates that the source is equally contaminated, at least.

The scientific literature on dioxins and furans is abundant and has documented the multiple human health and ecological effects of exposures to these chemicals. An updated literature search on dioxins for the last few years and extending back to earlier literature. Additionally, EPA is still working on the Dioxin Reassessment, although the IRIS listing for non-cancer health effects was published in 2012. The EPA official position on dioxin toxicity has developed over the years, but has not fundamentally changed since the early years of the reassessment. Basically, dioxin is a complete carcinogen, causes a host of non-cancer effects at low doses over short term exposures, and some non-cancer health effects display linear no-threshold response characteristics.

How will EPA incorporate the IRIS RfD into the Terry Creek site remediation?
Will EPA establish a PRG for dioxins in fish, in surface waters and in sediments?

The literature search results are given at the end of this document.

Groundwater contamination

How is the remediation method expected to keep groundwater contamination from remobilizing? The groundwater is now a source of contamination that needs to be addressed so that it does not re-contaminate the site once it is remediated. The upper surficial aquifer is primarily unconfined with only some isolated areas that are under semi-confined conditions. This geologic structure indicates the possibility for vertical movement in the groundwater. In the most recent groundwater monitoring report, there are still exceedances of VOCs at the former toxaphene surface impoundment within the upper surficial aquifer. Monitoring wells near the OU1 Outfall Ditch (MW-29D and -38D) show increasing trends in contaminants of concern including benzene, chlorobenzene and xylenes. The metals barium and chromium also continue to be a problem in the groundwater.

Previous Comments

From our comments on the *Draft Focused Remedial Investigation/Feasibility Study Report Operable Unit 1 (OU1) Outfall Ditch,* February 2014:

General Comments

Environmental Stewardship Concepts has previously commented on the *Focused Remedial Investigation/Feasibility Study Work Plan* (January 2012) and the *Remedial Alternative Screening Technical Memorandum* (December 2012) for OU1 at Terry Creek. Many of the comments from these previous documents are still not addressed, and as such, are reiterated in this review of the Draft RI/FS. This RI/FS is incomplete and inadequate for a variety of reasons that are explained below. EPA is urged to insist on a revision to this draft.

In an EPA document, *Ombudsman Report: More Information is Needed on Toxaphene Degradation Products* (USEPA 2005), the Office of Inspector General contends that more information is needed on toxaphene degradation products and that EPA should validate, approve, and use the gas chromatography with negative ion mass spectroscopy (NIMS) method that can test for these products. [Method 8276 has been finalized, as of October 2012; Revision 1 is dated July 2014 and is attached here for reference.] The EPA's report further states "Academia and the European Union have successfully used the NIMS method for at least 5 years to test for toxaphene degradation products in the environment," i.e. since the year 2000. As the method is currently being used, validation and approval steps would not be a difficult or lengthy process for the EPA.

Important in the assessment of toxaphene to human and ecological health is that receptors are exposed to the degradation products [present in the environment], not the

original technical toxaphene mixture as originally synthesized or released. Degradation is assumed to be minimal or non-existent, yet no data are available to confirm these assumptions under conditions at Terry Creek over the time period applicable to this site. It should be further determined which toxaphene congeners pose the most risk to human health, where p26, p50, p62, p40, p41, and p44 have been found in fish tissues (Fiolet and van Veen 2001) or soil (Maruya 2001a) or both. Where some congeners are easily metabolized and excreted, others are poorly metabolized and not readily excreted, accumulating in the body (Maruya 2000). Studies indicate that only five (p26, p50, p40, p41, and p44) of the 200 congeners of toxaphene are not easily metabolized by the human body, these contributing to the long-term chronic toxaphene exposure in humans.

The potential exposure pathways are also important to the assessment of toxaphene degradation products in ecological and human risk assessment. Scientific investigations indicate that the main exposure contributing to human health risk is from fish consumption and potential sources of drinking water (Fiolet and van Veen 2001, Buranatrevedh 2004). Additionally, babies are exposed to toxaphene degradation products *in utero* as well as after birth through mother's milk. Jacobson (1996) indicates that developing embryos are the most susceptible to organochlorines, such as toxaphene, among others, which has been linked to impaired cognitive development (i.e. low IQ scores).

The Inspector General's report directly addresses Terry Creek, noting Method 8081's failure to detect toxaphene's degradation products in any fish samples taken in 1997. When the same samples were re-analyzed in 2001 by Dr. Maruya of the Skidaway Institute of Oceanography, the NIMS method found toxaphene congener concentrations of up to 1,420 ppb (2001b).

References

Buranatrevedh, S. 2004. Cancer Risk Assessment of Toxaphene. Industrial Health, 42: 321-327.

Jacobson, J.L. et al. 1996. Intellectual Impairment in Children Exposed to Polychlorinated Biphenyls in Utero. New England Journal of Medicine, 335: 783-789.

Fiolet, D.C.M. and M.P. van Veen. 2001. Toxaphene Exposure in the Netherlands. National Institute of Public Health and the Environment, RIVM Report 604502-003.

Maruya, Keith A. et al. 2000. Prominent Chlorobornane Residues in Estuarine Sediments Contaminated with Toxaphene. Environmental Toxicology and Chemistry. 19:2198-2203.

Maruya, Keith A., et al. 2001a. Selective Persistence and Bioaccumulation of Toxaphene in a Coastal Wetland. American Chemical Society, Chapter 12: 164-174.

Maruya, Keith A. et al. 2001b. Residues of toxaphene in finfish and Shellfish from Terry and Dupree Creeks. Georgia, USA Estuaries 24:585-596.

US EPA, Office of Inspector General. Ombudsman Report: More Information is Needed on Toxaphene Degradation Products. December 16, 2005. Report no. 2006-P-00007

Specific Comments

In reviewing the *Draft Focused Remedial Investigation/Feasibility Study*, several of our previously submitted comments for OU1 Terry Creek documents, *Focused Remedial Investigation/Feasibility Study Work Plan* (January 2012) and the *Remedial Alternative Screening Technical Memorandum* (December 2012), still apply and are listed here, followed by comments on the current 2015 documents: the RI/FS, Appendix A to the RI/FS and the Proposed Plan.

Focused Remedial Investigation/Feasibility Study Work Plan (January 2012):

- Dioxin concentrations need to be measured in all sediment samples, as well as in pore water, suspended sediment and animal tissue, owing to the presence of dioxin in toxaphene products.
- The report claims that EPA Method 8276 is not necessary because of previous data collection, as explained on page 14: “Since Method 1 is the most widely used method and is analogous to the SW 846 Method 8081B, the data from this method is what will be used to inform remedial decisions at the Site.” [now page 17].” This statement is factually incorrect. Method 8276 is the official and approved method for measuring chlorinated camphenes or toxaphene.
- **Why does EPA not simply rely on the Method (Method 8276) that has been promulgated by the agency for measuring toxaphene?**
- The Work Plan for the RI/FS also anticipated leaving contamination in place that may pose continued risks to ecological receptors, indicated by the suggestion that the remediation may take the form of a performance based, rather than a standards-based or risk-based cleanup. The Work Plan needs to provide a method by which the remediation will be protective of ecological systems and human health.

Remedial Alternative Screening Technical Memorandum (December 2012)

- The RI/FS report basically discounts or ignores the chemicals besides toxaphene that are present as site contaminants. This omission underestimates the risks from chemicals to humans and ecological receptors.

- The RI/FS is correct that there is not enough sediment deposition to apply any form of natural recovery (an unproven approach for many situations, especially with chemicals that do not degrade naturally like toxaphene).
- Alternative and *in situ* methods could have been considered in the FS part of the report, but were completely absent. New methods may have advantages that are not possible with conventional approaches.
- Ultimately, none of the alternatives will bring this site to a conclusive cleanup if the ongoing source of toxaphene is not remediated successfully, and this report does nothing to address this most important issue.
- The considerable discussion over toxicity values for toxaphene or chlorinated camphenes, presents an issue that remains unresolved. EPA needs to take a position on this matter and insist that the values developed and used by EPA are the ones that the company will ascribe to and use.
- In a similar manner, the methods for measuring toxaphene present a problem that needs to be resolved by the Agency. It is unclear what EPA testing method was used for “Method 1 Technical toxaphene” and no explanation is given to how “Method 2 Total Area Under the Curve (TUAC)” was calculated. Hercules did run some samples under Method 8276, which is a more improved method over Method 8081 for testing for weathered toxaphene, but these results are not given in the report. Hercules needs to use Method 8276 for the remaining samples. More discussion on this point is presented in these comments.
- The text says that the detailed Conceptual Site Model is "under development" and will be in the final RI/FS report, contrary to guidance and standard. That is not the way to proceed. EcoRA guidelines from 1998 clearly state that the CSM comes first. Also see Glen Suter et al. textbooks on general Ecological Risk Assessment and ecological risk assessments for contaminated sites. The proposition that a conceptual site model is not prepared at a later time, but is supposed to be prepared at the outset. The RI/FS must include a conceptual site model.
- The plan calls for composite samples (page 24), which is inappropriate for characterizing the distribution, nature and extent of contamination, as EPA guidance dictates.
- This RI/FS wholly ignores conducting a Human Health Risk Assessment, with no mention of human health risks in a specific context. The RI/FS must, at the very least, include a summary of human health risks by noting the exposure pathways, types of health effects, what is known of dose-response relationships and a characterization of risks. But to completely exclude a section on human health is not acceptable. Any examination of the nature and extent of contamination demands an analysis of human health effects.

- The report only contains an Ecological Conceptual Site Model, with no reference to an analysis of human health.
- The area surrounding the Outfall Ditch is too residential to be cleaned up to a non-residential standard.
- The RI/FS alternatives do nothing to permanently remove contaminated sediments, only to ineffectively, remove contact with the contaminated sediment. The capping remedies require monitoring in perpetuity, which would greatly increase their costs. These costs are not adequately and fully characterized.
- The RI/FS on page 38 indicates that dioxins were measured in two sediment samples, which is consistent with information that dioxin is a contaminant of toxaphene production. The next statement that the dioxin in sediment samples must be derived from other sources is not credible and needs to be removed.
- Any discussion about construction times, possible contamination during construction, and difficulties of remediating the existing ditch without re-routing, are all trivial. For a remediation project of this small scale (as compared to the Hudson River which is undergoing dredging), a greater amount of sediment removal must be a larger part of the alternatives.
- If shallow groundwater in the vicinity of the ditch likely discharges into the Outfall Ditch and Dupree Creek, then groundwater needs to be better characterized and analyzed as a possible source of contaminants. The groundwater plume associated with the plant, while being managed under RCRA, is wholly dismissed and mentioned only once in the RI/FS.
- **How will EPA address the problem of recontamination by existing and future groundwater contamination of OU1, the Outfall Ditch?**
- The Ecological Conceptual Site Model only contains very general reference to groups of wildlife, not taking any one species specifically as a representative in that environment to determine its actual exposure pathways. Specific receptors can and should be used in the ecological risk assessment.
- The ecological risk assessment fails to consider the accumulation of toxaphene or chlorinated camphenes in marsh grass, *Spartina alterniflora* as a component in the exposure analysis and trophic transfer of toxaphene. ESC has previously submitted material on this point.
- Only one of the wildlife groups under consideration includes prey as a exposure pathway. This limited approach is wholly insufficient as prey items are a major source of contaminant exposure for chemicals such as chlorinated camphenes and dioxins that are bioaccumulative. For these chemicals, the food consumption pathway is considered the most significant of possible exposure pathways. In the present case, with no empirical data on exposures, there is no reason to conclude otherwise.

- **Why has EPA not insisted that site data on exposures be collected by the PRP?**
- **Does EPA assume that exposures to all receptors are as given in the Exposure Factors Handbook?**
- The SLERA and the determination as to whether a BERA should follow must include the data analyzed under the approved EPA Method 8276.
- Comparison of toxaphene and chlorinated camphenes found in fish pre- and post-remediation should not have been used to relax fish consumption guidelines when the post-remediation (2001) included different areas and species sampled than the pre-removal (1997) effort.
- The Outfall Ditch is being prioritized as a source of toxaphene to be remediated, but the larger issue is still the source of toxaphene to the Outfall Ditch, which has not been documented as remediated since the completion of corrective actions in 2010 on the Plant and the N-Street Ditch that feed into the Outfall Ditch. There was no reduction in fish tissue toxaphene in 2011. Additional testing must be done to confirm any measurable impact from the corrective actions.
- **What is the depth of contamination across the entire site? Has EPA accepted a depth at which no contamination occurs, and is therefore "clean?"**
- The NIMS method (Method 8276) has been performed in consideration of planning for OU2 and OU3, but is not relied upon for OU1, according to the Proposed Plan. As the Outfall Ditch is the source issue, environmental media in the ditch must be analyzed with the best/most sensitive congener evaluation available (Method 8276)
- The RI/FS contains the laboratory results of toxaphene breakdown products using the outdated methods, not the official EPA Method 8276, but the evaluation of the data will be performed under “separate cover” which means that the results will not adequately inform this remediation effort at the Outfall Ditch. The full data set and evaluation need to be included here. Appendix A seems to present
- It is unclear if there was ever any dredging of the triple box culvert at any time in its history. A disadvantage of a culvert is the need for periodic cleanout of the silting sediment.
- It is unclear how the accumulated volume of sediment since the previous removal was calculated (estimated to be: Pre-weir = 7500 cy and post-weir = 10,500 cy)
- The seepage rate (net gain of groundwater into the Outfall Ditch) pre-weir is 1,352 gpd and post-weir is 2,593 gpd. This information indicates a lot of seepage from groundwater into the Outfall Ditch not to be considered a contaminated source

- Net groundwater discharged into the Outfall Ditch may be substantial, based on the area being a “gaining” area, but this section seems to downplay the potential VOC contribution of groundwater.
- Section 8.3.2 of the FS explains the Remedial Action Objectives. All four are objectives to reduce exposures with no objective for removal of the source material or eliminating toxicity. The completion exclusion of removal as an objective seems completely inconsistent with EPA directives and guidance to treat or remove toxicity before relying on covering the source. This RI/FS lacks consideration of removal or treatment options. As a result, this Proposed Plan is deficient in failing to present appropriate remedies of a sufficient range and that satisfy ARARs.
- Section 8.3.4 of the FS on page 60 refers to MNR associated with reductions in surface sediment toxaphene concentrations, but fails to note that toxaphene degradation in the sediment is sufficiently slow that burial is the process that takes place. Wisely, MNR is not considered any further.
- Similarly, in Section 8.3.4 on pages 60-61, the RI/FS discounts removal because it is too difficult and too expensive, but fails to provide any substantive or meaningful support for this position. The RI/FS needs to give more than token consideration to removal.
- There is no consideration given to bioremediation, despite the fact that Hercules has conducted pilot studies with new methods for bacterial degradation.
- There is no discussion of testing excavated material for contaminants that is temporarily stockpiled to be used as backfill.
- A report of this size and importance (the RI/F) should have an Executive Summary and an Abbreviations page to make the material more accessible to the public.
- The preferred alternative uses armoring of remaining contaminated sediments left in place to prevent erosion, disturbance etc. This approach is not practical in the long term for a site that is basically a tidal salt marsh zone for several reasons. First of all, sea level rise will inundate the location. Second, changes in flow patterns and erosion in nearby areas will alter the existing flow patterns and the "new" flow patterns that are to be put in place with the remediation. Finally, extreme weather events such as hurricanes, floods and localized flooding will erode the stability of the armored area, exposing contaminated sediments. The armoring will have to be inspected annually and repairs made as needed.
- **If or when the site is disrupted or inundated, will EPA insure that further remedial actions are taken to address recontamination by contaminants left in place? Has EPA accounted for this cost?**

Importance of Seafood Consumption Surveys

Seafood consumption surveys need to be conducted in the Brunswick area. This information is integral to effectively reaching anglers, boaters, and recreationists about the seafood consumption advisories in the area. ESC conducted an analysis of seafood consumption advisories in southeastern states including North Carolina, South Carolina, Florida, Mississippi, and Louisiana. Research has found that fish consumption advisories alone are ineffective at reaching recreational anglers and people who eat fish. Even when advisories are seen, people tend to not always understand, trust, or follow them. Studies have found that differences in fish consumption advisory awareness vary among subpopulations, including gender, ethnicity, geographic area, age, and education. Furthermore, national seafood consumption rates do not always accurately reflect local data.

What will EPA do to include fish consumption information in the effectiveness of the remedy before and after remedial actions?

Signs posted at sites under advisory appear to be one of the most popular methods of dispersing advisories; however, a study conducted in Louisiana found that only 20% of respondents became aware of advisories via signs at landings, boat launches, fishing sites, and bait shops. Targeted outreach to the most exposed and susceptible population is encouraged, particularly during the most popular times for fishing. Mass media and mail-outs were the most effective and preferred methods of receiving advisory info; these methods should be used when resources are available.

In order to provide more accurate, effective fish consumption advisories that reduce regionally specific exposure pathways, clear, targeted education and locally-based advisories should be designed. When possible, target audience members should be involved in the process of crafting and disseminating educational materials. More realistic advisories can be created by basing monitoring and advisory decisions on regional species-specific sportfish consumption levels, not just on contaminant levels alone. Providing clear, culturally tailored health messages regarding fish advisories will promote more informed choices about fish consumption that will minimize potential exposures to environmental pollutants.

Summaries of Fish Consumption Source materials

North Carolina

Bawden et al. (2015): The University of North Carolina (UNC) has been seeking community input on fish consumption advisory educational materials in order to educate

recreational anglers and their families about a fish consumption advisory (FCA) related to PCBs. Despite existing educational materials on PCBs, community partners are concerned that many people take home their catch. Research has found that FCAs alone are ineffective at reaching recreational anglers and people who eat fish. It has also found that when FCA messages do reach their target audiences, people do not always trust, understand, or follow them. UNC is working to involve target audience members in the process of crafting and disseminating FCA educational materials, and to evaluate their community-based fish consumption education programs.

They found that minority participants and participants for whom English is not their first language were initially more likely to believe the fish were “somewhat safe” to “very safe” to eat. They were more likely to report consuming fish caught from contaminated locations and to express incorrect info about the health risks posed by contaminated fish. After reading their educational guide, people reported that consuming fish from the contaminated waters to be less safe than before they read the guide. They also recognized that children, and women who are pregnant or breastfeeding, should avoid eating fish from the contaminated waters.

Challenges endured in this study included reaching target populations, educating about carrying advisories at multiple locations with multiple contaminants, and overcoming social desirability bias.

UNC collaborated with several organizations, including the NC Department of Public Health, Neuse Riverkeeper Foundation, and the NIEHS-funded Center for Human Health and the Environment at NCSU.

LePrevost et al. (2013): This study examined the efficacy of a sign designed by the North Carolina Division of Public Health posted along a reservoir (Badin Lake) for increasing anglers’ awareness of a fish consumption advisory, with a particular focus on anglers who share their catch with women and children. Shore anglers were significantly less likely to be aware of the term “fish consumption advisory” and of the specific advisory for Badin Lake than boat anglers. The study’s findings underscore differences in fish consumption advisory awareness among subpopulations. It also revealed the importance of characterizing the communication needs of shore anglers and anglers who share their catch with sensitive populations for the creation of more targeted communications of fish consumption advisories.

South Carolina

Ellis et al. (2014): Research suggests that African-American fishers in the southeast US consume larger amounts of fish, potentially exposing them to higher environmental contaminant levels. An in-depth study focused on South Carolina's Gullah/Geechee heritage and African-American Sea Island attitudes, perceptions, and cultural beliefs about fishing in one urban and two rural South Carolina coastal. Results indicated that study participants in rural counties had slightly different perspectives of fishing, i.e. fishing as an essential dietary supplement, than in urban counties where fishing was viewed more as relaxation. Major misconceptions existed in all counties between fish consumption advisories related to pollution versus harvesting restrictions association with fishing regulations. Both urban and rural fishers exhibited confusion between fishing regulations and fish advisories. Providing clear, culturally tailored health messages regarding fish advisories will promote more informed choices about fish consumption that will minimize potential exposures to environmental pollutants.

Florida

Krimsky et al. (2015): To address the need for consumer-oriented education, these investigators conducted a survey of Florida seafood consumer preferences, perceptions, and concerns. The majority of respondents who do consume seafood eat it one to two times per week. This pattern is consistent with a 2007 Florida Seafood Study conducted by the Florida Department of Agriculture and Consumer Services (FDACS), which suggests that Floridians consume seafood more frequently than the national average. Based on the results of this study, the following suggestions for seafood educational programs were made:

- Educational materials should provide info on low-cost and seasonal options for Florida seafood commodities to address the fact that higher cost of seafood may be becoming a barrier to increased consumption.

- Educational programs could focus on developing a "train-the-trainer" model for restaurants and retail staff in order to help workers better address customer questions and needs regarding purchasing local seafood.

- General knowledge about seafood is low for Florida consumers, especially regarding the safety of imported seafood. The University of Florida and the Florida Cooperative Extension Service, both of which are recognized as respected outlets for seafood information, have an opportunity to address these gaps.

- Educational programs should utilize appropriate outreach materials, including both traditional (brochures) and non-traditional (internet, social media) strategies.

Schaefer et al (2014): Recent research has demonstrated higher seafood consumption and subsequent increased risk of methylmercury exposure among subpopulations living in coastal areas. Since the study found that mercury contamination is generally higher in Floria compared to all other states, targeted education and local advisories should be designed to reduce regionally specific exposure pathways. Future local consumption advisories may include several of the species identified in this study, particularly for pregnant women. However, there are many well-recognized benefits of fish consumption. The challenge for public health is to find and recommend the balance between the positive and negative effects of fish and shellfish consumption. The findings of high concentrations of mercury in hair among coastal residents in eastern Florida associated with consumption of locally caught seafood and specific species of fish should be used to develop interventions to reduce exposure among high risk groups.

Mississippi

EPA (2010): EPA's Office of Water, Office of Science and Technology designed and conducted a survey for assessing the awareness and effectiveness of the Mississippi Delta fish consumption advisory issued by the Mississippi Department of Environmental Quality (MDEQ) in 2001. The state-issued advisory recommends that people should not eat more than two meals a month of wild-caught buffalo fish, carp, gar, and large catfish and should not eat any buffalo fish from Roebuck Lake. MDEQ initiated an extensive outreach campaign in 2001 to promote awareness of the advisory by conducting a public media campaign, distributing letters and posters to stores, posting signs at fishing access points, and mailing letters and brochures to churches in the Delta area. They also implemented some aspects of the risk communication outreach campaign, including publishing advisories in the Mississippi Department of Wildlife, Fisheries, and Parks' regulations brochure, posting information on the MDEQ website, and maintaining signs at boat ramps and fishing areas.

The survey results suggested that some respondents, 33-54%, stopped eating or ate less wild-caught large catfish or buffalo fish since learning about the advisory (few ate carp or gar before the advisory). Respondents reported limited changes in their fishing practices and fish preparation and cooking practices since learning about the advisory. Only 10% were found to eat more than the recommended two fish meals per month of wild-caught fish from the Delta area, which would increase their health risks from

consuming DDT and toxaphene contaminated fish. About a third of respondents reported eating buffalo fish or wild-caught large catfish.

Louisiana

Katner et al. (2011): This was the first known population-based survey of recreational fishers in Louisiana (n = 1774). The ultimate goal of the study was to obtain data in support of the development of regional advisories for a high exposure population with unique seafood consumption patterns. A survey was mailed to a random sample of licensed recreational fishers to characterize local fishing habits, sportsmen consumption, and advisory awareness. Eight-eight percent of respondents reported eating sportfish. Respondents ate an estimated mean of four fish meals per month, of which, approximately half were sportfish. Over half of all sportfish meals (54%) were caught in the Gulf of Mexico or bordering brackish areas. Sportfish consumption varied by license and gender; the highest was among Sportsman's Paradise license holders and males. Advisory awareness rates varied by gender, ethnicity, geographic area, license type, age, and education. Results were used to identify ways to optimize monitoring, advisory development, and outreach activities.

Lincoln et al. (2011): Methyl mercury exposure assessments among average fish consumers in the US may underestimate exposures among US subpopulations with high intakes of regionally specific fish. The study examined relationships among fish consumption, estimated mercury intake, and measured mercury exposure within recreational anglers in Louisiana. Forty percent of participants had levels >1 ug/g, which approximately corresponds to the US EPA's reference dose. Study participants had relatively elevated hair mercury concentrations and reported consumption of a wide variety of fish, particularly locally caught fish. This group represents a highly exposed subpopulation with an exposure profile that differs from fish consumers in other regions of the US, suggesting a need for more regionally specific exposure estimates and public health advisories.

Gulf Coast

Natural Resources Defense Council (2010): The NRDC conducted a Gulf Coast Seafood Consumption Survey after the BP Deepwater Horizon spill in response to the FDA's protocol for determining seafood safety. The protocol guided the reopening of more than 99% of Gulf waters to fishing. The protocol included several assumptions that were questioned by scientists and Gulf Coast residents. The FDA derived its seafood consumption rates from national rather than local data.

The survey found elevated rates of seafood consumption among the Gulf Coast residents surveyed. Rates of shrimp consumption significantly exceeded the estimate used by the FDA to calculate a safe level of exposure to oil spill-related contaminants-ranging from 3.6 to 12.2 times higher. Some subpopulations reported significantly higher seafood consumption rates than other survey respondents and the FDA estimates. Also, many survey respondents are more vulnerable to contaminants in seafood than FDA accounted for due to smaller body weight. When coupled with increased consumption rates, this can result in a significantly increased dose of contaminants.

Comparative analysis of state fish consumption advisories targeting sensitive populations

Scherer et al. (2008): The study conducted a comparative analysis of advisory websites issued by states to assess health messages that sensitive populations might access. The findings highlight the complexity of assessing and communicating info about multiple contaminant exposure from fish consumption. Communication regarding potential health benefits conferred by specific fish nutrients was minimal and focused primarily on omega-3 fatty acids. The overview highlights a lack of both clarity and consistency in providing the breadth of information that sensitive populations such as pregnant women need to make public health decisions about fish consumption during pregnancy.

Will EPA consider the patterns and importance of fish consumption as an exposure for recreational and subsistence anglers in the Brunswick area?

Citations

Bawden, Kat, Kathleen Gray, Sarah Yelton, UNC Superfund Research Program, Department of Environmental Sciences & Engineering, Gillings School of Global Public Health, and UNC at Chapel Hill. “Evaluating the Effectiveness of Educational Materials on Fish Consumption Advisories,” Poster presentation at the EPA Community Involvement Training Conference, 2015.

Ellis, Jamelle H., Daniela B. Friedman, Robin Puett, Geoffrey I. Scott, and Dwayne E. Porter. 2014. “A Qualitative Exploration of Fishing and Fish Consumption in the Gullah/Geechee Culture.” *Journal of Community Health*, 1161–70.

Natural Resources Defense Council. 2010. “Gulf Coast Seafood Consumption Survey,” June 2010: 1–7.

Katner, Adrienne, Ebenezer Ogunyinka, Mei Hung Sun, Shannon Soileau, David Lavergne, Dianne Dugas, and Mel Suffet. 2011. “Fishing, Fish Consumption and Advisory Awareness among Louisiana’s Recreational Fishers.” *Environmental Research* 111 (8): 1037–45.

Krimsky, Lisa, Charles Adams, and Bryan Fluech. 2015. “Seafood Knowledge, Perceptions, and Use Patterns in Florida : Findings from a 2013 Survey of Florida.”

LePrevost, Catherine E., Kathleen M. Gray, Mercedes Hernández-Pelletier, Brennan D. Bouma, Consuelo Arellano, and W. Gregory Cope. 2013. “Need for Improved Risk Communication of Fish Consumption Advisories to Protect Maternal and Child Health: Influence of Primary Informants.” *International Journal of Environmental Research and Public Health* 10 (5): 1720–34.

Lincoln, Rebecca a., James P. Shine, Edward J. Chesney, Donna J. Vorhees, Philippe Grandjean, and David B. Senn. 2011. “Fish Consumption and Mercury Exposure among Louisiana Recreational Anglers.” *Environmental Health Perspectives* 119 (2): 245–51.

Scherer, Alison C., Ami Tsuchiya, Lisa R. Younglove, Thomas M. Burbacher, and Elaine M. Faustman. 2008. “Comparative Analysis of State Fish Consumption Advisories Targeting Sensitive Populations.” *Environmental Health Perspectives* 116 (12): 1598–1606.

United States Environmental Protection Agency. 2010. “Survey on the Awareness and Effectiveness of the Mississippi Delta Fish Consumption Advisory,” August 2010.

Dioxin Literature Review
2011-2015 Literature Search

ESC conducted a scientific literature search on the most recent (2011-2015) dioxin toxicity studies. We also include literature search results from a similar effort completed several years ago for years through 2010, appended at the end of the more recent search.

How does EPA plan to implement the information found in these studies, especially carcinogenicity, into the remediation of the site?

What are the Preliminary Remediation Goals (PRGs) at the site for dioxins/furans in sediment, water, and fish tissue? The Lower Duwamish Waterway Superfund Site created a PRG for surface water for PCB contamination, which became a cleanup level for surface water in the Record of Decision. **Will EPA complete similar action decisions for the Terry Creek OU 1 site for toxaphene, dioxins and furans?**

Ahrenhoerster, Lori S., Tess C. Leuthner, Everett R. Tate, Peter a. Lakatos, and Michael D. Laiosa. 2015. “Developmental Exposure to 2,3,7,8 Tetrachlorodibenzo-P-Dioxin Attenuates Later-Life Notch1-Mediated T Cell Development and Leukemogenesis.” *Toxicology and Applied Pharmacology* Ahrenhoers (2). Elsevier Inc.: 99–108. doi:10.1016/j.taap.2014.12.017.

Annamalai, Jayshree, and Vasudevan Namasivayam. 2015. “Endocrine Disrupting Chemicals in the Atmosphere: Their Effects on Humans and Wildlife.” *Environment International* Ahrenhoers. Elsevier Ltd: 78–97. doi:10.1016/j.envint.2014.12.006.

Antos, Piotr a., Małgorzata Błachuta, Anna Hrabia, Agnieszka K. Grzegorzewska, and Andrzej Sechman. 2015. “Expression of Aryl Hydrocarbon Receptor 1 (AHR1), AHR1 Nuclear Translocator 1 (ARNT1) and CYP1 Family Monooxygenase mRNAs and Their Activity in Chicken Ovarian Follicles Following in Vitro Exposure to 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD).” *Toxicology Letters* Ahrenhoers (2): 100–111. doi:10.1016/j.toxlet.2015.05.020.

Ashida, Hitoshi, Kiyonari Harada, Sakiho Mishima, Takakazu Mitani, Yoko Yamashita, and Fumio Matsumura. 2014. “Luteolin Suppresses TCDD-Induced Wasting Syndrome in a Cultured Adipocyte Model.” *Pesticide Biochemistry and Physiology* Ahrenhoers. Elsevier Inc.: 14–20. doi:10.1016/j.pestbp.2014.11.005.

Baker, Tracie R., Tisha C. King-Heiden, Richard E. Peterson, and Warren Heideman. 2014. “Dioxin Induction of Transgenerational Inheritance of Disease in Zebrafish.” *Molecular and Cellular Endocrinology* Ahrenhoers (1-2). Elsevier Ireland Ltd: 36–41. doi:10.1016/j.mce.2014.08.011.

Beníšek, Martin, Petr Kukučka, Giulio Mariani, Gert Suurkuusk, Bernd M. Gawlik, Giovanni Locoro, John P. Giesy, and Luděk Bláha. 2015. “Dioxins and Dioxin-like Compounds in Composts and Digestates from European Countries as Determined by the in Vitro Bioassay and Chemical Analysis.” *Chemosphere* Ahrenhoers: 168–75. doi:10.1016/j.chemosphere.2014.11.039.

Bock, Karl Walter. 2013. “The Human Ah Receptor: Hints from Dioxin Toxicities to Deregulated Target Genes and Physiological Functions.” *Biological Chemistry* Ahrenhoers (6): 729–39. doi:10.1515/hsz-2012-0340.

Byer, Jonathan D., Michel Lebeuf, Steve Trottier, Meriem Raach, Mehran Alaee, R. Stephen Brown, Sean Backus, John M. Casselman, and Peter V. Hodson. 2015. “Trends of Persistent Organic Pollutants in American Eel (Anguilla Rostrata) from Eastern Lake Ontario, Canada, and Their Potential Effects on Recruitment.” *Science of The Total Environment* Ahrenhoers. Elsevier B.V.: 231–42. doi:10.1016/j.scitotenv.2015.05.054.

Chen, Jing. 2015. “Cardiac Toxicity by Sublethal 2,3,7,8-Tetrachlorodibenzo- P -Dioxin Correlates with Its Anti-Proliferation Effect on Cardiomyocytes in Zebrafish

Embryos." *Environmental Toxicology and Chemistry* Ahrenhoers (2): 420–28. doi:10.1002/etc.2822.

Chen, Yajie, Qiansheng Huang, Qionghua Chen, Yi Lin, Xia Sun, Huanteng Zhang, Maobi Zhu, and Sijun Dong. 2015. "The Inflammation and Estrogen Metabolism Impacts of Polychlorinated Biphenyls on Endometrial Cancer Cells." *Toxicology in Vitro* Ahrenhoers (2). Elsevier Ltd: 308–13. doi:10.1016/j.tiv.2014.11.008.

Della Torre, Camilla, Francesco Buonocore, Giada Frenzilli, Simonetta Corsolini, Andrea Brunelli, Patrizia Guidi, Anton Kocan, et al. 2015. "Influence of Titanium Dioxide Nanoparticles on 2,3,7,8-Tetrachlorodibenzo-P-Dioxin Bioconcentration and Toxicity in the Marine Fish European Sea Bass (Dicentrarchus Labrax)." *Environmental Pollution* Ahrenhoers. Elsevier Ltd: 185–93. doi:10.1016/j.envpol.2014.09.020.

Dong, Wu, David E. Hinton, and Seth W. Kullman. 2012. "TCDD Disrupts Hypural Skeletogenesis during Medaka Embryonic Development." *Toxicological Sciences* Ahrenhoers (1): 91–104. doi:10.1093/toxsci/kfr284.

Ducharme, Nicole a., David M. Reif, Jan-Ake Gustafsson, and Maria Bondesson. 2014. "Comparison of Toxicity Values across Zebrafish Early Life Stages and Mammalian Studies: Implications for Chemical Testing." *Reproductive Toxicology* Ahrenhoers. Elsevier Inc.: 3–10. doi:10.1016/j.reprotox.2014.09.005.

Forum, Risk Assessment. n.d. "No Title" Ahrenhoers.

Fromme, Hermann, Michael Albrecht, Markus Appel, Bettina Hilger, Wolfgang Völkel, Bernhard Liebl, and Eike Roscher. 2015. "PCBs, PCDD/Fs, and PBDEs in Blood Samples of a Rural Population in South Germany." *International Journal of Hygiene and Environmental Health* Ahrenhoers (1). Elsevier GmbH.: 41–46. doi:10.1016/j.ijheh.2014.07.004.

Gandhi, Nilima, Satyendra P Bhavsar, Eric J Reiner, Tony Chen, Dave Morse, George B Arhonditsis, and Ken G Drouillard. 2015. "Evaluation and Interconversion of Various Indicator PCB Schemes for ∑ PCB and Dioxin-Like PCB Toxic Equivalent Levels in Fish" Ahrenhoers.

Gräns, Johanna, Britt Wassmur, María Fernández-Santoscoy, Juliano Zanette, Bruce R. Woodin, Sibel I. Karchner, Diane E. Nacci, et al. 2015. "Regulation of Pregnane-X-Receptor, CYP3A and P-Glycoprotein Genes in the PCB-Resistant Killifish (Fundulus Heteroclitus) Population from New Bedford Harbor." *Aquatic Toxicology* Ahrenhoers. Elsevier B.V.: 198–207. doi:10.1016/j.aquatox.2014.12.010.

Group, Tcdd. 1987. "2,3,7,8-TETRAeHLORODIBENZO-Para-DIOXIN (TCDD) (Group 2B)" Ahrenhoers: 350–54.

Hanano, Abdulsamie, Hassan Ammouneh, Ibrahem Almousally, Abdulfattah Alorr, Mouhnad Shaban, Amer Abu Alnaser, and Iyad Ghanem. 2014. “Traceability of Polychlorinated Dibenzo-Dioxins/furans Pollutants in Soil and Their Ecotoxicological Effects on Genetics, Functions and Composition of Bacterial Community.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 326–33. doi:10.1016/j.chemosphere.2014.01.061.

Harrill, Joshua a., Bethany B Parks, Eliane Wauthier, J. Craig Rowlands, Lola M. Reid, and Russell S. Thomas. 2015. “Lineage-Dependent Effects of Aryl Hydrocarbon Receptor Agonists Contribute to Liver Tumorigenesis.” *Hepatology* Ahrenhoers (2): 548–60. doi:10.1002/hep.27547.

Herlin, Maria, Mattias Öberg, Joakim Ringblom, Bertrand Joseph, Merja Korkalainen, Matti Viluksela, Rachel a. Heimeier, and Helen Håkansson. 2015. “Inhibitory Effects on Osteoblast Differentiation in Vitro by the Polychlorinated Biphenyl Mixture Aroclor 1254 Are Mainly Associated with the Dioxin-like Constituents.” *Toxicology in Vitro* Ahrenhoers (5). Elsevier Ltd: 876–83. doi:10.1016/j.tiv.2015.03.006.

Hong, Mee Young, Jan Lumibao, Prashila Mistry, Rhonda Saleh, and Eunha Hoh. 2015. “Fish Oil Contaminated with Persistent Organic Pollutants Reduces Antioxidant Capacity and Induces Oxidative Stress without Affecting Its Capacity to Lower Lipid Concentrations and Systemic Inflammation in Rats 1 – 3.” *Journal of Nutrition* Ahrenhoers: 939–44. doi:10.3945/jn.114.206607.939.

Hoogenboom, Ron L.a.P., Michiel J.J. Kotterman, Marion Hoek-van Nieuwenhuizen, Martijn K. van der Lee, Wim C. Mennes, Suzanne M.F. Jeurissen, and Stefan P.J. van Leeuwen. 2015. “Dioxins, PCBs and Heavy Metals in Chinese Mitten Crabs from Dutch Rivers and Lakes.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 1–8. doi:10.1016/j.chemosphere.2014.10.055.

Houlahan, Kathleen E., Stephenie D. Prokopec, Ivy D. Moffat, Jere Lindén, Sanna Lensu, Allan B. Okey, Raimo Pohjanvirta, and Paul C. Boutros. 2015. “Transcriptional Profiling of Rat Hypothalamus Response to 2,3,7,8-Tetrachlorodibenzo-P-Dioxin.” *Toxicology* Ahrenhoers. Elsevier Ireland Ltd: 93–101. doi:10.1016/j.tox.2014.12.016.

Ilavarasi, K., P. Chermakani, S. Arif Nisha, D. Sheeja Malar, and K. Pandima Devi. 2014. “Antioxidant Compounds in the Seaweed *Gelidiella Acerosa* Protects Human Peripheral Blood Mononuclear Cells against TCDD Induced Toxicity.” *Drug and Chemical Toxicology* Ahrenhoers (2): 1–12. doi:10.3109/01480545.2014.919582.

Isales, Gregory M., Rachel a. Hipszer, Tara D. Raftery, Albert Chen, Heather M. Stapleton, and David C. Volz. 2015. “Triphenyl Phosphate-Induced Developmental Toxicity in Zebrafish: Potential Role of the Retinoic Acid Receptor.” *Aquatic Toxicology* Ahrenhoers. Elsevier B.V.: 221–30. doi:10.1016/j.aquatox.2015.02.009.

Jeanneret, Fabienne, Julien Boccard, Flavia Badoud, Olivier Sorg, David Tonoli, Daniela Pelclova, Stepanka Vlckova, et al. 2013. “Human Urinary Biomarkers of Dioxin Exposure: Analysis by Metabolomics and Biologically Driven Data Dimensionality Reduction.” *Toxicology Letters* Ahrenhoers (2). Elsevier Ireland Ltd: 234–43. doi:10.1016/j.toxlet.2013.10.031.

Jürgens, Monika D., Chakra Chaemfa, David Hughes, Andrew C. Johnson, and Kevin C. Jones. 2015. “PCB and Organochlorine Pesticide Burden in Eels in the Lower Thames River (UK).” *Chemosphere* Ahrenhoers: 103–11. doi:10.1016/j.chemosphere.2014.06.088.

King-Heiden, Tisha C., Vatsal Mehta, Kong M. Xiong, Kevin a. Lanham, Dagmara S. Antkiewicz, Alissa Ganser, Warren Heideman, and Richard E. Peterson. 2012a. “Reproductive and Developmental Toxicity of Dioxin in Fish.” *Molecular and Cellular Endocrinology* Ahrenhoers (1-2). Elsevier Ireland Ltd: 121–38. doi:10.1016/j.mce.2011.09.027.

———. 2012b. “Reproductive and Developmental Toxicity of Dioxin in Fish.” *Molecular and Cellular Endocrinology* Ahrenhoers (1-2). Elsevier Ireland Ltd: 121–38. doi:10.1016/j.mce.2011.09.027.

Klees, Marcel, Ernst Hiester, Peter Bruckmann, Karl Molt, and Torsten C. Schmidt. 2015. “Polychlorinated Biphenyls, Polychlorinated Dibenzo-P-Dioxins and Dibenzofurans in Street Dust of North Rhine-Westphalia, Germany.” *Science of The Total Environment* Ahrenhoers. Elsevier B.V.: 72–81. doi:10.1016/j.scitotenv.2014.12.018.

Korkalainen, Merja, Katriina Huumonen, Jonne Naarala, Matti Viluksela, and Jukka Juutilainen. 2012. “Dioxin Induces Genomic Instability in Mouse Embryonic Fibroblasts.” *PLoS ONE* Ahrenhoers (5): 1–9. doi:10.1371/journal.pone.0037895.

Labunska, Iryna, Mohamed Abou-Elwafa Abdallah, Igor Eulaers, Adrian Covaci, Fang Tao, Mengjiao Wang, David Santillo, Paul Johnston, and Stuart Harrad. 2015. “Human Dietary Intake of Organohalogen Contaminants at E-Waste Recycling Sites in Eastern China.” *Environment International* Ahrenhoers. Elsevier Ltd: 209–20. doi:10.1016/j.envint.2014.10.020.

Lanham, Kevin a., Richard E. Peterson, and Warren Heideman. 2012. “Sensitivity to Dioxin Decreases as Zebrafish Mature.” *Toxicological Sciences* Ahrenhoers (2): 360–70. doi:10.1093/toxsci/kfs103.

Larsson, Malin, Martin van den Berg, Petra Brenerová, Majorie B. M. van Duursen, Karin I. van Ede, Christiane Lohr, Sandra Luecke-Johansson, et al. 2015. “Consensus Toxicity Factors for Polychlorinated Dibenzo- P -Dioxins, Dibenzofurans, and Biphenyls Combining in Silico Models and Extensive in Vitro

Screening of AhR-Mediate." *Chemical Research in Toxicology* Ahrenhoers: 150213161000001. doi:10.1021/tx500434j.

Latchney, Sarah E., Amy M. Hein, M. Kerry O'Banion, Emanuel Dicicco-Bloom, and Lisa a. Opanashuk. 2013. "Deletion or Activation of the Aryl Hydrocarbon Receptor Alters Adult Hippocampal Neurogenesis and Contextual Fear Memory." *Journal of Neurochemistry* Ahrenhoers (3): 430–45. doi:10.1111/jnc.12130.

Li, Sumei, Guorui Liu, Minghui Zheng, Wenbin Liu, Mei Wang, Ke Xiao, Changliang Li, and Yiwen Wang. 2015. "Chemosphere Comparison of the Contributions of Polychlorinated Dibenzo-P-Dioxins and Dibenzofurans and Other Unintentionally Produced Persistent Organic Pollutants to the Total Toxic Equivalents in Air of Steel Plant Areas." *Chemosphere* Ahrenhoers. Elsevier Ltd: 73–77. doi:10.1016/j.chemosphere.2015.02.014.

Liebens, Johan, and Carl J. Mohrherr. 2015. "RESEARCH ARTICLE: DDT, Dioxins, and PCBs in Sediments in a Historically Polluted Estuary along the Gulf of Mexico." *Environmental Practice* Ahrenhoers (02): 89–101. doi:10.1017/S1466046615000058.

Lindholm-Lehto, Petra C., Juha S. Knuutinen, Heidi S. J. Ahkola, and Sirpa H. Herve. 2015. "Refractory Organic Pollutants and Toxicity in Pulp and Paper Mill Wastewaters." *Environmental Science and Pollution Research* Ahrenhoers (9): 6473–99. doi:10.1007/s11356-015-4163-x.

Liu, Qing, Matthew L. Rise, Jan M. Spitsbergen, Tiago S. Hori, Mark Mieritz, Steven Geis, Joseph E. McGraw, et al. 2013. "Gene Expression and Pathologic Alterations in Juvenile Rainbow Trout due to Chronic Dietary TCDD Exposure." *Aquatic Toxicology* Ahrenhoers. Elsevier B.V.: 356–68. doi:10.1016/j.aquatox.2013.06.018.

Liu, Qing, Jan M. Spitsbergen, Ronan Cariou, Chun Yuan Huang, Nan Jiang, Giles Goetz, Reinhold J. Hutz, Peter J. Tonellato, and Michael J. Carvan. 2014. "Histopathologic Alterations Associated with Global Gene Expression due to Chronic Dietary TCDD Exposure in Juvenile Zebrafish." *PLoS ONE* Ahrenhoers (7): 1–14. doi:10.1371/journal.pone.0100910.

M., Iarc. 1997. "2,3,7,8-Tetrachlorodibenzo-P-Dioksin and 2,3,4,7,8 Pentachlorodibenzofuran Review." *Iarc* Ahrenhoers: 339–78.

Maier, Diana, Ludek Blaha, John P. Giesy, Anja Henneberg, Heinz-R. Köhler, Bertram Kuch, Raphaela Osterauer, et al. 2014. "Biological Plausibility as a Tool to Associate Analytical Data for Micropollutants and Effect Potentials in Wastewater, Surface Water, and Sediments with Effects in Fishes." *Water Research* Ahrenhoers. doi:10.1016/j.watres.2014.08.050.

Merhaby, Dima, Sopheak Net, Jalal Halwani, and Baghdad Ouddane. 2015. “Organic Pollution in Surficial Sediments of Tripoli Harbour, Lebanon.” *Marine Pollution Bulletin* Ahrenhoers (1-2). Elsevier Ltd: 284–93. doi:10.1016/j.marpolbul.2015.01.004.

Mitoma, Chikage, Hiroshi Uchi, Kiyomi Tsukimori, Hideyuki Yamada, Manabu Akahane, Tomoaki Imamura, Atsushi Utani, and Masutaka Furue. 2015. “Yusho and Its Latest findings—A Review in Studies Conducted by the Yusho Group.” *Environment International* Ahrenhoers. Elsevier Ltd: 41–48. doi:10.1016/j.envint.2015.05.004.

Neugebauer, Julia, Jürgen Wittsiepe, Monika Kasper-Sonnenberg, Nina Schöneck, Axel Schölmerich, and Michael Wilhelm. 2015. “The Influence of Low Level Pre- and Perinatal Exposure to PCDD/Fs, PCBs, and Lead on Attention Performance and Attention-Related Behavior among German School-Aged Children: Results from the Duisburg Birth Cohort Study.” *International Journal of Hygiene and Environmental Health* Ahrenhoers (1). Elsevier GmbH.: 153–62. doi:10.1016/j.ijheh.2014.09.005.

Nishijo, Muneko, Pham The Tai, Nguyen Thi Nguyet Anh, Tran Ngoc Nghi, Hideaki Nakagawa, Hoang Van Luong, Tran Hai Anh, et al. 2015. “Urinary Amino Acid Alterations in 3-Year-Old Children with Neurodevelopmental Effects due to Perinatal Dioxin Exposure in Vietnam: A Nested Case-Control Study for Neurobiomarker Discovery.” *Plos One* Ahrenhoers (1): e0116778. doi:10.1371/journal.pone.0116778.

Nøstbakken, Ole Jakob, Helge T. Hove, Arne Duinker, Anne-Katrine Lundebye, Marc H.G. Berntssen, Rita Hannisdal, Bjørn Tore Lunestad, et al. 2015. “Contaminant Levels in Norwegian Farmed Atlantic Salmon (Salmo Salar) in the 13-Year Period from 1999 to 2011.” *Environment International* Ahrenhoers. Elsevier B.V.: 274–80. doi:10.1016/j.envint.2014.10.008.

Nunes, Margarida, Filipe Martinho, Anaïs Vernisseau, Philippe Marchand, Bruno Le Bizec, Henk W. van der Veer, Henrique N. Cabral, Fernando Ramos, and Miguel a. Pardal. 2014. “Early Contamination of European Flounder (Platichthys Flesus) by PCDD/Fs and Dioxin-like PCBs in European Waters.” *Marine Pollution Bulletin* Ahrenhoers (1). Elsevier Ltd: 292–96. doi:10.1016/j.marpolbul.2014.05.042.

Omwoma, Solomon, Joseph O Lalah, Munir Virani, Karl-Werner Schramm, and Bernhard Henkelmann. 2014. “Dioxin-like PCBs and PCDD/Fs in Surface Sediments near the Shore of Winam Gulf, Lake Victoria.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 143–47. doi:10.1016/j.chemosphere.2014.07.062.

Organization, World Health. 2010. “Exposure to Dioxins and Dioxin-like Substances: A Major Public Health Concern” Ahrenhoers.

Patterson, Andrew T., Benjamin H. Kaffenberger, Richard a. Keller, and Dirk M. Elston. 2015. “Skin Diseases Associated with Agent Orange and Other Organochlorine Exposures.” *Journal of the American Academy of Dermatology* Ahrenhoers. Elsevier Inc: 1–28. doi:10.1016/j.jaad.2015.05.006.

Pham, Diem T, Hang M Nguyen, Thomas G Boivin, Anna Zajacova, Snehalata V Huzurbazar, and Harold L Bergman. 2015. “Chemosphere Predictors for Dioxin Accumulation in Residents Living in Da Nang and Bien Hoa , Vietnam , Many Years after Agent Orange Use.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 277–83. doi:10.1016/j.chemosphere.2014.09.064.

Pinto, Debora P., Cíntia C. Chivittz, Roger S. Ferreira, Mauricio S. Sopezki, and Juliano Zanette. 2015. “Beta-Naphthoflavone-inducedCYP1A Expression in the Guppy Jenynsia Multidentata: Time-Dependent Response, Anesthetic MS-222 Effect and Fin Analysis.” *Ecotoxicology and Environmental Safety* Ahrenhoers: 38–44. doi:10.1016/j.ecoenv.2014.11.023.

Pohjanvirta, Raimo, Hanna Miettinen, Satu Sankari, Nagabhooshan Hegde, and Jere Lindén. 2012. “Unexpected Gender Difference in Sensitivity to the Acute Toxicity of Dioxin in Mice.” *Toxicology and Applied Pharmacology* Ahrenhoers (2). Elsevier Inc.: 167–76. doi:10.1016/j.taap.2012.04.032.

Prokopec, Stephenie D., John D. Watson, Jamie Lee, Raimo Pohjanvirta, and Paul C. Boutros. 2015. “Sex-Related Differences in Murine Hepatic Transcriptional and Proteomic Responses to TCDD.” *Toxicology and Applied Pharmacology* Ahrenhoers (2). Elsevier B.V.: 188–96. doi:10.1016/j.taap.2015.02.012.

Publication, Advance. 2015. “The Journal of Veterinary Medical Science Toxicity on the Developmental Dentate Gyrus and Hippocampal Fimbria in Fetal Mice” Ahrenhoers (May).

Rose, Martin, Alwyn Fernandes, David Mortimer, and Christina Baskaran. 2015. “Contamination of Fish in UK Fresh Water Systems: Risk Assessment for Human Consumption.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 183–89. doi:10.1016/j.chemosphere.2014.11.046.

Roszko, Marek, Krystyna Szymczyk, Małgorzata Rzepkowska, and Renata Jędrzejczak. 2015. “Preliminary Study on Brominated Dioxins/furans and Hydroxylated/methoxylated PBDEs in Baltic Cod (Gadus Morhua) Liver. Comparison to the Levels of Analogue Chlorinated Co-Occurring Pollutants.” *Marine Pollution Bulletin* Ahrenhoers (1-2): 165–75. doi:10.1016/j.marpolbul.2015.05.032.

Sarihan, Mehmet Ediz, Hakan Parlakpinar, Osman Ciftci, Fethi Yilmaz, Mustafa Sagir, Omur Yilmaz, and Gokhan Ceker. 2015. “Protective Effects of Melatonin against

2,3,7,8-Tetrachlorodibenzo-P-Dioxin-Induced Cardiac Injury in Rats." *European Journal of Pharmacology* Ahrenhoers: 214–20. doi:10.1016/j.ejphar.2015.04.054.

Saurat, Jean Hilaire, Guerkan Kaya, Nikolina Saxer-Sekulic, Bruno Pardo, Minerva Becker, Lionel Fontao, Florence Mottu, et al. 2012. "The Cutaneous Lesions of Dioxin Exposure: Lessons from the Poisoning of Victor Yushchenko." *Toxicological Sciences* Ahrenhoers (1): 310–17. doi:10.1093/toxsci/kfr223.

Sforzini, Susanna, Michael N. Moore, Marta Boeri, Mauro Bencivenga, and Aldo Viarengo. 2015. "Effects of PAHs and Dioxins on the Earthworm Eisenia Andrei: A Multivariate Approach for Biomarker Interpretation." *Environmental Pollution* Ahrenhoers. Elsevier Ltd: 60–71. doi:10.1016/j.envpol.2014.09.015.

Sorg, Olivier. 2013. "AhR Signalling and Dioxin Toxicity." *Toxicology Letters* Ahrenhoers (2). Elsevier Ireland Ltd: 225–33. doi:10.1016/j.toxlet.2013.10.039.

Tcdd, Tetrachlorodibenzo-p-dioxin, Noelia Patrignani, Ana Molina, and Alfonso Blanco. 2014. "Structural and Ultrastructural Evaluations of Zebrafish Ovaries after Exposure to 2 , 3 , 7 , 8 -" Ahrenhoers (1): 57–64.

Tomasini, Maria C., Sarah Beggiato, Luca Ferraro, Sergio Tanganelli, Luca Marani, Luca Lorenzini, and Tiziana Antonelli. 2012. "Prenatal Exposure to 2,3,7,8-Tetrachlorodibenzo-P-Dioxin Produces Alterations in Cortical Neuron Development and a Long-Term Dysfunction of Glutamate Transmission in Rat Cerebral Cortex." *Neurochemistry International* Ahrenhoers (5). Elsevier Ltd: 759–66. doi:10.1016/j.neuint.2012.07.004.

Turkez, Hasan, Fatime Geyikoglu, Yousef I. Mokhtar, and Basak Togar. 2012. "Eicosapentaenoic Acid Protects against 2,3,7,8-Tetrachlorodibenzo-P-Dioxin-Induced Hepatic Toxicity in Cultured Rat Hepatocytes." *Cytotechnology* Ahrenhoers (1): 15–25. doi:10.1007/s10616-011-9386-1.

Tuyet-Hanh, Tran Thi, Nguyen Hung Minh, Le Vu-Anh, Michael Dunne, Leisa-Maree Toms, Thomas Tenkate, Minh-Hue Nguyen Thi, and Fiona Harden. 2015. "Environmental Health Risk Assessment of Dioxin in Foods at the Two Most Severe Dioxin Hot Spots in Vietnam." *International Journal of Hygiene and Environmental Health* Ahrenhoers (5). Elsevier GmbH.: 471–78. doi:10.1016/j.ijheh.2015.03.014.

United States Environmental Protection Agency. 2012. "EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments, Volume 1." *In Support of Summary Information on the Integrated Risk Information System (IRIS)* Ahrenhoers (1746). http://hero.epa.gov/index.cfm?action=reference.details&reference_id=543766\npapers2://publication/uuid/F27D8F6C-CE69-43C0-93C0-015427C58A6A.

United States Environmental Protection Agency. 2010. “Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-P-Dioxin and Dioxin-Like Compounds” December 2 (Risk Assessment Forum).

Wall, Richard J., Alwyn Fernandes, Martin Rose, David R. Bell, and Ian R. Mellor. 2015. “Characterisation of Chlorinated, Brominated and Mixed Halogenated Dioxins, Furans and Biphenyls as Potent and as Partial Agonists of the Aryl Hydrocarbon Receptor.” *Environment International* Ahrenhoers. Elsevier B.V.: 49–56. doi:10.1016/j.envint.2014.12.002.

Wang, Chunyan, Zhi Tang, Yanling Zhang, Yan Liang, Fengrui Song, and Zongwei Cai. 2013. “A New Method for Identification of in Vitro Metabolites of 2,3,7,8-TCDD with Rat Liver Microsomes by Using Liquid Chromatography-Mass Spectrometry.” *Analytical Methods* Ahrenhoers (11): 2757. doi:10.1039/c3ay26443b.

Wang, Lin-Song, Lin Wang, Li Wang, Ge Wang, Zhao-Hu Li, and Jian-Ji Wang. 2009. “Effect of 1-Butyl-3-Methylimidazolium Tetrafluoroborate on the Wheat (Triticum Aestivum L.) Seedlings.” *Environmental Toxicology* Ahrenhoers (3): 296–303. doi:10.1002/tox.

Wincent, Emma, John J. Stegeman, and Maria E. Jönsson. 2015. “Combination Effects of AHR Agonists and Wnt/β-Catenin Modulators in Zebrafish Embryos: Implications for Physiological and Toxicological AHR Functions.” *Toxicology and Applied Pharmacology* Ahrenhoers (2). Elsevier Inc.: 163–79. doi:10.1016/j.taap.2015.02.014.

Wu, Lidong, Xianbo Lu, Xue Wang, Yi Song, and Jiping Chen. 2015. “An Electrochemical Deoxyribonucleic Acid Biosensor for Rapid Genotoxicity Screening of Chemicals.” *Anal. Methods* Ahrenhoers (8). Royal Society of Chemistry: 3347–52. doi:10.1039/C5AY00020C.

Yue, Monica S., Richard E. Peterson, and Warren Heideman. 2015. “Dioxin Inhibition of Swim Bladder Development in Zebrafish: Is It Secondary to Heart Failure?” *Aquatic Toxicology* Ahrenhoers. Elsevier B.V.: 10–17. doi:10.1016/j.aquatox.2015.02.016.

Zacs, D, J Rjabova, a Viksna, and V Bartkevics. 2014. “Method Development for the Simultaneous Determination of Polybrominated, Polychlorinated, Mixed Polybrominated/chlorinated Dibenzo-P-Dioxins and Dibenzofurans, Polychlorinated Biphenyls and Polybrominated Diphenyl Ethers in Fish.” *Chemosphere* Ahrenhoers. Elsevier Ltd: 72–80. doi:10.1016/j.chemosphere.2014.06.032.

Zhang, Limin, Emmanuel Hatzakis, Robert G. Nichols, Ruixin Hao, Jared B. Correll, Philip B Smith, Christopher R. Chiaro, Gary H Perdew, and Andrew D. Patterson. 2015. “Metabolomics Reveals That Aryl Hydrocarbon Receptor Activation by Environmental Chemicals Induces Systemic Metabolic Dysfunction in Mice.”

Environmental Science & Technology Ahrenhoers: 150529115537009. doi:10.1021/acs.est.5b01389.

Zhang, Yang, Xiaoke Nie, Tao Tao, Wenbo Qian, Shengyang Jiang, Junkang Jiang, Aihong Li, Aisong Guo, Guangfei Xu, and Qiyun Wu. 2014. "2,3,7,8-Tetrachlorodibenzo-P-Dioxin Promotes Astrocyte Activation and the Secretion of Tumor Necrosis Factor-A via PKC/SSeCKS-Dependent Mechanisms." *Journal of Neurochemistry* Ahrenhoers (5): 839–49. doi:10.1111/jnc.12696.

Disclaimer:

This report was produced by Environmental Stewardship Concepts, LLC (ESC, LLC) for and in cooperation with the Glynn Environmental Coalition. As a Technical Advisor, ESC, LLC provides independent analysis of the reports and data related to the Superfund Sites referenced to help support a well-informed community.

This project has been funded wholly or partly by the U.S. Environmental Protection Agency under Assistance Agreement Numbers 198448298, 198453298, 199485001 to The Glynn Environmental Coalition, Inc. The contents of this document do not necessarily reflect the views and policies of the U.S. Environmental Protection agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Previous to 2011 Dioxin/Furan Literature Search:

Preliminary Reference List for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD): *In Vivo* Mammalian Dose-Response and Epidemiological Studies

't Mannetje, A., D. McLean, S. Cheng, P. Boffetta, D. Colin and N. Pearce. 2005. Mortality in New Zealand workers exposed to phenoxy herbicides and dioxins. Occup. Environ. Med. 62(1):34-40.

Abadin, H.G., C.H. Chou and F.T. Llados. 2007. Health effects classification and its role in the derivation of minimal risk levels: immunological effects. Regul. Toxicol. Pharmacol. 47(3):249-256.

Abbott, B.D., T.M. Lin, N.T. Rasmussen, R.M. Albrecht, J.E. Schmid and R.E. Peterson. 2003. Lack of expression of EGF and TGF-alpha in the fetal mouse alters formation of prostatic epithelial buds and influences the response to TCDD. Toxicol. Sci. 76(2):427-436.

Abraham, K., A. Geusau, Y. Tosun, H. Helge, S. Bauer and J. Brockmoller. 2002. Severe 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) intoxication: insights into the measurement of hepatic cytochrome P450 1A2 induction. Clin. Pharmacol. Ther. 72(2):163-174.

Adamsson, A., U. Simanainen, M. Viluksela, J. Paranko and J. Toppari. 2008. The effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on foetal male rat steroidogenesis. Int. J. Androl.

Ahmad, K. 2002. Agent Orange no longer linked to childhood AML. Lancet Oncol. 3(4):199.

Alaluusua, S. and P.L. Lukinmaa. 2006. Developmental dental toxicity of dioxin and related compounds--a review. Int. Dent. J. 56(6):323-331.

Alaluusua, S., H. Kiviranta, A. Leppaniemi, P. Holtta, P.L. Lukinmaa, L. Lope, A.L. Jarvenpaa, M. Renlund, J. Toppari, H. Virtanen, M. Kaleva and T. Vartiainen. 2002. Natal and neonatal teeth in relation to environmental toxicants. Pediatr. Res. 52(5):652-655.

Alaluusua, S., P. Calderara, P.M. Gerthoux, P.L. Lukinmaa, O. Kovero, L. Needham, D.G. Patterson, Jr., J. Tuomisto and P. Mocarelli. 2004. Developmental dental aberrations after the dioxin accident in Seveso. Environ. Health Perspect. 112(13):1313-1318.

Allen, D.E. and L.J. Leamy. 2001. 2,3,7,8-tetrachlorodibenzo-p-dioxin affects size and shape, but not asymmetry, of mandibles in mice. Ecotoxicology. 10(3):167-176.

Alsharif, N.Z. and E.A. Hassoun. 2004. Protective effects of vitamin A and vitamin E succinate against 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced body wasting, hepatomegaly, thymic atrophy, production of reactive oxygen species and DNA damage in C57BL/6J mice. Basic Clin. Pharmacol. Toxicol. 95(3):131-138.

Ambrus, J.L., A. Islam, S. Akhter, W. Dembinski, M. Kulaylat and C.M. Ambrus. 2004. Multiple medical problems following agent orange exposure. J. Med. 35(1-6):265-269.

Amin, S., R.W. Moore, R.E. Peterson and S.L. Schantz. 2000. Gestational and lactational exposure to TCDD or coplanar PCBs alters adult expression of saccharin preference behavior in female rats. Neurotoxicol. Teratol. 22(5):675-682.

Anger, D.L. and W.G. Foster. 2008. The link between environmental toxicant exposure and endometriosis. Front Biosci. 13:1578-1593.

Aragon, A.C., M.B. Goens, E. Carbett and M.K. Walker. 2008a. Perinatal 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure sensitizes offspring to angiotensin II-induced hypertension. Cardiovasc. Toxicol. 8(3):145-154.

Aragon, A.C., P.G. Kopf, M.J. Campen, J.K. Huwe and M.K. Walker. 2008b. In utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure: effects on fetal and adult cardiac gene expression and adult cardiac and renal morphology. Toxicol. Sci. 101(2):321-330.

Arisawa, K., H. Takeda and H. Mikasa. 2005. Background exposure to PCDDs/PCDFs/PCBs and its potential health effects: a review of epidemiologic studies. J. Med. Invest. 52(1-2):10-21.

Atallah, E. and C.A. Schiffer. 2007. Agent Orange, prostate cancer irradiation and acute promyelocyic leukemia (APL): is there a link? Leuk. Res. 31(5):720-721.

Aulerich, R.J., B. Yamini and S.J. Bursian. 2001. Dietary exposure to 3,3',4,4',5-pentachlorobiphenyl (PCB 126) or 2,3,7,8-tetrachlorodibenzo-p-dixon (TCDD) does not induce proliferation of squamous epithelium or osteolysis in the jaws of weanling rats. Vet. Hum. Toxicol. 43(3):170-171.

Baccarelli, A., A.C. Pesatori, S.A. Masten, D.G. Patterson, Jr., L.L. Needham, P. Mocarelli, N.E. Caporaso, D. Consonni, J.A. Grassman, P.A. Bertazzi and M.T. Landi. 2004. Aryl-hydrocarbon receptor-dependent pathway and toxic effects of TCDD in humans: a population-based study in Seveso, Italy. Toxicol. Lett. 149(1-3):287-293.

Baccarelli, A., A.C. Pesatori, D. Consonni, P. Mocarelli, D.G. Patterson, Jr., N.E. Caporaso, P.A. Bertazzi and M.T. Landi. 2005. Health status and plasma dioxin levels in chloracne cases 20 years after the Seveso, Italy accident. Br. J. Dermatol. 152(3):459-465.

Baccarelli, A., C. Hirt, A.C. Pesatori, D. Consonni, D.G. Patterson, Jr., P.A. Bertazzi, G. Dolken and M.T. Landi. 2006. t(14;18) translocations in lymphocytes of healthy dioxin-exposed individuals from Seveso, Italy. Carcinogenesis. 27(10):2001-2007.

Baccarelli, A., S.M. Giacomini, C. Corbetta, M.T. Landi, M. Bonzini, D. Consonni, P. Grillo, D.G. Patterson, A.C. Pesatori and P.A. Bertazzi. 2008. Neonatal thyroid function in Seveso 25 years after maternal exposure to dioxin. PLoS. Med. 5(7):e161.

Badawi, A.F., E.L. Cavalieri and E.G. Rogan. 2000. Effect of chlorinated hydrocarbons on expression of cytochrome P450 1A1, 1A2 and 1B1 and 2- and 4-hydroxylation of 17beta-estradiol in female Sprague-Dawley rats. Carcinogenesis. 21(8):1593-1599.

Bagchi, D., J. Balmoori, M. Bagchi, X. Ye, C.B. Williams and S.J. Stohs. 2002. Comparative effects of TCDD, endrin, naphthalene and chromium (VI) on oxidative stress and tissue damage in the liver and brain tissues of mice. Toxicology. 175(1-3):73-82.

Barrett, D.H., R.D. Morris, F.Z. Akhtar and J.E. Michalek. 2001. Serum dioxin and cognitive functioning among veterans of Operation Ranch Hand. Neurotoxicology. 22(4):491-502.

Bell, D.R., S. Clode, M.Q. Fan, A. Fernandes, P.M. Foster, T. Jiang, G. Loizou, A. MacNicoll, B.G. Miller, M. Rose, L. Tran and S. White. 2007a. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the developing male Wistar(Han) rat. I: No decrease in epididymal sperm count after a single acute dose. Toxicol. Sci. 99(1):214-223.

Bell, D.R., S. Clode, M.Q. Fan, A. Fernandes, P.M. Foster, T. Jiang, G. Loizou, A. MacNicoll, B.G. Miller, M. Rose, L. Tran and S. White. 2007b. Relationships between tissue levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), mRNAs, and toxicity in the developing male Wistar(Han) rat. Toxicol. Sci. 99(2):591-604.

Bell, D.R., S. Clode, M.Q. Fan, A. Fernandes, P.M. Foster, T. Jiang, G. Loizou, A. MacNicoll, B.G. Miller, M. Rose, L. Tran and S. White. 2007c. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the developing male Wistar(Han) rat. II: Chronic dosing causes developmental delay. Toxicol. Sci. 99(1):224-233.

Bemis, J.C., N.F. Alejandro, D.A. Nazarenko, A.I. Brooks, R.B. Baggs and T.A. Gasiewicz. 2007. TCDD-induced alterations in gene expression profiles of the developing mouse paw do not influence morphological differentiation of this potential target tissue. Toxicol. Sci. 95(1):240-248.

Besteman, E.G., K.L. Zimmerman and S.D. Holladay. 2005. Tetrachlorodibenzo-p-Dioxin (TCDD) Inhibits Differentiation and Increases Apoptotic Cell Death of Precursor T-Cells in the Fetal Mouse Thymus. J. Immunotoxicol. 2(2):107-114.

Besteman, E.G., K.L. Zimmerman, W.R. Huckle, M.R. Prater, R.M. Gogal, Jr. and S.D. Holladay. 2007. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or diethylstilbestrol (DES) cause similar hematopoietic hypocellularity and hepatocellular changes in murine fetal liver, but differentially affect gene expression. Toxicol. Pathol. 35(6):788-794.

Birnbaum, L.S. and J. Tuomisto. 2000. Non-carcinogenic effects of TCDD in animals. Food Addit. Contam. 17(4):275-288.

Birnbaum, L.S. and S.E. Fenton. 2003. Cancer and developmental exposure to endocrine disruptors. Environ. Health Perspect. 111(4):389-394.

Blond, B. 2000. [Risks of dioxins on health are still poorly evaluated]. Soins. Pediatr. Pueric.(197):10.

Boas, M., U. Feldt-Rasmussen, N.E. Skakkebaek and K.M. Main. 2006. Environmental chemicals and thyroid function. Eur. J. Endocrinol. 154(5):599-611.

Boersma, E.R. and C.I. Lanting. 2000. Environmental exposure to polychlorinated biphenyls (PCBs) and dioxins. Consequences for longterm neurological and cognitive development of the child lactation. Adv. Exp. Med. Biol. 478:271-287.

Boffetta, P. 2006. Human cancer from environmental pollutants: the epidemiological evidence. Mutat. Res. 608(2):157-162.

Bohn, A.A., K.S. Harrod, S. Teske and B.P. Lawrence. 2005. Increased mortality associated with TCDD exposure in mice infected with influenza A virus is not due to severity of lung injury or alterations in Clara cell protein content. Chem. Biol. Interact. 155(3):181-190.

Bolt, H.M. and K. Golka. 2007. [Occupational cancer--burdens of the past or actual threat?]. Dtsch. Med. Wochenschr. 132(4):133-134.

Boverhof, D.R., L.D. Burgoon, C. Tashiro, B. Chittim, J.R. Harkema, D.B. Jump and T.R. Zacharewski. 2005. Temporal and dose-dependent hepatic gene expression patterns in mice provide new insights into TCDD-Mediated hepatotoxicity. Toxicol. Sci. 85(2):1048-1063.

Bowers, O.J., K.B. Sommersted, R.T. Sowell, G.E. Boling, W.H. Hanneman, R.G. Titus and G.K. Dekrey. 2006. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) reduces Leishmania major burdens in C57BL/6 mice. Am. J. Trop. Med. Hyg. 75(4):749-752.

Boyle, S.H., W.G. Jackson and E.C. Suarez. 2007. Hostility, anger, and depression predict increases in C3 over a 10-year period. Brain Behav. Immun. 21(6):816-823.

Brody, J.G., K.B. Moysich, O. Humblet, K.R. Attfield, G.P. Beehler and R.A. Rudel. 2007. Environmental pollutants and breast cancer: epidemiologic studies. Cancer. 109(12 Suppl):2667-2711.

Brouillette, J. and R. Quirion. 2008. The common environmental pollutant dioxin-induced memory deficits by altering estrogen pathways and a major route of retinol transport involving transthyretin. Neurotoxicology. 29(2):318-327.

Bruner-Tran, K.L., G.R. Yeaman, M.A. Crispens, T.M. Igarashi and K.G. Osteen. 2008. Dioxin may promote inflammation-related development of endometriosis. Fertil. Steril. 89(5 Suppl):1287-1298.

Brunnberg, S., P. Andersson, M. Lindstam, I. Paulson, L. Poellinger and A. Hanberg. 2006. The constitutively active Ah receptor (CA-Ahr) mouse as a potential model for dioxin exposure--effects in vital organs. Toxicology. 224(3):191-201.

Buchanan, D.L., S. Ohsako, C. Tohyama, P.S. Cooke and T. Iguchi. 2002. Dioxin inhibition of estrogen-induced mouse uterine epithelial mitogenesis involves changes in cyclin and transforming growth factor-beta expression. Toxicol. Sci. 66(1):62-68.

Butler, D. 2005. US abandons health study on Agent Orange. Nature. 434(7034):687.

Byers, J.P., K. Masters, J.G. Sarver and E.A. Hassoun. 2006. Association between the levels of biogenic amines and superoxide anion production in brain regions of rats after subchronic exposure to TCDD. Toxicology. 228(2-3):291-298.

Calkosinski, I., M. Dobrzynski, M. Cegielski, A. Sieja and M. Calkosinska. 2006. [The multifaceted effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in organisms, especially dentition changes]. Postepy Hig. Med. Dosw. (Online.). 60:237-240.

Calle, E.E., H. Frumkin, S.J. Henley, D.A. Savitz and M.J. Thun. 2002. Organochlorines and breast cancer risk. CA Cancer J. Clin. 52(5):301-309.

Camacho, I.A., M.R. Hassuneh, M. Nagarkatti and P.S. Nagarkatti. 2001. Enhanced activation-induced cell death as a mechanism of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced immunotoxicity in peripheral T cells. Toxicology. 165(1):51-63.

Camacho, I.A., M. Nagarkatti and P.S. Nagarkatti. 2004a. Evidence for induction of apoptosis in T cells from murine fetal thymus following perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicol. Sci. 78(1):96-106.

Camacho, I.A., M. Nagarkatti and P.S. Nagarkatti. 2004b. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on maternal immune response during pregnancy. Arch. Toxicol. 78(5):290-300.

Cao, Y., G. Winneke, M. Wilhelm, J. Wittsiepe, F. Lemm, P. Furst, U. Ranft, M. Imohl, M. Kraft, B. Oesch-Bartlomowicz and U. Kramer. 2008. Environmental exposure to dioxins and polychlorinated biphenyls reduce levels of gonadal hormones in newborns: results from the Duisburg cohort study. Int. J. Hyg. Environ. Health. 211(1-2):30-39.

Casey, B. 2005. Environmental contaminants and maternal thyroid function. Am. J. Obstet. Gynecol. 193(6):1889-1890.

Chang, H., Y.J. Wang, L.W. Chang and P. Lin. 2005. A histochemical and pathological study on the interrelationship between TCDD-induced AhR expression, AhR activation, and hepatotoxicity in mice. J. Toxicol. Environ. Health A. 68(17-18):1567-1579.

Chao, H.R., S.L. Wang, L.Y. Lin, W.J. Lee and O. Papke. 2007. Placental transfer of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in Taiwanese mothers in relation to menstrual cycle characteristics. Food Chem. Toxicol. 45(2):259-265.

Charnley, G. and R.D. Kimbrough. 2006. Overview of exposure, toxicity, and risks to children from current levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds in the USA. Food Chem. Toxicol. 44(5):601-615.

Chaudhuri, A. and M.D. Harris. 2003. 'Proximal-type' epithelioid sarcoma: is Agent Orange still at large? Ann. R. Coll. Surg. Engl. 85(6):410-412.

Chen, J., L.S. Laughlin, A.G. Hendrickx, K. Natarajan, J.W. Overstreet and B.L. Lasley. 2003. The effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on chorionic gonadotrophin activity in pregnant macaques. Toxicology. 186(1-2):21-31.

Chen, H.L., H.J. Su, Y.J. Wang, Y.L. Guo, P.C. Liao and C.C. Lee. 2006a. Interactive effects between CYP1A1 genotypes and environmental polychlorinated dibenzo-p-dioxins and dibenzofurans exposures on liver function profile. J. Toxicol. Environ. Health A. 69(3-4):269-281.

Chen, H.L., H.J. Su, Y.L. Guo, P.C. Liao, C.F. Hung and C.C. Lee. 2006b. Biochemistry examinations and health disorder evaluation of Taiwanese living near incinerators and with low serum PCDD/Fs levels. Sci. Total Environ. 366(2-3):538-548.

Cheng, S.B., S. Kuchiiwa, I. Nagatomo, Y. Akasaki, M. Uchida, M. Tominaga, W. Hashiguchi, T. Kuchiiwa and S. Nakagawa. 2002. 2,3,7,8-Tetrachlorodibenzo-p-dioxin treatment induces c-Fos expression in the forebrain of the Long-Evans rat. Brain Res. 931(2):176-180.

Cherniak, I., D.A. Grassman and A.A. Shelepchikov. 2005. [Markers of impact and effects of dioxines in firemen who participated in fire extinguishing at "Irkutskcabel" plant]. Med. Tr. Prom Ekol.(12):41-46.

Cho, H.J., E.J. Hahn, J.A. Hwang, M.S. Hong, S.K. Kim, H.R. Pak and J.H. Park. 2006. Enhanced expression of plasma glutathione peroxidase in the thymus of mice treated with TCDD and its implication for TCDD-induced thymic atrophy. Mol. Cells. 21(2):276-283.

Choi, S.S., M.A. Miller and P.A. Harper. 2006. In utero exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces amphiregulin gene expression in the developing mouse ureter. Toxicol. Sci. 94(1):163-174.

Chu, I., P. Lecavalier, H. Hakansson, A. Yagminas, V.E. Valli, P. Poon and M. Feeley. 2001. Mixture effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and polychlorinated biphenyl congeners in rats. Chemosphere. 43(4-7):807-814.

Codier, S. and D. Bard. 2000. [Paternal exposure to dioxin and sex ratio in the offspring]. Rev. Epidemiol. Sante Publique. 48(6):590-591.

Colborn, T. 2002. Impact of Endocrine Disruptors on Brain Development and Behaviour. Proceedings of a conference. 15-20 September 2001, Sicily, Italy. Environ. Health Perspect. 110 Suppl 3:335-449.

Collins, J.J., R.A. Budinsky, C.J. Burns, L.L. Lamparski, M.L. Carson, G.D. Martin and M. Wilken. 2006. Serum dioxin levels in former chlorophenol workers. J. Expo. Sci. Environ. Epidemiol. 16(1):76-84.

Collins, L.L., M.A. Williamson, B.D. Thompson, D.P. Dever, T.A. Gasiewicz and L.A. Opanashuk. 2008. 2,3,7,8-Tetracholorodibenzo-p-dioxin exposure disrupts granule neuron precursor maturation in the developing mouse cerebellum. Toxicol. Sci. 103(1):125-136.

Connor, K.T. and L.L. Aylward. 2006. Human response to dioxin: aryl hydrocarbon receptor (AhR) molecular structure, function, and dose-response data for enzyme induction indicate an impaired human AhR. J. Toxicol. Environ. Health B Crit Rev. 9(2):147-171.

Consonni, D., A.C. Pesatori, C. Zocchetti, R. Sindaco, L.C. D'Oro, M. Rubagotti and P.A. Bertazzi. 2008. Mortality in a population exposed to dioxin after the Seveso, Italy, accident in 1976: 25 years of follow-up. Am. J. Epidemiol. 167(7):847-858.

Cordier, S. 2008. Evidence for a role of paternal exposures in developmental toxicity. Basic Clin. Pharmacol. Toxicol. 102(2):176-181.

Correa-Villasenor, A., J. Cragan, J. Kucik, L. O'Leary, C. Siffel and L. Williams. 2003. The Metropolitan Atlanta Congenital Defects Program: 35 years of birth defects surveillance at the Centers for Disease Control and Prevention. Birth Defects Res. A Clin. Mol. Teratol. 67(9):617-624.

Cranmer, M., S. Louie, R.H. Kennedy, P.A. Kern and V.A. Fonseca. 2000. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is associated with hyperinsulinemia and insulin resistance. Toxicol. Sci. 56(2):431-436.

Crofton, K.M., E.S. Craft, J.M. Hedge, C. Gennings, J.E. Simmons, R.A. Carchman, W.H. Carter, Jr. and M.J. DeVito. 2005. Thyroid-hormone-disrupting chemicals: evidence for dose-dependent additivity or synergism. Environ. Health Perspect. 113(11):1549-1554.

Croutch, C.R., M. Lebofsky, K.W. Schramm, P.F. Terranova and K.K. Rozman. 2005. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin (HxCDD) alter body weight by decreasing insulin-like growth factor I (IGF-I) signaling. Toxicol. Sci. 85(1):560-571.

Dalton, T.P., J.K. Kerzee, B. Wang, M. Miller, M.Z. Dieter, J.N. Lorenz, H.G. Shertzer, D.W. Nerbert and A. Puga. 2001. Dioxin exposure is an environmental risk factor for ischemic heart disease. Cardiovasc. Toxicol. 1(4):285-298.

Darras, V.M. 2008. Endocrine disrupting polyhalogenated organic pollutants interfere with thyroid hormone signalling in the developing brain. Cerebellum. 7(1):26-37.

Davies, R., B. Clothier, S.W. Robinson, R.E. Edwards, P. Greaves, J. Luo, T.W. Gant, T. Chernova and A.G. Smith. 2008. Essential role of the AH receptor in the dysfunction of heme metabolism induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Chem. Res. Toxicol. 21(2):330-340.

Davis, B.J., E.A. Mccurdy, B.D. Miller, G.W. Lucier and A.M. Tritscher. 2000. Ovarian tumors in rats induced by chronic 2,3,7,8-tetrachlorodibenzo-p-dioxin treatment. Cancer Res. 60(19):5414-5419.

De Roos, A.J., P. Hartge, J.H. Lubin, J.S. Colt, S. Davis, J.R. Cerhan, R.K. Severson, W. Cozen, D.G. Patterson, Jr., L.L. Needham and N. Rothman. 2005. Persistent organochlorine chemicals in plasma and risk of non-Hodgkin's lymphoma. Cancer Res. 65(23):11214-11226.

Dearstyne, E.A. and N.I. Kerkvliet. 2002. Mechanism of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced decrease in anti-CD3-activated CD4(+) T cells: the roles of apoptosis, Fas, and TNF. Toxicology. 170(1-2):139-151.

Debacker, N., A. Sasse, N. van Wouwe, L. Goeyens, F. Sartor and O.H. van. 2007. PCDD/F levels in plasma of a belgian population before and after the 1999 belgian PCB/DIOXIN incident. Chemosphere. 67(9):S217-S223.

Derkenne, S., C.P. Curran, H.G. Shertzer, T.P. Dalton, N. Dragin and D.W. Nebert. 2005. Theophylline pharmacokinetics: comparison of Cyp1a1(-/-) and Cyp1a2(-/-) knockout mice, humanized hCYP1A1_1A2 knock-in mice lacking either the mouse Cyp1a1 or Cyp1a2 gene, and Cyp1(+/+) wild-type mice. Pharmacogenet. Genomics. 15(7):503-511.

Desaulniers, D., K. Leingartner, J. Russo, G. Perkins, B.G. Chittim, M.C. Archer, M. Wade and J. Yang. 2001. Modulatory effects of neonatal exposure to TCDD, or a mixture of PCBs, p,p'-DDT, and p-p'-DDE, on methylnitrosourea-induced mammary tumor development in the rat. Environ. Health Perspect. 109(7):739-747.

Dhulipala, V.C., W.V. Welshons and C.S. Reddy. 2006. Cell cycle proteins in normal and chemically induced abnormal secondary palate development: a review. Hum. Exp. Toxicol. 25(11):675-682.

Dietert, R.R. 2008. Developmental Immunotoxicology: Focus on Health Risks. Chem. Res. Toxicol.

Donato, F. and M. Magoni. 2005. [Answers to Panizza e Ricci about Brescia]. Epidemiol. Prev. 29(5-6):233-236.

Dong, L. and N.J. Tang. 2005. [Liver toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.]. Zhonghua Lao. Dong. Wei Sheng Zhi. Ye. Bing. Za Zhi. 23(1):60-62.

Dragan, Y.P. and D. Schrenk. 2000. Animal studies addressing the carcinogenicity of TCDD (or related compounds) with an emphasis on tumour promotion. Food Addit. Contam. 17(4):289-302.

Dragin, N., T.P. Dalton, M.L. Miller, H.G. Shertzer and D.W. Nebert. 2006. For dioxin-induced birth defects, mouse or human CYP1A2 in maternal liver protects whereas mouse CYP1A1 and CYP1B1 are inconsequential. J. Biol. Chem. 281(27):18591-18600.

Dunlap, D.Y. and F. Matsumura. 2000. Analysis of difference in vivo effects of TCDD between c-src +/+ mice, c-src deficient, -/+ and -/- B6, 129-Src(tm 1 sor) mice and their wild-type littermates. Chemosphere. 40(9-11):1241-1246.

Dunlap, D.Y., I. Ikeda, H. Nagashima, C.F. Vogel and F. Matsumura. 2002. Effects of src-deficiency on the expression of in vivo toxicity of TCDD in a strain of c-src knockout mice procured through six generations of backcrossings to C57BL/6 mice. Toxicology. 172(2):125-141.

Eckle, V.S., A. Buchmann, W. Bursch, R. Schulte-Hermann and M. Schwarz. 2004. Immunohistochemical detection of activated caspases in apoptotic hepatocytes in rat liver. Toxicol. Pathol. 32(1):9-15.

Emi, Y., S. Ikushiro and Y. Kato. 2007. Thyroxine-metabolizing rat uridine diphosphate-glucuronosyltransferase 1A7 is regulated by thyroid hormone receptor. Endocrinology. 148(12):6124-6133.

Eskenazi, B., P. Mocarelli, M. Warner, W.Y. Chee, P.M. Gerthoux, S. Samuels, L.L. Needham and D.G. Patterson, Jr. 2003. Maternal serum dioxin levels and birth outcomes in women of Seveso, Italy. Environ. Health Perspect. 111(7):947-953.

Eskenazi, B., M. Warner, S. Samuels, J. Young, P.M. Gerthoux, L. Needham, D. Patterson, D. Olive, N. Gavoni, P. Vercellini and P. Mocarelli. 2007. Serum dioxin concentrations and risk of uterine leiomyoma in the Seveso Women's Health Study. Am. J. Epidemiol. 166(1):79-87.

Esser, C., S. Steinwachs, C. Herder, M. Majora and Z.W. Lai. 2005. Effects of a single dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin, given at post-puberty, in senescent mice. Toxicol. Lett. 157(2):89-98.

Fattore, E., C. Trossvik and H. Hakansson. 2000. Relative potency values derived from hepatic vitamin A reduction in male and female Sprague-Dawley rats following subchronic dietary exposure to individual polychlorinated dibenzo-p-dioxin and dibenzofuran congeners and a mixture thereof. Toxicol. Appl. Pharmacol. 165(3):184-194.

Fetissov, S.O., P. Huang, Q. Zhang, J. Mimura, Y. Fujii-Kuriyama, A. Rannug, T. Hokfelt and S. Ceccatelli. 2004. Expression of hypothalamic neuropeptides after acute TCDD treatment and distribution of Ah receptor repressor. Regul. Pept. 119(1-2):113-124.

Figa-Talamanca, I., M. Tarquini and L. Lauria. 2003. [Is it possible to use sex ratio at birth as indicator of the presence of endocrine disrupters in environmental pollution?]. G. Ital. Med. Lav. Ergon. 25 Suppl(3):52-53.

Finkelstein, A., E. Rotman, A. Eisenkraft, A. Krivoy, I. Laish, Z. Tashma, A. Hoffman and Y. Yehezkelli. 2005. [Political poisoning with dioxins--a weapon of chemical "disgracefulness"]. Harefuah. 144(10):729-35, 749.

Fisher, M.T., M. Nagarkatti and P.S. Nagarkatti. 2005. 2,3,7,8-tetrachlorodibenzo-p-dioxin enhances negative selection of T cells in the thymus but allows autoreactive T cells to escape deletion and migrate to the periphery. Mol. Pharmacol. 67(1):327-335.

Fletcher, N., A. Hanberg and H. Hakansson. 2001. Hepatic vitamin a depletion is a sensitive marker of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure in four rodent species. Toxicol. Sci. 62(1):166-175.

Fletcher, N., N. Giese, C. Schmidt, N. Stern, P.M. Lind, M. Viluksela, J.T. Tuomisto, J. Tuomisto, H. Nau and H. Hakansson. 2005. Altered retinoid metabolism in female Long-Evans and Han/Wistar rats following long-term 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-treatment. Toxicol. Sci. 86(2):264-272.

Forawi, H.A., P.B. Tchounwou and R.W. McMurray. 2004. Xenoestrogen modulation of the immune system: effects of dichlorodiphenyltrichloroethane (DDT) and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Rev. Environ. Health. 19(1):1-13.

Foster, W.G. 2008. Endocrine toxicants including 2,3,7,8-terachlorodibenzo-p-dioxin (TCDD) and dioxin-like chemicals and endometriosis: is there a link? J. Toxicol. Environ. Health B Crit Rev. 11(3-4):177-187.

Franczak, A., A. Nynca, K.E. Valdez, K.M. Mizinga and B.K. Petroff. 2006. Effects of acute and chronic exposure to the aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzo-p-dioxin on the transition to reproductive senescence in female Sprague-Dawley rats. Biol. Reprod. 74(1):125-130.

Frericks, M., V.V. Temchura, M. Majora, S. Stutte and C. Esser. 2006. Transcriptional signatures of immune cells in aryl hydrocarbon receptor (AHR)-proficient and AHR-deficient mice. Biol. Chem. 387(9):1219-1226.

Fritz, W.A., T.M. Lin, R.W. Moore, P.S. Cooke and R.E. Peterson. 2005. In utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure: effects on the prostate and its response to castration in senescent C57BL/6J mice. Toxicol. Sci. 86(2):387-395.

Froehner, M. and M.P. Wirth. 2001. Etiologic factors in soft tissue sarcomas. Onkologie. 24(2):139-142.

Frumkin, H. 2003. Agent Orange and cancer: an overview for clinicians. CA Cancer J. Clin. 53(4):245-255.

Fujimaki, H., K. Nohara, T. Kobayashi, K. Suzuki, K. Eguchi-Kasai, S. Tsukumo, M. Kijima and C. Tohyama. 2002. Effect of a single oral dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin on immune function in male NC/Nga mice. Toxicol. Sci. 66(1):117-124.

Fujiwara, K., T. Yamada, K. Mishima, H. Imura and T. Sugahara. 2008. Morphological and immunohistochemical studies on cleft palates induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin in mice. Congenit. Anom. (Kyoto). 48(2):68-73.

Fujiyoshi, P.T., J.E. Michalek and F. Matsumura. 2006. Molecular epidemiologic evidence for diabetogenic effects of dioxin exposure in U.S. Air force veterans of the Vietnam war. Environ. Health Perspect. 114(11):1677-1683.

Funatake, C.J., E.A. Dearstyne, L.B. Steppan, D.M. Shepherd, E.S. Spanjaard, A. Marshak-Rothstein and N.I. Kerkvliet. 2004. Early consequences of 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on the activation and survival of antigen-specific T cells. Toxicol. Sci. 82(1):129-142.

Funatake, C.J., N.B. Marshall, L.B. Steppan, D.V. Mourich and N.I. Kerkvliet. 2005. Cutting edge: activation of the aryl hydrocarbon receptor by 2,3,7,8-tetrachlorodibenzo-p-dioxin generates a population of CD4+ CD25+ cells with characteristics of regulatory T cells. J. Immunol. 175(7):4184-4188.

Funseth, E., A. Wicklund-Glynn, G. Friman and N. Ilback. 2000. Redistribution of accumulated 2,3,7,8-tetrachlorodibenzo-p-dioxin during coxsackievirus B3 infection in the mouse. Toxicol. Lett. 116(1-2):131-141.

Funseth, E., L. Wesslen, U. Lindh, G. Friman and N.G. Ilback. 2002. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on trace elements, inflammation and viral clearance in the myocardium during coxsackievirus B3 infection in mice. Sci. Total Environ. 284(1-3):135-147.

Galijatovic, A., D. Beaton, N. Nguyen, S. Chen, J. Bonzo, R. Johnson, S. Maeda, M. Karin, F.P. Guengerich and R.H. Tukey. 2004. The human CYP1A1 gene is regulated in a developmental and tissue-specific fashion in transgenic mice. J. Biol. Chem. 279(23):23969-23976.

Gao, X., B.K. Petroff, K.K. Rozman and P.F. Terranova. 2000. Gonadotropin-releasing hormone (GnRH) partially reverses the inhibitory effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on ovulation in the immature gonadotropin-treated rat. Toxicology. 147(1):15-22.

Gao, X., K. Mizuyachi, P.F. Terranova and K.K. Rozman. 2001. 2,3,7,8-tetrachlorodibenzo-p-dioxin decreases responsiveness of the hypothalamus to estradiol as a feedback inducer of preovulatory gonadotropin secretion in the immature gonadotropin-primed rat. Toxicol. Appl. Pharmacol. 170(3):181-190.

Gao, Y., C. Sahlberg, A. Kiukkonen, S. Alaluusua, R. Pohjanvirta, J. Tuomisto and P.L. Lukinmaa. 2004. Lactational exposure of Han/Wistar rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin interferes with enamel maturation and retards dentin mineralization. J. Dent. Res. 83(2):139-144.

Garrett, R.W. and T.A. Gasiewicz. 2006. The aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzo-p-dioxin alters the circadian rhythms, quiescence, and expression of clock genes in murine hematopoietic stem and progenitor cells. Mol. Pharmacol. 69(6):2076-2083.

Gaudry, J. and K. Skiehar. 2007. Promoting environmentally responsible health care. Can. Nurse. 103(1):22-26.

Geng, G.H., L. Dong, B.H. Du, C.M. Zhang, S.W. Ma, N.J. Tang, W. Han, P. Zhang and P.J. Coenraads. 2006. [Effect of occupationally exposed to dioxin on serum oxidative stress indices in male workers]. Zhonghua Lao. Dong. Wei Sheng Zhi. Ye. Bing. Za Zhi. 24(7):419-422.

Geng, H.O., J.C. Zhang, B. Hu and J.B. Wang. 2008. [Effects of lactational dioxin exposure to development of alveolar bone in SD rat offspring]. Zhonghua Kou Qiang. Yi. Xue. Za Zhi. 43(5):278-280.

Genter, M.B., C.D. Clay, T.P. Dalton, H. Dong, D.W. Nebert and H.G. Shertzer. 2006. Comparison of mouse hepatic mitochondrial versus microsomal cytochromes P450 following TCDD treatment. Biochem. Biophys. Res. Commun. 342(4):1375-1381.

Geusau, A., W. Jurecka, H. Nahavandi, J.B. Schmidt, G. Stingl and E. Tschachler. 2000. Punctate keratoderma-like lesions on the palms and soles in a patient with chloracne: a new clinical manifestation of dioxin intoxication? Br. J. Dermatol. 143(5):1067-1071.

Geusau, A., K. Abraham, K. Geissler, M.O. Sator, G. Stingl and E. Tschachler. 2001. Severe 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) intoxication: clinical and laboratory effects. Environ. Health Perspect. 109(8):865-869.

Geusau, A., M. Khorchide, M. Mildner, J. Pammer, L. Eckhart and E. Tschachler. 2005. 2,3,7,8-tetrachlorodibenzo-p-dioxin impairs differentiation of normal human epidermal keratinocytes in a skin equivalent model. J. Invest Dermatol. 124(1):275-277.

Giacomini, S.M., L. Hou, P.A. Bertazzi and A. Baccarelli. 2006. Dioxin effects on neonatal and infant thyroid function: routes of perinatal exposure, mechanisms of action and evidence from epidemiology studies. Int. Arch. Occup. Environ. Health. 79(5):396-404.

Giri, V.N., A.E. Cassidy, J. Beebe-Dimmer, L.R. Ellis, D.C. Smith, C.H. Bock and K.A. Cooney. 2004. Association between Agent Orange and prostate cancer: a pilot case-control study. Urology. 63(4):757-760.

Glover, R.E., D.R. Germolec, R. Patterson, N.J. Walker, G.W. Lucier and R.P. Mason. 2000. Endotoxin (lipopolysaccharide)-induced nitric oxide production in 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated Fischer rats: detection of nitrosyl hemoproteins by EPR spectroscopy. Chem. Res. Toxicol. 13(10):1051-1055.

Guo, L., Y.Y. Zhao, Y.Y. Zhao, Z.J. Sun, H. Liu and S.L. Zhang. 2007. Toxic effects of TCDD on osteogenesis through altering IGFBP-6 gene expression in osteoblasts. Biol. Pharm. Bull. 30(11):2018-2026.

Gupta, A., N. Ketchum, C.G. Roehrborn, A. Schecter, C.C. Aragaki and J.E. Michalek. 2006a. Serum dioxin, testosterone, and subsequent risk of benign prostatic hyperplasia: a prospective cohort study of Air Force veterans. Environ. Health Perspect. 114(11):1649-1654.

Gupta, A., A. Schecter, C.C. Aragaki and C.G. Roehrborn. 2006b. Dioxin exposure and benign prostatic hyperplasia. J. Occup. Environ. Med. 48(7):708-714.

Guzman, C. and E. Zambrano. 2007. [Endocrine disruptor compounds and their role in the developmental programming of the reproductive axis]. Rev. Invest Clin. 59(1):73-81.

Ha, M.H., D.H. Lee and D.R. Jacobs. 2007. Association between serum concentrations of persistent organic pollutants and self-reported cardiovascular disease prevalence: results from the National Health and Nutrition Examination Survey, 1999-2002. Environ. Health Perspect. 115(8):1204-1209.

Ha, M.H., D.H. Lee, H.K. Son, S.K. Park and D.R. Jacobs, Jr. 2008. Association between serum concentrations of persistent organic pollutants and prevalence of newly diagnosed hypertension: results from the National Health and Nutrition Examination Survey 1999-2002. J. Hum. Hypertens.

Haavisto, T., K. Nurmela, R. Pohjanvirta, H. Huuskonen, F. El-Gehani and J. Paranko. 2001. Prenatal testosterone and luteinizing hormone levels in male rats exposed during pregnancy to 2,3,7,8-tetrachlorodibenzo-p-dioxin and diethylstilbestrol. Mol. Cell Endocrinol. 178(1-2):169-179.

Haavisto, T.E., S.A. Myllymaki, N.A. Adamsson, L.J. Brokken, M. Viluksela, J. Toppari and J. Paranko. 2006. The effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on testicular steroidogenesis in infantile male rats. Int. J. Androl. 29(2):313-322.

Hailey, J.R., N.J. Walker, D.M. Sells, A.E. Brix, M.P. Jokinen and A. Nyska. 2005. Classification of proliferative hepatocellular lesions in harlan sprague-dawley rats chronically exposed to dioxin-like compounds. Toxicol. Pathol. 33(1):165-174.

Handler, S. 2006. Story short on science. Minn. Med. 89(4):6-7.

Hardell, L. and M. Eriksson. 2003. Is the decline of the increasing incidence of non-Hodgkin lymphoma in Sweden and other countries a result of cancer preventive measures? Environ. Health Perspect. 111(14):1704-1706.

Hardell, L., G. Lindstrom, B. van Bavel, K. Hardell, A. Linde, M. Carlberg and G. Liljegren. 2001. Adipose tissue concentrations of dioxins and dibenzofurans, titers of antibodies to Epstein-Barr virus early antigen and the risk for non-Hodgkin lymphoma. Environ. Res. 87(2):99-107.

Hassoun, E.A., F. Li, A. Abushaban and S.J. Stohs. 2000. The relative abilities of TCDD and its congeners to induce oxidative stress in the hepatic and brain tissues of rats after subchronic exposure. Toxicology. 145(2-3):103-113.

Hassoun, E.A., H. Wang, A. Abushaban and S.J. Stohs. 2002. Induction of oxidative stress in the tissues of rats after chronic exposure to TCDD, 2,3,4,7,8-pentachlorodibenzofuran, and 3,3',4,4',5-pentachlorobiphenyl. J. Toxicol. Environ. Health A. 65(12):825-842.

Hassoun, E.A., M. Al-Ghafri and A. Abushaban. 2003. The role of antioxidant enzymes in TCDD-induced oxidative stress in various brain regions of rats after subchronic exposure. Free Radic. Biol. Med. 35(9):1028-1036.

Hassoun, E.A., J. Vodhanel and A. Abushaban. 2004. The modulatory effects of ellagic acid and vitamin E succinate on TCDD-induced oxidative stress in different brain regions of rats after subchronic exposure. J. Biochem. Mol. Toxicol. 18(4):196-203.

Henry, E.C., J.C. Bemis, O. Henry, A.S. Kende and T.A. Gasiewicz. 2006. A potential endogenous ligand for the aryl hydrocarbon receptor has potent agonist activity in vitro and in vivo. Arch. Biochem. Biophys. 450(1):67-77.

Hermsen, S.A., S. Larsson, A. Arima, A. Muneoka, T. Ihara, H. Sumida, T. Fukusato, S. Kubota, M. Yasuda and P.M. Lind. 8 A.D. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) affects bone tissue in rhesus monkeys. Toxicology. 253(1-3):147-152.

Hirose, A. and M. Ema. 2004. [Recent TDI derivation of dioxin based on the reproductive and developmental toxicity]. Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Hokoku(122):56-61.

Hochstein, M.S., Jr., J.A. Render, S.J. Bursian and R.J. Aulerich. 2001. Chronic toxicity of dietary 2,3,7,8-tetrachlorodibenzo-p-dioxin to mink. Vet. Hum. Toxicol. 43(3):134-139.

Hoegberg, P., C.K. Schmidt, N. Fletcher, C.B. Nilsson, C. Trossvik, A. Gerlienke Schuur, A. Brouwer, H. Nau, N.B. Ghyselinck, P. Chambon and H. Hakansson. 2005. Retinoid status and responsiveness to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice lacking retinoid binding protein or retinoid receptor forms. Chem. Biol. Interact. 156(1):25-39.

Hofer, T., R. Pohjanvirta, P. Spielmann, M. Viluksela, D.P. Buchmann, R.H. Wenger and M. Gassmann. 2004. Simultaneous exposure of rats to dioxin and carbon monoxide reduces the xenobiotic but not the hypoxic response. Biol. Chem. 385(3-4):291-294.

Hogaboam, J.P., A.J. Moore and B.P. Lawrence. 2008. The aryl hydrocarbon receptor affects distinct tissue compartments during ontogeny of the immune system. Toxicol. Sci. 102(1):160-170.

Hojo, R., G. Zareba, J.W. Kai, R.B. Baggs and B. Weiss. 2006. Sex-specific alterations of cerebral cortical cell size in rats exposed prenatally to dioxin. J. Appl. Toxicol. 26(1):25-34.

Holladay, S.D., L.V. Sharova, K. Punareewattana, T.C. Hrubec, R.M. Gogal, Jr., M.R. Prater and A.A. Sharov. 2002. Maternal immune stimulation in mice decreases fetal malformations caused by teratogens. Int. Immunopharmacol. 2(2-3):325-332.

Hombach-Klonisch, S., P. Pocar, S. Kietz and T. Klonisch. 2005. Molecular actions of polyhalogenated arylhydrocarbons (PAHs) in female reproduction. Curr. Med. Chem. 12(5):599-616.

Hood, D.B., L. Woods, L. Brown, S. Johnson and F.F. Ebner. 2006. Gestational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure effects on sensory cortex function. Neurotoxicology. 27(6):1032-1042.

Hu, S.W., T.J. Cheng, G.P. ChangChien and C.C. Chan. 2003. Association between dioxins/furans exposures and incinerator workers' hepatic function and blood lipids. J. Occup. Environ. Med. 45(6):601-608.

Hung, Y.C., G.S. Huang, V.M. Sava, V.A. Blagodarsky and M.Y. Hong. 2006. Protective effects of tea melanin against 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced toxicity: antioxidant activity and aryl hydrocarbon receptor suppressive effect. Biol. Pharm. Bull. 29(11):2284-2291.

Hurst, C.H., B. Abbott, J.E. Schmid and L.S. Birnbaum. 2002. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) disrupts early morphogenetic events that form the lower reproductive tract in female rat fetuses. Toxicol. Sci. 65(1):87-98.

Hutt, K.J., Z. Shi, D.F. Albertini and B.K. Petroff. 2008. The environmental toxicant 2,3,7,8-tetrachlorodibenzo-p-dioxin disrupts morphogenesis of the rat pre-implantation embryo. BMC. Dev. Biol. 8:1.

Hwang, S.Y., W.J. Kim, J.J. Wee, J.S. Choi and S.K. Kim. 2004. Panax ginseng improves survival and sperm quality in guinea pigs exposed to 2,3,7,8-tetrachlorodibenzo- p-dioxin. BJU. Int. 94(4):663-668.

Iba, M.M., J. Fung, K.R. Cooper, P.E. Thomas, G.C. Wagner and Y. Park. 2000. Effect of gestational and lactational 2,3,7, 8-tetrachlorodibenzo-p-dioxin exposure on the level and catalytic activities of hepatic microsomal CYP1A in prepubertal and adult rats. Biochem. Pharmacol. 59(9):1147-1154.

Ikeda, M., T. Mitsui, K. Setani, M. Tamura, M. Kakeyama, H. Sone, C. Tohyama and T. Tomita. 2005a. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in rats disrupts brain sexual differentiation. Toxicol. Appl. Pharmacol. 205(1):98-105.

Ikeda, M., M. Tamura, J. Yamashita, C. Suzuki and T. Tomita. 2005b. Repeated in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure affects male gonads in offspring, leading to sex ratio changes in F2 progeny. Toxicol. Appl. Pharmacol. 206(3):351-355.

Ingel, F., V. Platonova and L. Katosova. 2001. Human emotional stress, dioxin blood content and genetic damage in Chapaevsk town. Chemosphere. 43(4-7):989-998.

Inouye, K., X. Pan, N. Imai, T. Ito, T. Takei, C. Tohyama and K. Nohara. 2005. T cell-derived IL-5 production is a sensitive target of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Chemosphere. 60(7):907-913.

Ishida, T., S. Kan-o, J. Mutoh, S. Takeda, Y. Ishii, I. Hashiguchi, A. Akamine and H. Yamada. 2005. 2,3,7,8-Tetrachlorodibenzo-p-dioxin-induced change in intestinal function and pathology: evidence for the involvement of arylhydrocarbon receptor-mediated alteration of glucose transportation. Toxicol. Appl. Pharmacol. 205(1):89-97.

Ishihara, K., K. Warita, T. Tanida, T. Sugawara, H. Kitagawa and N. Hoshi. 2007. Does paternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) affect the sex ratio of offspring? J. Vet. Med. Sci. 69(4):347-352.

Ishimura, R., S. Ohsako, Y. Miyabara, M. Sakaue, T. Kawakami, Y. Aoki, J. Yonemoto and C. Tohyama. 2002. Increased glycogen content and glucose transporter 3 mRNA level in the placenta of Holtzman rats after exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol. Appl. Pharmacol. 178(3):161-171.

Ishimura, R., T. Kawakami, S. Ohsako, K. Nohara and C. Tohyama. 2006. Suppressive effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on vascular remodeling that takes place in the normal labyrinth zone of rat placenta during late gestation. Toxicol. Sci. 91(1):265-274.

Ishizuka, M., J. Yonemoto, H. Zaha, C. Tohyama and H. Sone. 2003. Perinatal exposure to low doses of 2,3,7,8-tetrachlorodibenzo-p-dioxin alters sex-dependent expression of hepatic CYP2C11. J. Biochem. Mol. Toxicol. 17(5):278-285.

Ito, T., K. Inouye, H. Fujimaki, C. Tohyama and K. Nohara. 2002. Mechanism of TCDD-induced suppression of antibody production: effect on T cell-derived cytokine production in the primary immune reaction of mice. Toxicol. Sci. 70(1):46-54.

Ito, T., K. Inouye, K. Nohara, C. Tohyama and H. Fujimaki. 2008. TCDD exposure exacerbates atopic dermatitis-related inflammation in NC/Nga mice. Toxicol. Lett. 177(1):31-37.

James, W.H. 2001. Sex ratios at birth as monitors of endocrine disruption. Environ. Health Perspect. 109(6):A250-A251.

James, W.H. 2002. Parental exposure to dioxin and offspring sex ratios. Environ. Health Perspect. 110(9):A502.

Jamsa, T., M. Viluksela, J.T. Tuomisto, J. Tuomisto and J. Tuukkanen. 2001. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on bone in two rat strains with different aryl hydrocarbon receptor structures. J. Bone Miner. Res. 16(10):1812-1820.

Jang, J.Y., S. Shin, B.I. Choi, D. Park, J.H. Jeon, S.Y. Hwang, J.C. Kim, Y.B. Kim and S.S. Nahm. 2007. Antiteratogenic effects of alpha-naphthoflavone on 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposed mice in utero. Reprod. Toxicol. 24(3-4):303-309.

Jang, J.Y., D. Park, S. Shin, J.H. Jeon, B.I. Choi, S.S. Joo, S.Y. Hwang, S.S. Nahm and Y.B. Kim. 2008. Antiteratogenic effect of resveratrol in mice exposed in utero to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Eur. J. Pharmacol. 591(1-3):280-283.

Jao-Tan, C. and E. Pope. 2006. Cutaneous poisoning syndromes in children: a review. Curr. Opin. Pediatr. 18(4):410-416.

Jenkins, S., C. Rowell, J. Wang and C.A. Lamartiniere. 2007. Prenatal TCDD exposure predisposes for mammary cancer in rats. Reprod. Toxicol. 23(3):391-396.

Jeong, Y.C., N.J. Walker, D.E. Burgin, G. Kissling, M. Gupta, L. Kupper, L.S. Birnbaum and J.A. Swenberg. 2008. Accumulation of M1dG DNA adducts after chronic exposure to PCBs, but not from acute exposure to polychlorinated aromatic hydrocarbons. Free Radic. Biol. Med. 45(5):585-591.

Jin, M.H., C.H. Hong, H.Y. Lee, H.J. Kang and S.W. Han. 2008a. Enhanced TGF-beta1 is involved in 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induced oxidative stress in C57BL/6 mouse testis. Toxicol. Lett. 178(3):202-209.

Jin, M.H., H.K. Ko, C.H. Hong and S.W. Han. 2008b. In Utero Exposure to 2,3,7,8-Tetrachlorodibenzo-p-Dioxin Affects the Development of Reproductive System in Mouse. Yonsei Med. J. 49(5):843-850.

Jokinen, M.P., N.J. Walker, A.E. Brix, D.M. Sells, J.K. Haseman and A. Nyska. 2003. Increase in cardiovascular pathology in female Sprague-Dawley rats following chronic treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin and 3,3',4,4',5-pentachlorobiphenyl. Cardiovasc. Toxicol. 3(4):299-310.

Jongbloet, P.H., N. Roeleveld and H.M. Groenewoud. 2002. Where the boys aren't: dioxin and the sex ratio. Environ. Health Perspect. 110(1):1-3.

Kaiser, J. 2000. Toxicology. Just how bad is dioxin? Science. 288(5473):1941-1944.

Kakeyama, M. and C. Tohyama. 2003. Developmental neurotoxicity of dioxin and its related compounds. Ind. Health. 41(3):215-230.

Kakeyama, M., H. Sone and C. Tohyama. 2001. Changes in expression of NMDA receptor subunit mRNA by perinatal exposure to dioxin. Neuroreport. 12(18):4009-4012.

Kakeyama, M., H. Sone, Y. Miyabara and C. Tohyama. 2003. Perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters activity-dependent expression of BDNF mRNA in the neocortex and male rat sexual behavior in adulthood. Neurotoxicology. 24(2):207-217.

Kakeyama, M., H. Sone and C. Tohyama. 2008. Perinatal exposure of female rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces central precocious puberty in the offspring. J. Endocrinol. 197(2):351-358.

Kaneko, H., E. Matsui, S. Shinoda, N. Kawamoto, Y. Nakamura, R. Uehara, N. Matsuura, M. Morita, H. Tada and N. Kondo. 2006. Effects of dioxins on the quantitative levels of immune components in infants. Toxicol. Ind. Health. 22(3):131-136.

Kang, H.K., N.A. Dalager, L.L. Needham, D.G. Patterson, Jr., P.S. Lees, K. Yates and G.M. Matanoski. 2006. Health status of Army Chemical Corps Vietnam veterans who sprayed defoliant in Vietnam. Am. J. Ind. Med. 49(11):875-884.

Katsnel'son, B.A., A.A. Koseleva, S.V. Kuz'min and L.I. Privalova. 2002. [Dioxins: facts and conjectures]. Vestn. Ross. Akad. Med. Nauk(9):29-34.

Kattainen, H., J. Tuukkanen, U. Simanainen, J.T. Tuomisto, O. Kovero, P.L. Lukinmaa, S. Alaluusua, J. Tuomisto and M. Viluksela. 2001. In utero/lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure impairs molar tooth development in rats. Toxicol. Appl. Pharmacol. 174(3):216-224.

Kawakami, T., R. Ishimura, K. Nohara, K. Takeda, C. Tohyama and S. Ohsako. 2006. Differential susceptibilities of Holtzman and Sprague-Dawley rats to fetal death and placental dysfunction induced by 2,3,7,8-teterachlorodibenzo-p-dioxin (TCDD) despite the identical primary structure of the aryl hydrocarbon receptor. Toxicol. Appl. Pharmacol. 212(3):224-236.

Kayajanian, G.M. 2000. Southeast Asia, promotability and dioxin's relationship to cancer incidence in operation ranch hand veterans. Ecotoxicol. Environ. Saf. 46(2):125-129.

Kayajanian, G.M. 2001. Dioxin body burdens in operation ranch hand veterans: promotion blocking and cancer causation. Ecotoxicol. Environ. Saf. 50(3):167-173.

Kayajanian, G.M. 2002. The J-shaped dioxin dose response curve. Ecotoxicol. Environ. Saf. 51(1):1-4.

Keller, J.M., J.C. Huang, Y. Huet-Hudson and L.J. Leamy. 2007a. The effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on molar and mandible traits in congenic mice: a test of the role of the Ahr locus. Toxicology. 242(1-3):52-62.

Keller, J.M., Y.M. Huet-Hudson and L.J. Leamy. 2007b. Qualitative effects of dioxin on molars vary among inbred mouse strains. Arch. Oral Biol. 52(5):450-454.

Keller, J.M., D.E. Allen, C.R. Davis and L.J. Leamy. 2007c. 2,3,7,8-Tetrachlorodibenzo-p-dioxin affects fluctuating asymmetry of molar shape in mice, and an epistatic interaction of two genes for molar size. Heredity. 98(5):259-267.

Keller, J.M., Y. Huet-Hudson and L.J. Leamy. 2008. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on molar development among non-resistant inbred strains of mice: a geometric morphometric analysis. Growth Dev. Aging. 71(1):3-16.

Kellerhoff, N.M. and A. Lussi. 2004. ["Molar-incisor hypomineralization".]. Schweiz. Monatsschr. Zahnmed. 114(3):243-253.

Kelley, S.K., C.B. Nilsson, M.H. Green, J.B. Green and H. Hakansson. 2000. Mobilization of vitamin A stores in rats after administration of 2,3, 7,8-tetrachlorodibenzo-p-dioxin: a kinetic analysis. Toxicol. Sci. 55(2):478-484.

Kerkvliet, N.I., D.M. Shepherd and L. Baecher-Steppan. 2002. T lymphocytes are direct, aryl hydrocarbon receptor (AhR)-dependent targets of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD): AhR expression in both CD4+ and CD8+ T cells is necessary for full suppression of a cytotoxic T lymphocyte response by TCDD. Toxicol. Appl. Pharmacol. 185(2):146-152.

Kern, P.A., S. Said, W.G. Jackson, Jr. and J.E. Michalek. 2004. Insulin sensitivity following agent orange exposure in Vietnam veterans with high blood levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin. J. Clin. Endocrinol. Metab. 89(9):4665-4672.

Ketchum, N.S. and J.E. Michalek. 2005. Postservice mortality of Air Force veterans occupationally exposed to herbicides during the Vietnam War: 20-year follow-up results. Mil. Med. 170(5):406-413.

Khripach, L.V., V.S. Zhurkov, I. Revazova and I. Rakhmanin. 2005. [Problems in the assessment of carcinogenic risk of dioxins]. Gig. Sanit.(6):24-27.

Kim, A.H., M.C. Kohn, A. Nyska and N.J. Walker. 2003a. Area under the curve as a dose metric for promotional responses following 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure. Toxicol. Appl. Pharmacol. 191(1):12-21.

Kim, H.A., E.M. Kim, Y.C. Park, J.Y. Yu, S.K. Hong, S.H. Jeon, K.L. Park, S.J. Hur and Y. Heo. 2003b. Immunotoxicological effects of Agent Orange exposure to the Vietnam War Korean veterans. Ind. Health. 41(3):158-166.

Kim, H.J., K.S. Jeong, S.J. Park, S.W. Cho, H.Y. Son, S.R. Kim, S.H. Kim, M.Y. An and S.Y. Ryu. 2003c. Effects of benzo[alpha]pyrene, 2-bromopropane, phenol and 2,3,7,8-tetrachlorodibenzo-p-dioxin on IL-6 production in mice after single or repeated exposure. In Vivo. 17(3):269-275.

Kim, J.S., H.S. Lim, S.I. Cho, H.K. Cheong and M.K. Lim. 2003d. Impact of Agent Orange exposure among Korean Vietnam veterans. Ind. Health. 41(3):149-157.

Kimbrough, R.D. and C. Krouskas. 2002. Polychlorinated biphenyls, TEQs, children, and data analysis. Vet. Hum. Toxicol. 44(6):354-357.

Kimbrough, R.D., M.L. Doemland and C.A. Krouskas. 2001. Analysis of research studying the effects of polychlorinated biphenyls and related chemicals on neurobehavioral development in children. Vet. Hum. Toxicol. 43(4):220-228.

Kishi, R., F. Sata, Y. Saijo, N. Kurahashi, S. Kato, S. Nakajima and S. Sasaki. 2006. [Exposure to endocrine disrupting chemicals and children's health: problems in epidemiological studies]. Nippon Eiseigaku Zasshi. 61(1):19-31.

Kitamura, N., P. Wong and F. Matsumura. 2006. Mechanistic investigation on the cause for reduced toxicity of TCDD in wa-1 homozygous TGFalpha mutant strain of mice as compared its matching wild-type counterpart, C57BL/6J mice. J. Biochem. Mol. Toxicol. 20(4):151-158.

Ko, K., H.M. Theobald and R.E. Peterson. 2002. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in the C57BL/6J mouse prostate: lobe-specific effects on branching morphogenesis. Toxicol. Sci. 70(2):227-237.

Ko, K., R.W. Moore and R.E. Peterson. 2004a. Aryl hydrocarbon receptors in urogenital sinus mesenchyme mediate the inhibition of prostatic epithelial bud formation by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol. Appl. Pharmacol. 196(1):149-155.

Ko, K., H.M. Theobald, R.W. Moore and R.E. Peterson. 2004b. Evidence that inhibited prostatic epithelial bud formation in 2,3,7,8-tetrachlorodibenzo-p-dioxin-exposed C57BL/6J fetal mice is not due to interruption of androgen signaling in the urogenital sinus. Toxicol. Sci. 79(2):360-369.

Kogevinas, M. 2000. Studies of cancer in humans. Food Addit. Contam. 17(4):317-324.

Kogevinas, M. 2001. Human health effects of dioxins: cancer, reproductive and endocrine system effects. Hum. Reprod. Update. 7(3):331-339.

Kogevinas, M. and G. Janer. 2000. [Health effects of dioxins]. Med. Clin. (Barc.). 115(19):740-748.

Kopec, A.K., D.R. Boverhof, L.D. Burgoon, D. Ibrahim-Aibo, J.R. Harkema, C. Tashiro, B. Chittim and T.R. Zacharewski. 2008. Comparative toxicogenomic examination of the hepatic effects of PCB126 and TCDD in immature, ovariectomized C57BL/6 mice. Toxicol. Sci. 102(1):61-75.

Kopf, P.G., J.K. Huwe and M.K. Walker. 2008. Hypertension, Cardiac Hypertrophy, and Impaired Vascular Relaxation Induced by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin are Associated with Increased Superoxide. Cardiovasc. Toxicol. 8(4):181-193.

Korenaga, T., T. Fukusato, M. Ohta, K. Asaoka, N. Murata, A. Arima and S. Kubota. 2007. Long-term effects of subcutaneously injected 2,3,7,8-tetrachlorodibenzo-p-dioxin on the liver of rhesus monkeys. Chemosphere. 67(9):S399-S404.

Kransler, K.M., B.P. McGarrigle and J.R. Olson. 2007a. Comparative developmental toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the hamster, rat and guinea pig. Toxicology. 229(3):214-225.

Kransler, K.M., D.A. Tonucci, B.P. McGarrigle, J.L. Napoli and J.R. Olson. 2007b. Gestational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters retinoid homeostasis in maternal and perinatal tissues of the Holtzman rat. Toxicol. Appl. Pharmacol. 224(1):29-38.

Kransler, K.M., B.P. McGarrigle, R.J. Russell and J.R. Olson. 2008. Effects of Helicobacter infection on developmental toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Holtzman rats. Lab Anim (NY). 37(4):171-175.

Kristensen, V.N. and A.L. Borresen-Dale. 2000. Molecular epidemiology of breast cancer: genetic variation in steroid hormone metabolism. Mutat. Res. 462(2-3):323-333.

Kronenberg, S., Z. Lai and C. Esser. 2000. Generation of alphabeta T-cell receptor+ CD4- CD8+ cells in major histocompatibility complex class I-deficient mice upon activation of the aryl hydrocarbon receptor by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Immunology. 100(2):185-193.

Kuchiiwa, S., S.B. Cheng, I. Nagatomo, Y. Akasaki, M. Uchida, M. Tominaga, W. Hashiguchi and T. Kuchiiwa. 2002. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin decreases serotonin-immunoreactive neurons in raphe nuclei of male mouse offspring. Neurosci. Lett. 317(2):73-76.

Kwon, Y.I., J.D. Yeon, S.M. Oh and K.H. Chung. 2004. Protective effects of ursodeoxycholic acid against 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced testicular damage in mice. Toxicol. Appl. Pharmacol. 194(3):239-247.

La Merrill, M., D. Baston, M. Denison, L. Birnbaum, D. Pomp and D.W. Threadgill. 2008. Mouse breast cancer model-dependent changes in metabolic syndrome-associated phenotypes caused by maternal dioxin exposure and dietary fat. Am. J. Physiol Endocrinol. Metab.

Laiosa, M.D., Z.W. Lai, T.S. Thurmond, N.C. Fiore, C. DeRossi, B.C. Holdener, T.A. Gasiewicz and A.E. Silverstone. 2002. 2,3,7,8-tetrachlorodibenzo-p-dioxin causes alterations in lymphocyte development and thymic atrophy in hemopoietic chimeras generated from mice deficient in ARNT2. Toxicol. Sci. 69(1):117-124.

Langer, P. 2008. Persistent organochlorinated pollutants (PCB, DDE, HCB, dioxins, furans) and the thyroid--review 2008. Endocr. Regul. 42(2-3):79-104.

Latchoumycandane, C., K.C. Chitra and P.P. Mathur. 2002. The effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the antioxidant system in mitochondrial and microsomal fractions of rat testis. Toxicology. 171(2-3):127-135.

Lawrence, B.P., T.K. Warren and H. Luong. 2000. Fewer T lymphocytes and decreased pulmonary influenza virus burden in mice exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). J. Toxicol. Environ. Health A. 61(1):39-53.

Lawrence, B.P. and B.A. Vorderstrasse. 2004. Activation of the aryl hydrocarbon receptor diminishes the memory response to homotypic influenza virus infection but does not impair host resistance. Toxicol. Sci. 79(2):304-314.

Lawrence, B.P., A.D. Roberts, J.J. Neumiller, J.A. Cundiff and D.L. Woodland. 2006. Aryl hydrocarbon receptor activation impairs the priming but not the recall of influenza virus-specific CD8+ T cells in the lung. J. Immunol. 177(9):5819-5828.

Lawson, C.C., T.M. Schnorr, E.A. Whelan, J.A. Deddens, D.A. Dankovic, L.A. Piacitelli, M.H. Sweeney and L.B. Connally. 2004. Paternal occupational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and birth outcomes of offspring: birth weight, preterm delivery, and birth defects. Environ. Health Perspect. 112(14):1403-1408.

Lee, C.C., Y.J. Yao, H.L. Chen, Y.L. Guo and H.J. Su. 2006a. Fatty liver and hepatic function for residents with markedly high serum PCDD/Fs levels in Taiwan. J. Toxicol. Environ. Health A. 69(5):367-380.

Lee, D.H., I.K. Lee, K. Song, M. Steffes, W. Toscano, B.A. Baker and D.R. Jacobs, Jr. 2006b. A strong dose-response relation between serum concentrations of persistent organic pollutants and diabetes: results from the National Health and Examination Survey 1999-2002. Diabetes Care. 29(7):1638-1644.

Lee, D.H., I.K. Lee, M. Porta, M. Steffes and D.R. Jacobs, Jr. 2007a. Relationship between serum concentrations of persistent organic pollutants and the prevalence of metabolic syndrome among non-diabetic adults: results from the National Health and Nutrition Examination Survey 1999-2002. Diabetologia. 50(9):1841-1851.

Lee, J.H., D. Sul, E. Oh, W.W. Jung, K.W. Hwang, T.S. Hwang, K.C. Lee and N.H. Won. 2007b. Panax ginseng effects on DNA damage, CYP1A1 expression and histopathological changes in testes of rats exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Food Chem. Toxicol. 45(11):2237-2244.

Lensu, S., R. Miettinen, R. Pohjanvirta, J. Linden and J. Tuomisto. 2006. Assessment by c-Fos immunostaining of changes in brain neural activity induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and leptin in rats. Basic Clin. Pharmacol. Toxicol. 98(4):363-371.

Lewis, B.C., S. Hudgins, A. Lewis, K. Schorr, R. Sommer, R.E. Peterson, J.A. Flaws and P.A. Furth. 2001. In utero and lactational treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin impairs mammary gland differentiation but does not block the response to exogenous estrogen in the postpubertal female rat. Toxicol. Sci. 62(1):46-53.

Li, X.M. and J. Li. 2003. [Environmental hormones and their effects on human health]. Zhonghua Yu Fang Yi. Xue. Za Zhi. 37(3):209-211.

Li, B., H.Y. Liu, L.J. Dai, J.C. Lu, Z.M. Yang and L. Huang. 2006. The early embryo loss caused by 2,3,7,8-tetrachlorodibenzo-p-dioxin may be related to the accumulation of this compound in the uterus. Reprod. Toxicol. 21(3):301-306.

Lim, C.K., M. Danton, B. Clothier and A.G. Smith. 2006. Dihydroxy-, hydroxyspirolactone-, and dihydroxyspirolactone-urochlorins induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin in the liver of mice. Chem. Res. Toxicol. 19(12):1660-1667.

Lin, T.M., K. Ko, R.W. Moore, D.L. Buchanan, P.S. Cooke and R.E. Peterson. 2001. Role of the aryl hydrocarbon receptor in the development of control and 2,3,7,8-tetrachlorodibenzo-p-dioxin-exposed male mice. J. Toxicol. Environ. Health A. 64(4):327-342.

Lin, T.M., U. Simanainen, R.W. Moore and R.E. Peterson. 2002a. Critical windows of vulnerability for effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on prostate and seminal vesicle development in C57BL/6 mice. Toxicol. Sci. 69(1):202-209.

Lin, T.M., K. Ko, R.W. Moore, U. Simanainen, T.D. Oberley and R.E. Peterson. 2002b. Effects of aryl hydrocarbon receptor null mutation and in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on prostate and seminal vesicle development in C57BL/6 mice. Toxicol. Sci. 68(2):479-487.

Linden, J., M. Korkalainen, S. Lensu, J. Tuomisto and R. Pohjanvirta. 2005. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and leptin on hypothalamic mRNA expression of factors participating in food intake regulation in a TCDD-sensitive and a TCDD-resistant rat strain. J. Biochem. Mol. Toxicol. 19(3):139-148.

Link, B., T. Gabrio, I. Zollner, I. Piechotowski and B. Kouros. 2007. Sentinel health department project in Baden-Wuerttemberg (Germany)--a useful tool for monitoring children's health and environment. Int. J. Hyg. Environ. Health. 210(3-4):351-355.

Liu, J. and N.J. Tang. 2006. [Advance of research on skin injury after exposure to 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin]. Zhonghua Lao. Dong. Wei Sheng Zhi. Ye. Bing. Za Zhi. 24(4):250-252.

Loertscher, J.A., T.M. Lin, R.E. Peterson and B.L. Allen-Hoffmann. 2002. In utero exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin causes accelerated terminal differentiation in fetal mouse skin. Toxicol. Sci. 68(2):465-472.

Longnecker, M.P. and J.L. Daniels. 2001. Environmental contaminants as etiologic factors for diabetes. Environ. Health Perspect. 109 Suppl 6:871-876.

Luebeck, E.G., A. Buchmann, S. Stinchcombe, S.H. Moolgavkar and M. Schwarz. 2000. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on initiation and promotion of GST-P-positive foci in rat liver: A quantitative analysis of experimental data using a stochastic model. Toxicol. Appl. Pharmacol. 167(1):63-73.

Luebke, R.W., C.B. Copeland, M. Daniels, A.L. Lambert and M.I. Gilmour. 2001. Suppression of allergic immune responses to house dust mite (HDM) in rats exposed to 2,3,7,8-TCDD. Toxicol. Sci. 62(1):71-79.

Luebke, R.W., C.B. Copeland, L.R. Bishop, M.J. Daniels and M.I. Gilmour. 2002. Mortality in dioxin-exposed mice infected with influenza: mitochondrial toxicity (reye's-like syndrome) versus enhanced inflammation as the mode of action. Toxicol. Sci. 69(1):109-116.

Luebke, R.W., D.H. Chen, R. Dietert, Y. Yang, M. King and M.I. Luster. 2006. The comparative immunotoxicity of five selected compounds following developmental or adult exposure. J. Toxicol. Environ. Health B Crit Rev. 9(1):1-26.

Lukinmaa, P.L., C. Sahlberg, A. Leppaniemi, A.M. Partanen, O. Kovero, R. Pohjanvirta, J. Tuomisto and S. Alaluusua. 2001. Arrest of rat molar tooth development by lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol. Appl. Pharmacol. 173(1):38-47.

Lundqvist, C., M. Zuurbier, M. Leijs, C. Johansson, S. Ceccatelli, M. Saunders, G. Schoeters, G. ten Tusscher and J.G. Koppe. 2006. The effects of PCBs and dioxins on child health. Acta Paediatr. Suppl. 95(453):55-64.

Ma, X., J.R. Idle, M.A. Malfatti, K.W. Krausz, D.W. Nebert, C.S. Chen, J.S. Felton, D.J. Waxman and F.J. Gonzalez. 2007. Mouse lung CYP1A1 catalyzes the metabolic activation of 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP). Carcinogenesis. 28(3):732-737.

Mally, A. and J.K. Chipman. 2002. Non-genotoxic carcinogens: early effects on gap junctions, cell proliferation and apoptosis in the rat. Toxicology. 180(3):233-248.

Mariussen, E. and F. Fonnum. 2006. Neurochemical targets and behavioral effects of organohalogen compounds: an update. Crit Rev. Toxicol. 36(3):253-289.

Marwick, C. 2003. Link found between Agent Orange and chronic lymphocytic leukaemia. BMJ. 326(7383):242.

Massart, F. and V. Meucci. 2007. Environmental thyroid toxicants and child endocrine health. Pediatr. Endocrinol. Rev. 5(1):500-509.

Matsuki, H. and Y. Kawano. 2004. [Dioxin]. Nippon Rinsho. 62 Suppl 12:498-501.

Matsuura, N., T. Uchiyama, H. Tada, Y. Nakamura, N. Kondo, M. Morita and M. Fukushi. 2001. Effects of dioxins and polychlorinated biphenyls (PCBs) on thyroid function in infants born in Japan--the second report from research on environmental health. Chemosphere. 45(8):1167-1171.

Maurin, J.C., F. Bleicher and H. Magloire. 2005. [Clinical consequences of dioxins exposure during tooth development]. Arch. Pediatr. 12(11):1636-1640.

Mendola, P., S.G. Selevan, S. Gutter and D. Rice. 2002. Environmental factors associated with a spectrum of neurodevelopmental deficits. Ment. Retard. Dev. Disabil. Res. Rev. 8(3):188-197.

Meulenbelt, J. and I. de Vries. 2005. [Toxicity of dioxins in humans]. Ned. Tijdschr. Geneeskd. 149(4):168-171.

Meyer, K.M. 2002. Incidence of CTCL in Vietnam veterans. Dermatol. Nurs. 14(1):42, 45, 52.

Michalek, J.E. and M. Pavuk. 2008. Diabetes and cancer in veterans of Operation Ranch Hand after adjustment for calendar period, days of spraying, and time spent in Southeast Asia. J. Occup. Environ. Med. 50(3):330-340.

Michalek, J.E., F.Z. Akhtar, J.C. Arezzo, D.H. Garabrant and J.W. Albers. 2001a. Serum dioxin and peripheral neuropathy in veterans of Operation Ranch Hand. Neurotoxicology. 22(4):479-490.

Michalek, J.E., N.S. Ketchum and M.P. Longnecker. 2001b. Serum dioxin and hepatic abnormalities in veterans of Operation Ranch Hand. Ann. Epidemiol. 11(5):304-311.

Michalek, J.E., F.Z. Akhtar, M.P. Longnecker and J.E. Burton. 2001c. Relation of serum 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) level to hematological examination results in veterans of Operation Ranch Hand. Arch. Environ. Health. 56(5):396-405.

Michalek, J.E., D.H. Barrett, R.D. Morris and W.G. Jackson, Jr. 2003. Serum dioxin and psychological functioning in U.S. Air Force veterans of the Vietnam War. Mil. Med. 168(2):153-159.

Miettinen, H.M., S. Alaluusua, J. Tuomisto and M. Viluksela. 2002. Effect of in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on rat molar development: the role of exposure time. Toxicol. Appl. Pharmacol. 184(1):57-66.

Miettinen, H.M., H. Huuskonen, A.M. Partanen, P. Miettinen, J.T. Tuomisto, R. Pohjanvirta and J. Tuomisto. 2004. Effects of epidermal growth factor receptor deficiency and 2,3,7,8-tetrachlorodibenzo-p-dioxin on fetal development in mice. Toxicol. Lett. 150(3):285-291.

Miettinen, H.M., P. Pulkkinen, T. Jamsa, J. Koistinen, U. Simanainen, J. Tuomisto, J. Tuukkanen and M. Viluksela. 2005. Effects of in utero and lactational TCDD exposure on bone development in differentially sensitive rat lines. Toxicol. Sci. 85(2):1003-1012.

Miettinen, H.M., R. Sorvari, S. Alaluusua, M. Murtomaa, J. Tuukkanen and M. Viluksela. 2006. The effect of perinatal TCDD exposure on caries susceptibility in rats. Toxicol. Sci. 91(2):568-575.

Miller, K.P., C. Borgeest, C. Greenfeld, D. Tomic and J.A. Flaws. 2004. In utero effects of chemicals on reproductive tissues in females. Toxicol. Appl. Pharmacol. 198(2):111-131.

Mitchell, K.A. and B.P. Lawrence. 2003a. T cell receptor transgenic mice provide novel insights into understanding cellular targets of TCDD: suppression of antibody production, but not the response of CD8(+) T cells, during infection with influenza virus. Toxicol. Appl. Pharmacol. 192(3):275-286.

Mitchell, K.A. and B.P. Lawrence. 2003b. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) renders influenza virus-specific CD8+ T cells hyporesponsive to antigen. Toxicol. Sci. 74(1):74-84.

Mitchell, K.A., C.A. Lockhart, G. Huang and C.J. Elferink. 2006. Sustained aryl hydrocarbon receptor activity attenuates liver regeneration. Mol. Pharmacol. 70(1):163-170.

Mitrou, P.I., G. Dimitriadis and S.A. Raptis. 2001. Toxic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds. Eur. J. Intern. Med. 12(5):406-411.

Mitsui, T., N. Sugiyama, S. Maeda, C. Tohyama and J. Arita. 2006. Perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin suppresses contextual fear conditioning-accompanied activation of cyclic AMP response element-binding protein in the hippocampal CA1 region of male rats. Neurosci. Lett. 398(3):206-210.

Mocarelli, P. 2001. Seveso: a teaching story. Chemosphere. 43(4-7):391-402.

Mocarelli, P., P.M. Gerthoux, D.G. Patterson, Jr., S. Milani, G. Limonta, M. Bertona, S. Signorini, P. Tramacere, L. Colombo, C. Crespi, P. Brambilla, C. Sarto, V. Carreri, E.J. Sampson, W.E. Turner and L.L. Needham. 2008. Dioxin exposure, from infancy through puberty, produces endocrine disruption and affects human semen quality. Environ. Health Perspect. 116(1):70-77.

Moennikes, O., S. Loeppen, A. Buchmann, P. Andersson, C. Ittrich, L. Poellinger and M. Schwarz. 2004. A constitutively active dioxin/aryl hydrocarbon receptor promotes hepatocarcinogenesis in mice. Cancer Res. 64(14):4707-4710.

Moon, D.G., K.C. Lee, Y.W. Kim, H.S. Park, H.Y. Cho and J.J. Kim. 2004. Effect of TCDD on corpus cavernosum histology and smooth muscle physiology. Int. J. Impot. Res. 16(3):224-230.

Moon, B.H., C.G. Hong, S.Y. Kim, H.J. Kim, S.K. Shin, S. Kang, K.J. Lee, Y.K. Kim, M.S. Lee and K.H. Shin. 2008. A single administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin that produces reduced food and water intake induces long-lasting expression of corticotropin-releasing factor, arginine vasopressin, and proopiomelanocortin in rat brain. Toxicol. Appl. Pharmacol.

Moran, F.M., R. Tarara, J. Chen, S. Santos, A. Cheney, J.W. Overstreet and B.L. Lasley. 2001. Effect of dioxin on ovarian function in the cynomolgus macaque (M. fascicularis). Reprod. Toxicol. 15(4):377-383.

Moriguchi, T., H. Motohashi, T. Hosoya, O. Nakajima, S. Takahashi, S. Ohsako, Y. Aoki, N. Nishimura, C. Tohyama, Y. Fujii-Kuriyama and M. Yamamoto. 2003. Distinct response to dioxin in an arylhydrocarbon receptor (AHR)-humanized mouse. Proc. Natl. Acad. Sci. U. S. A. 100(10):5652-5657.

Moshammer, H. and M. Neuberger. 2000. Sex ratio in the children of the Austrian chloracne cohort. Lancet. 356(9237):1271-1272.

Mukai, M., T.M. Lin, R.E. Peterson, P.S. Cooke and S.A. Tischkau. 2008. Behavioral rhythmicity of mice lacking AhR and attenuation of light-induced phase shift by 2,3,7,8-tetrachlorodibenzo-p-dioxin. J. Biol. Rhythms. 23(3):200-210.

Murante, F.G. and T.A. Gasiewicz. 2000. Hemopoietic progenitor cells are sensitive targets of 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57BL/6J mice. Toxicol. Sci. 54(2):374-383.

Mustafa, A., S.D. Holladay, M. Goff, S.G. Witonsky, R. Kerr, C.M. Reilly, D.P. Sponenberg and R.M. Gogal, Jr. 2008. An enhanced postnatal autoimmune profile in 24 week-old C57BL/6 mice developmentally exposed to TCDD. Toxicol. Appl. Pharmacol. 232(1):51-59.

Mutoh, J., T. Ishida, Y. Ishii and H. Yamada. 2007. [Effect on the expression of testicular steroidogenic enzymes in fetal mouse by maternal exposure to TCDD]. Fukuoka Igaku Zasshi. 98(5):203-207.

Myllymaki, S.A., T.E. Haavisto, L.J. Brokken, M. Viluksela, J. Toppari and J. Paranko. 2005. In utero and lactational exposure to TCDD; steroidogenic outcomes differ in male and female rat pups. Toxicol. Sci. 88(2):534-544.

Nagai, H., M. Kubo, R. Abe, M. Yamamoto and K. Nohara. 2006. Constitutive activation of the aryl hydrocarbon receptor in T-lineage cells induces thymus involution independently of the Fas/Fas ligand signaling pathway. Int. Immunopharmacol. 6(2):279-286.

Nagayama, J., M. Nagayama, T. Iida, H. Hirakawa, T. Matsueda, T. Yanagawa and J. Fukushige. 2001a. Effect of dioxins in mother's milk on sister chromatid exchange frequency in infant lymphocytes. Fukuoka Igaku Zasshi. 92(5):177-183.

Nagayama, J., M. Nagayama, T. Iida, H. Hirakawa, T. Matsueda, M. Ohki and H. Tsuji. 2001b. Effects of donor age and contamination level of dioxins and related chemicals on frequency of sister chromatid exchanges in human lymphocytes cultured in vitro. Chemosphere. 43(4-7):845-849.

Nagayama, J., M. Nagayama, T. Iida, H. Hirakawa, T. Matsueda and J. Fukushige. 2003. Frequency of SCEs in Japanese infants exposed to dioxins and PCBs through the breast milk. Fukuoka Igaku Zasshi. 94(5):158-165.

Nagayama, J., H. Tsuji, T. Iida, R. Nakagawa, T. Matsueda, H. Hirakawa, T. Yanagawa, J. Fukushige and T. Watanabe. 2007a. Immunologic effects of perinatal exposure to dioxins, PCBs and organochlorine pesticides in Japanese infants. Chemosphere. 67(9):S393-S398.

Nagayama, J., H. Kohno, T. Kunisue, K. Kataoka, H. Shimomura, S. Tanabe and S. Konishi. 2007b. Concentrations of organochlorine pollutants in mothers who gave birth to neonates with congenital hypothyroidism. Chemosphere. 68(5):972-976.

Nakajima, S., Y. Saijo, S. Kato, S. Sasaki, A. Uno, N. Kanagami, H. Hirakawa, T. Hori, K. Tobiishi, T. Todaka, Y. Nakamura, S. Yanagiya, Y. Sengoku, T. Iida, F. Sata and R. Kishi. 2006. Effects of prenatal exposure to polychlorinated biphenyls and dioxins on mental and motor development in Japanese children at 6 months of age. Environ. Health Perspect. 114(5):773-778.

National Toxicology Program. 2002. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD); "dioxin". Rep. Carcinog. 10:224-226.

National Toxicology Program. 2006. NTP technical report on the toxicology and carcinogenesis studies of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) (CAS No. 1746-01-6) in female Harlan Sprague-Dawley rats (Gavage Studies). Natl. Toxicol. Program. Tech. Rep. Ser.(521):4-232.

Nau, H. 2006. [Impacts and impact mechanisms of "dioxins" in humans and animals]. Dtsch. Tierarztl. Wochenschr. 113(8):292-297.

Nayyar, T., K.L. Bruner-Tran, D. Piestrzeniewicz-Ulanska and K.G. Osteen. 2007. Developmental exposure of mice to TCDD elicits a similar uterine phenotype in adult animals as observed in women with endometriosis. Reprod. Toxicol. 23(3):326-336.

Neff-LaFord, H.D., B.A. Vorderstrasse and B.P. Lawrence. 2003. Fewer CTL, not enhanced NK cells, are sufficient for viral clearance from the lungs of immunocompromised mice. Cell Immunol. 226(1):54-64.

Neff-LaFord, H., S. Teske, T.P. Bushnell and B.P. Lawrence. 2007. Aryl hydrocarbon receptor activation during influenza virus infection unveils a novel pathway of IFN-gamma production by phagocytic cells. J. Immunol. 179(1):247-255.

Negishi, T., H. Shimomura, T. Koyama, K. Kawasaki, Y. Ishii, S. Kyuwa, M. Yasuda, Y. Kuroda and Y. Yoshikawa. 2006. Gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin affects social behaviors between developing rhesus monkeys (Macaca mulatta). Toxicol. Lett. 160(3):233-244.

Neubert, R., L. Maskow, G. Triebig, H.C. Broding, U. Jacob-Muller, H. Helge and D. Neubert. 2000. Chlorinated dibenzo-p-dioxins and dibenzofurans and the human immune system: 3. Plasma immunoglobulins and cytokines of workers with quantified moderately-increased body burdens. Life Sci. 66(22):2123-2142.

Ngaon, L.T. and T. Yoshimura. 2001. Liver Cancer in Viet Nam: Risk Estimates of Viral Infections and Dioxin Exposure in the South and North Populations. Asian Pac. J. Cancer Prev. 2(3):199-202.

Ngo, A.D., R. Taylor, C.L. Roberts and T.V. Nguyen. 2006. Association between Agent Orange and birth defects: systematic review and meta-analysis. Int. J. Epidemiol. 35(5):1220-1230.

Niittynen, M., J.T. Tuomisto, S. Auriola, R. Pohjanvirta, P. Syrjala, U. Simanainen, M. Viluksela and J. Tuomisto. 2003. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced accumulation of biliverdin and hepatic peliosis in rats. Toxicol. Sci. 71(1):112-123.

Niittynen, M., U. Simanainen, P. Syrjala, R. Pohjanvirta, M. Viluksela, J. Tuomisto and J.T. Tuomisto. 2007. Differences in acute toxicity syndromes of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin in rats. Toxicology. 235(1-2):39-51.

Niittynen, M., J.T. Tuomisto and R. Pohjanvirta. 2008. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on heme oxygenase-1, biliverdin IXalpha reductase and delta-aminolevulinic acid synthetase 1 in rats with wild-type or variant AH receptor. Toxicology. 250(2-3):132-142.

Nilsson, C.B., P. Hoegberg, C. Trossvik, V. zais-Braesco, W.S. Blaner, G. Fex, E.H. Harrison, H. Nau, C.K. Schmidt, A.M. van Bennekum and H. Hakansson. 2000. 2,3,7,8-tetrachlorodibenzo-p-dioxin increases serum and kidney retinoic acid levels and kidney retinol esterification in the rat. Toxicol. Appl. Pharmacol. 169(2):121-131.

Nishijo, M., J. Kuriwaki, E. Hori, K. Tawara, H. Nakagawa and H. Nishijo. 2007. Effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on fetal brain growth and motor and behavioral development in offspring rats. Toxicol. Lett. 173(1):41-47.

Nishijo, M., K. Tawara, H. Nakagawa, R. Honda, T. Kido, H. Nishijo and S. Saito. 2008. 2,3,7,8-Tetrachlorodibenzo-p-dioxin in maternal breast milk and newborn head circumference. J. Expo. Sci. Environ. Epidemiol. 18(3):246-251.

Nishimura, N., Y. Miyabara, J.S. Suzuki, M. Sato, Y. Aoki, M. Satoh, J. Yonemoto and C. Tohyama. 2001. Induction of metallothionein in the livers of female Sprague-Dawley rats treated with 2,3,7 ,8-tetrachlorodibenzo-p-dioxin. Life Sci. 69(11):1291-1303.

Nishimura, N., Y. Miyabara, M. Sato, J. Yonemoto and C. Tohyama. 2002. Immunohistochemical localization of thyroid stimulating hormone induced by a low oral dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Sprague-Dawley rats. Toxicology. 171(2-3):73-82.

Nishimura, N., J. Yonemoto, Y. Miyabara, M. Sato and C. Tohyama. 2003. Rat thyroid hyperplasia induced by gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Endocrinology. 144(5):2075-2083.

Nishimura, N., J. Yonemoto, H. Nishimura, S. Ikushiro and C. Tohyama. 2005a. Disruption of thyroid hormone homeostasis at weaning of Holtzman rats by lactational but not in utero exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol. Sci. 85(1):607-614.

Nishimura, N., J. Yonemoto, Y. Miyabara, Y. Fujii-Kuriyama and C. Tohyama. 2005b. Altered thyroxin and retinoid metabolic response to 2,3,7,8-tetrachlorodibenzo-p-dioxin in aryl hydrocarbon receptor-null mice. Arch. Toxicol. 79(5):260-267.

Nishimura, N., J. Yonemoto, H. Nishimura and C. Tohyama. 2006. Localization of cytochrome P450 1A1 in a specific region of hydronephrotic kidney of rat neonates lactationally exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicology. 227(1-2):117-126.

Nishimura, N., F. Matsumura, C.F. Vogel, H. Nishimura, J. Yonemoto, W. Yoshioka and C. Tohyama. 2008. Critical role of cyclooxygenase-2 activation in pathogenesis of hydronephrosis caused by lactational exposure of mice to dioxin. Toxicol. Appl. Pharmacol. 231(3):374-383.

Nishiumi, S., Y. Yabushita, T. Furuyashiki, I. Fukuda and H. Ashida. 2008. Involvement of SREBPs in 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced disruption of lipid metabolism in male guinea pig. Toxicol. Appl. Pharmacol. 229(3):281-289.

Nohara, K., H. Fujimaki, S. Tsukumo, H. Ushio, Y. Miyabara, M. Kijima, C. Tohyama and J. Yonemoto. 2000a. The effects of perinatal exposure to low doses of 2,3,7,8-tetrachlorodibenzo-p-dioxin on immune organs in rats. Toxicology. 154(1-3):123-133.

Nohara, K., H. Ushio, S. Tsukumo, T. Kobayashi, M. Kijima, C. Tohyama and H. Fujimaki. 2000b. Alterations of thymocyte development, thymic emigrants and peripheral T cell population in rats exposed to 2,3,7, 8-tetrachlorodibenzo-p-dioxin. Toxicology. 145(2-3):227-235.

Nohara, K., H. Fujimaki, S. Tsukumo, K. Inouye, H. Sone and C. Tohyama. 2002a. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on T cell-derived cytokine production in ovalbumin (OVA)-immunized C57Bl/6 mice. Toxicology. 172(1):49-58.

Nohara, K., H. Izumi, S. Tamura, R. Nagata and C. Tohyama. 2002b. Effect of low-dose 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on influenza A virus-induced mortality in mice. Toxicology. 170(1-2):131-138.

Nohara, K., K. Ao, Y. Miyamoto, T. Suzuki, S. Imaizumi, Y. Tateishi, S. Omura, C. Tohyama and T. Kobayashi. 2008. Arsenite-induced thymus atrophy is mediated by cell cycle arrest: a characteristic downregulation of E2F-related genes revealed by a microarray approach. Toxicol. Sci. 101(2):226-238.

Nomura, T. 2008. Transgenerational effects from exposure to environmental toxic substances. Mutat. Res. 659(1-2):185-193.

Nottebrock, C., K. Riecke, M. Kruse, M. Shakibaei and R. Stahlmann. 2006. Effects of 2,3,7,8-tetrachloro-dibenzo-p-dioxin on the extracellular matrix of the thymus in juvenile marmosets (Callithrix jacchus). Toxicology. 226(2-3):197-207.

Novelli, M., S. Piaggi and V. De Tata. 2005. 2,3,7,8-Tetrachlorodibenzo-p-dioxin-induced impairment of glucose-stimulated insulin secretion in isolated rat pancreatic islets. Toxicol. Lett. 156(2):307-314.

Oh, E., E. Lee, H. Im, H.S. Kang, W.W. Jung, N.H. Won, E.M. Kim and D. Sul. 2005. Evaluation of immuno- and reproductive toxicities and association between immunotoxicological and genotoxicological parameters in waste incineration workers. Toxicology. 210(1):65-80.

Ohbayashi, H., M. Saito, H. Senoh, Y. Umeda, S. Aiso, K. Yamazaki, K. Nagano, S. Yamamoto and S. Fukushima. 2008. Occurrence of two different types of glutathione S-transferase placental form-positive hepatocytes after a single administration of 2,3,7,8-tetrabromodibenzo-p-dioxin in rats. Ind. Health. 46(3):281-288.

Ohsako, S., Y. Miyabara, M. Sakaue, R. Ishimura, M. Kakeyama, H. Izumi, J. Yonemoto and C. Tohyama. 2002. Developmental stage-specific effects of perinatal 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on reproductive organs of male rat offspring. Toxicol. Sci. 66(2):283-292.

Ohyama, K. 2006. [Disorders of sex differentiation caused by exogenous sex hormones and endocrine disruptors]. Nippon Rinsho. Suppl 2:533-538.

Ohyama, K., M. Ohta, T. Sano, K. Sato, Y. Nakagomi, Y. Shimura and Y. Yamano. 2007. Maternal exposure of low dose of TCDD modulates the expression of estrogen receptor subunits of male gonads in offspring. J. Vet. Med. Sci. 69(6):619-625.

Okino, S.T. and J.P. Whitlock, Jr. 2000. The aromatic hydrocarbon receptor, transcription, and endocrine aspects of dioxin action. Vitam. Horm. 59:241-264.

Operana, T.N., N. Nguyen, S. Chen, D. Beaton and R.H. Tukey. 2007. Human CYP1A1GFP expression in transgenic mice serves as a biomarker for environmental toxicant exposure. Toxicol. Sci. 95(1):98-107.

Paajarvi, G., M. Viluksela, R. Pohjanvirta, U. Stenius and J. Hogberg. 2005. TCDD activates Mdm2 and attenuates the p53 response to DNA damaging agents. Carcinogenesis. 26(1):201-208.

Pan, X., K. Inouye, T. Ito, H. Nagai, Y. Takeuchi, Y. Miyabara, C. Tohyama and K. Nohara. 2004. Evaluation of relative potencies of PCB126 and PCB169 for the immunotoxicities in ovalbumin (OVA)-immunized mice. Toxicology. 204(1):51-60.

Pande, K., S.M. Moran and C.A. Bradfield. 2005. Aspects of dioxin toxicity are mediated by interleukin 1-like cytokines. Mol. Pharmacol. 67(5):1393-1398.

Panizza, C. and P. Ricci. 2005. [Caffaro pollution, the affaire approaches the end]. Epidemiol. Prev. 29(5-6):237-238.

Panteleyev, A.A. and D.R. Bickers. 2006. Dioxin-induced chloracne--reconstructing the cellular and molecular mechanisms of a classic environmental disease. Exp. Dermatol. 15(9):705-730.

Pape, F. and R. Stahlmann. 2007. [Chloracne after exposure to dioxin]. Med. Monatsschr. Pharm. 30(6):206-212.

Park, S.J., W.K. Yoon, H.Y. Son, S.W. Cho, J.Y. Jung, K.S. Jeong, T.H. Kim, S.H. Kim and S.Y. Ryu. 2006. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on leukocyte function-associated antigen-1 mediated splenocyte adhesion. Anticancer Res. 26(6B):4575-4583.

Patterson, R.M., R. Stachlewitz and D. Germolec. 2003. Induction of apoptosis by 2,3,7,8-tetrachlorodibenzo-p-dioxin following endotoxin exposure. Toxicol. Appl. Pharmacol. 190(2):120-134.

Pavuk, M., J.E. Michalek, A. Schecter, N.S. Ketchum, F.Z. Akhtar and K.A. Fox. 2005. Did TCDD exposure or service in Southeast Asia increase the risk of cancer in air force Vietnam veterans who did not spray agent orange? J. Occup. Environ. Med. 47(4):335-342.

Pavuk, M., J.E. Michalek and N.S. Ketchum. 2006. Prostate cancer in US Air Force veterans of the Vietnam war. J. Expo. Sci. Environ. Epidemiol. 16(2):184-190.

Pearce, N. and D. McLean. 2005. Agricultural exposures and non-Hodgkin's lymphoma. Scand. J. Work Environ. Health. 31 Suppl 1:18-25.

Pelclova, D., Z. Fenclova, Z. Dlaskova, P. Urban, E. Lukas, B. Prochazka, C. Rappe, J. Preiss, A. Kocan and J. Vejlupkova. 2001. Biochemical, neuropsychological, and neurological abnormalities following 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure. Arch. Environ. Health. 56(6):493-500.

Pelclova, D., Z. Fenclova, J. Preiss, B. Prochazka, J. Spacil, Z. Dubska, B. Okrouhlik, E. Lukas and P. Urban. 2002. Lipid metabolism and neuropsychological follow-up study of workers exposed to 2,3,7,8- tetrachlordibenzo- p-dioxin. Int. Arch. Occup. Environ. Health. 75 Suppl:S60-S66.

Pelclova, D., P. Urban, J. Preiss, E. Lukas, Z. Fenclova, T. Navratil, Z. Dubska and Z. Senholdova. 2006. Adverse health effects in humans exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Rev. Environ. Health. 21(2):119-138.

Pelclova, D., M. Prazny, J. Skrha, Z. Fenclova, M. Kalousova, P. Urban, T. Navratil, Z. Senholdova and Z. Smerhovsky. 2007. 2,3,7,8-TCDD exposure, endothelial dysfunction and impaired microvascular reactivity. Hum. Exp. Toxicol. 26(9):705-713.

Penel, N., C. Nisse, S. Feddal and E. Lartigau. 2001. [Epidemiology of soft tissue sarcomas in adults]. Presse Med. 30(28):1405-1413.

Peota, C. 2006. A presumption of illness. Minn. Med. 89(2):6-8.

Perdew, G.H. 8 A.D. Ah Receptor Binding to its Cognate Response Element is Required for Dioxin-Mediated Toxicity. Toxicol. Sci. 106(2):301-303.

Perucatti, A., G.P. Di Meo, S. Albarella, F. Ciotola, D. Incarnato, A.C. Jambrenghi, V. Peretti, G. Vonghia and L. Iannuzzi. 2006. Increased frequencies of both chromosome abnormalities and SCEs in two sheep flocks exposed to high dioxin levels during pasturage. Mutagenesis. 21(1):67-75.

Pesatori, A.C., D. Consonni, S. Bachetti, C. Zocchetti, M. Bonzini, A. Baccarelli and P.A. Bertazzi. 2003. Short- and long-term morbidity and mortality in the population exposed to dioxin after the "Seveso accident". Ind. Health. 41(3):127-138.

Pesatori, A., A. Baccarelli, D. Consonni, A. Lania, P. Beck-Peccoz, P. Bertazzi and A. Spada. 2008. Aryl hydrocarbon receptor interacting protein and pituitary adenomas: a population-based study on subjects exposed to dioxin after the Seveso, Italy, accident. Eur. J. Endocrinol.

Pesonen, S.A., T.E. Haavisto, M. Viluksela, J. Toppari and J. Paranko. 2006. Effects of in utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on rat follicular steroidogenesis. Reprod. Toxicol. 22(3):521-528.

Petroff, B.K., X. Gao, K.K. Rozman and P.F. Terranova. 2000. Interaction of estradiol and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in an ovulation model: evidence for systemic potentiation and local ovarian effects. Reprod. Toxicol. 14(3):247-255.

Petroff, B.K., X. Gao, K.K. Rozman and P.F. Terranova. 2001. The effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on weight gain and hepatic ethoxyresorufin-o-deethylase (EROD) induction vary with ovarian hormonal status in the immature gonadotropin-primed rat model. Reprod. Toxicol. 15(3):269-274.

Petroff, B.K., X. Gao, K. Ohshima, F. Shi, D.S. Son, K.F. Roby, K.K. Rozman, G. Watanabe, K. Taya and P.F. Terranova. 2002. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on serum inhibin concentrations and inhibin immunostaining during follicular development in female Sprague-Dawley rats. Reprod. Toxicol. 16(2):97-105.

Pflieger-Bruss, S., H.C. Schuppe and W.B. Schill. 2004. The male reproductive system and its susceptibility to endocrine disrupting chemicals. Andrologia. 36(6):337-345.

Phillips, K.P. and N. Tanphaichitr. 2008. Human exposure to endocrine disrupters and semen quality. J. Toxicol. Environ. Health B Crit Rev. 11(3-4):188-220.

Pierard, G.E., G. Plomteux, R. Denooz and C. Charlier. 2005. [Dioxin, poisoning information or brainwashing? On Seveso's and Yushchenko's acne]. Rev. Med. Liege. 60(1):18-22.

Pitt, J.A., A.R. Buckalew, D.E. House and B.D. Abbott. 2000. Adrenocorticotropin (ACTH) and corticosterone secretion by perifused pituitary and adrenal glands from rodents exposed to 2,3,7, 8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicology. 151(1-3):25-35.

Pohjanvirta, R., M. Niittynen, J. Linden, P.C. Boutros, I.D. Moffat and A.B. Okey. 2006. Evaluation of various housekeeping genes for their applicability for normalization of mRNA expression in dioxin-treated rats. Chem. Biol. Interact. 160(2):134-149.

Popp, J.A., E. Crouch and E.E. McConnell. 2006. A Weight-of-evidence analysis of the cancer dose-response characteristics of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). Toxicol. Sci. 89(2):361-369.

Porterfield, S.P. 2000. Thyroidal dysfunction and environmental chemicals--potential impact on brain development. Environ. Health Perspect. 108 Suppl 3:433-438.

Powers, B.E., T.M. Lin, A. Vanka, R.E. Peterson, J.M. Juraska and S.L. Schantz. 2005. Tetrachlorodibenzo-p-dioxin exposure alters radial arm maze performance and hippocampal morphology in female AhR mice. Genes Brain Behav. 4(1):51-59.

Prell, R.A., E. Dearstyne, L.G. Steppan, A.T. Vella and N.I. Kerkvliet. 2000. CTL hyporesponsiveness induced by 2,3,7, 8-tetrachlorodibenzo-p-dioxin: role of cytokines and apoptosis. Toxicol. Appl. Pharmacol. 166(3):214-221.

Ramakrishna, G., C. Perella, L. Birely, B.A. Diwan, L.W. Fornwald and L.M. Anderson. 2002. Decrease in K-ras p21 and increase in Raf1 and activated Erk 1 and 2 in murine lung tumors initiated by N-nitrosodimethylamine and promoted by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol. Appl. Pharmacol. 179(1):21-34.

Read, D., C. Wright, P. Weinstein and B. Borman. 2007. Cancer incidence and mortality in a New Zealand community potentially exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin from 2,4,5-trichlorophenoxyacetic acid manufacture. Aust. N. Z. J. Public Health. 31(1):13-18.

Render, J.A., J.R. Hochstein, R.J. Aulerich and S.J. Bursian. 2000. Proliferation of periodontal squamous epithelium in mink fed 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Vet. Hum. Toxicol. 42(2):85-86.

Render, J.A., S.J. Bursian, D.S. Rosenstein and R.J. Aulerich. 2001. Squamous epithelial proliferation in the jaws of mink fed diets containing 3,3',4,4',5-pentachlorobiphenyl (PCB 126) or 2,3,7,8-tetrachlorodibenzo-P-dioxin (TCDD). Vet. Hum. Toxicol. 43(1):22-26.

Revazova, J., V. Yurchenko, L. Katosova, V. Platonova, L. Sycheva, L. Khripach, F. Ingel, T. Tsutsman and V. Zhurkov. 2001. Cytogenetic investigation of women exposed to different levels of dioxins in Chapaevsk town. Chemosphere. 43(4-7):999-1004.

Revich, B., E. Aksel, T. Ushakova, I. Ivanova, N. Zhuchenko, N. Klyuev, B. Brodsky and Y. Sotskov. 2001. Dioxin exposure and public health in Chapaevsk, Russia. Chemosphere. 43(4-7):951-966.

Richter-Reichhelm, H.B., J. Althoff, A. Schulte, S. Ewe and U. Gundert-Remy. 2002. Workshop report. Children as a special subpopulation: focus on immunotoxicity. Federal Institute for Health Protection of Consumers and Veterinary Medicine (BgVV), 15-16 November 2001, Berlin, Germany. Arch. Toxicol. 76(7):377-382.

Riecke, K., D. Grimm, M. Shakibaei, P. Kossmehl, G. Schulze-Tanzil, M. Paul and R. Stahlmann. 2002. Low doses of 2,3,7,8-tetrachlorodibenzo- p-dioxin increase transforming growth factor beta and cause myocardial fibrosis in marmosets (Callithrix jacchus). Arch. Toxicol. 76(5-6):360-366.

Rier, S. and W.G. Foster. 2003. Environmental dioxins and endometriosis. Semin. Reprod. Med. 21(2):145-154.

Rier, S.E., C.L. Coe, A.M. Lemieux, D.C. Martin, R. Morris, G.W. Lucier and G.C. Clark. 2001. Increased tumor necrosis factor-alpha production by peripheral blood leukocytes from TCDD-exposed rhesus monkeys. Toxicol. Sci. 60(2):327-337.

Roby, K.F. 2001. Alterations in follicle development, steroidogenesis, and gonadotropin receptor binding in a model of ovulatory blockade. Endocrinology. 142(6):2328-2335.

Rosselli, M., K. Reinhart, B. Imthurn, P.J. Keller and R.K. Dubey. 2000. Cellular and biochemical mechanisms by which environmental oestrogens influence reproductive function. Hum. Reprod. Update. 6(4):332-350.

Rowland, R.E., L.A. Edwards and J.V. Podd. 2007. Elevated sister chromatid exchange frequencies in New Zealand Vietnam War veterans. Cytogenet. Genome Res. 116(4):248-251.

Rowlands, J.C., R.A. Budinsky, L.L. Aylward, A.S. Faqi and E.W. Carney. 2006. Sex ratio of the offspring of Sprague-Dawley rats exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in utero and lactationally in a three-generation study. Toxicol. Appl. Pharmacol. 216(1):29-33.

Ryan, J.J. and A. Schecter. 2000. Exposure of Russian phenoxy herbicide producers to dioxins. J. Occup. Environ. Med. 42(9):861-870.

Ryo, H., H. Nakajima and T. Nomura. 2006. Germ-Line Mutations at a Mouse ESTR (Pc-3) Locus and Human Microsatellite Loci. J. Radiat. Res. (Tokyo). 47 Suppl B:B31-B37.

Sahlberg, C., R. Pohjanvirta, Y. Gao, S. Alaluusua, J. Tuomisto and P.L. Lukinmaa. 2002. Expression of the mediators of dioxin toxicity, aryl hydrocarbon receptor (AHR) and the AHR nuclear translocator (ARNT), is developmentally regulated in mouse teeth. Int. J. Dev. Biol. 46(3):295-300.

Sakurai, K. and C. Mori. 2000. [Fetal exposure to endocrine disruptors]. Nippon Rinsho. 58(12):2508-2513.

Salisbury, T.B. and J.L. Marcinkiewicz. 2002. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,4,7,8-pentachlorodibenzofuran reduces growth and disrupts reproductive parameters in female rats. Biol. Reprod. 66(6):1621-1626.

Sans, S. and A. Evans. 2001. Are cardiovascular disease trends driven by gadflies? Int. J. Epidemiol. 30(3):624-625.

Schecter, A. and J.D. Constable. 2006. Commentary: Agent Orange and birth defects in Vietnam. Int. J. Epidemiol. 35(5):1230-1232.

Schecter, A., L. Birnbaum, J.J. Ryan and J.D. Constable. 2006a. Dioxins: an overview. Environ. Res. 101(3):419-428.

Schecter, A., H.T. Quynh, O. Papke, K.C. Tung and J.D. Constable. 2006b. Agent Orange, dioxins, and other chemicals of concern in Vietnam: update 2006. J. Occup. Environ. Med. 48(4):408-413.

Schellart, N.A. and D. Reits. 2008. Influences of perinatal dioxin load to visual motion and oddball stimuli examined with an EEG and MEG analysis. Clin. Neurophysiol. 119(7):1486-1495.

Schulz, T.G., F.A. Wiebel, R. Thier, D. Neubert, D.S. Davies and R.J. Edwards. 2000. Identification of theta-class glutathione S-transferase in liver cytosol of the marmoset monkey. Arch. Toxicol. 74(3):133-138.

Scott, M.A., R.P. Tarara, A.G. Hendrickx, K. Benirschke, J.W. Overstreet and B.L. Lasley. 2001. Exposure to the dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces squamous metaplasia in the endocervix of cynomolgus macaques. J. Med. Primatol. 30(3):156-160.

Seeber, A., P. Demes, K. Golka, E. Kiesswetter, M. Schaper, T.C. van and M. Zupanic. 2000. Subjective symptoms due to solvent mixtures, dioxin, and toluene: impact of exposure versus personality factors. Neurotoxicology. 21(5):677-684.

Senft, A.P., T.P. Dalton, D.W. Nebert, M.B. Genter, A. Puga, R.J. Hutchinson, J.K. Kerzee, S. Uno and H.G. Shertzer. 2002. Mitochondrial reactive oxygen production is dependent on the aromatic hydrocarbon receptor. Free Radic. Biol. Med. 33(9):1268-1278.

Seo, B.W., B.E. Powers, J.J. Widholm and S.L. Schantz. 2000. Radial arm maze performance in rats following gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Neurotoxicol. Teratol. 22(4):511-519.

Shepherd, D.M., E.A. Dearstyne and N.I. Kerkvliet. 2000. The effects of TCDD on the activation of ovalbumin (OVA)-specific DO11.10 transgenic CD4(+) T cells in adoptively transferred mice. Toxicol. Sci. 56(2):340-350.

Shepherd, D.M., L.B. Steppan, O.R. Hedstrom and N.I. Kerkvliet. 2001. Anti-CD40 Treatment of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-exposed C57Bl/6 mice induces activation of antigen presenting cells yet fails to overcome TCDD-induced suppression of allograft immunity. Toxicol. Appl. Pharmacol. 170(1):10-22.

Sherr, D.H. 2004. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and long term immunologic memory. Toxicol. Sci. 79(2):211-213.

Shi, Z., K.E. Valdez, A.Y. Ting, A. Franczak, S.L. Gum and B.K. Petroff. 2007. Ovarian Endocrine Disruption Underlies Premature Reproductive Senescence Following Environmentally Relevant Chronic Exposure to the Aryl Hydrocarbon Receptor Agonist 2,3,7,8-Tetrachlorodibenzo-p-Dioxin. Biol. Reprod. 76(2):198-202.

Shirota, M., T. Kaneko, M. Okuyama, Y. Sakurada, K. Shirota and Y. Matsuki. 2007. Internal dose-effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in gonadotropin-primed weanling rat model. Arch. Toxicol. 81(4):261-269.

Shon, Y.H., I.K. Park, I.S. Moon, H.W. Chang, I.K. Park and K.S. Nam. 2002. Effect of chitosan oligosaccharide on 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced oxidative stress in mice. Biol. Pharm. Bull. 25(9):1161-1164.

Shridhar, S., A. Farley, R.L. Reid, W.G. Foster and D.A. Van Vugt. 2001. The effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on corticotrophin-releasing hormone, arginine vasopressin, and pro-opiomelanocortin mRNA levels in the hypothalamus of the cynomolgus monkey. Toxicol. Sci. 63(2):181-188.

Signorini, S., P.M. Gerthoux, C. Dassi, M. Cazzaniga, P. Brambilla, N. Vincoli and P. Mocarelli. 2000. Environmental exposure to dioxin: the Seveso experience. Andrologia. 32(4-5):263-270.

Sikka, S.C. and R. Wang. 2008. Endocrine disruptors and estrogenic effects on male reproductive axis. Asian J. Androl. 10(1):134-145.

Simanainen, U., J.T. Tuomisto, J. Tuomisto and M. Viluksela. 2002. Structure-activity relationships and dose responses of polychlorinated dibenzo-p-dioxins for short-term effects in 2,3,7,8-tetrachlorodibenzo-p-dioxin-resistant and -sensitive rat strains. Toxicol. Appl. Pharmacol. 181(1):38-47.

Simanainen, U., J.T. Tuomisto, J. Tuomisto and M. Viluksela. 2003. Dose-response analysis of short-term effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin in three differentially susceptible rat lines. Toxicol. Appl. Pharmacol. 187(2):128-136.

Simanainen, U., T. Haavisto, J.T. Tuomisto, J. Paranko, J. Toppari, J. Tuomisto, R.E. Peterson and M. Viluksela. 2004a. Pattern of male reproductive system effects after in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure in three differentially TCDD-sensitive rat lines. Toxicol. Sci. 80(1):101-108.

Simanainen, U., J.T. Tuomisto, R. Pohjanvirta, P. Syrjala, J. Tuomisto and M. Viluksela. 2004b. Postnatal development of resistance to short-term high-dose toxic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin in TCDD-resistant and -semiresistant rats. Toxicol. Appl. Pharmacol. 196(1):11-19.

Singh, K.P., A. Wyman, F.L. Casado, R. Garrett and T.A. Gasiewicz. 2008. Treatment of Mice with the Ah Receptor Agonist and Human Carcinogen Dioxin Results in Altered Numbers and Function of Hematopoietic Stem Cells. Carcinogenesis.

Slezak, B.P., J.T. Hamm, J. Reyna, C.H. Hurst and L.S. Birnbaum. 2002. TCDD-mediated oxidative stress in male rat pups following perinatal exposure. J. Biochem. Mol. Toxicol. 16(2):49-52.

Smialowicz, R.J. 2002. The rat as a model in developmental immunotoxicology. Hum. Exp. Toxicol. 21(9-10):513-519.

Smialowicz, R.J., D.E. Burgin, W.C. Williams, J.J. Diliberto, R.W. Setzer and L.S. Birnbaum. 2004. CYP1A2 is not required for 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced immunosuppression. Toxicology. 197(1):15-22.

Smialowicz, R.J., M.J. DeVito, W.C. Williams and L.S. Birnbaum. 2008. Relative potency based on hepatic enzyme induction predicts immunosuppressive effects of a mixture of PCDDS/PCDFS and PCBS. Toxicol. Appl. Pharmacol. 227(3):477-484.

Smith, A.G., M. Hansson, A. Rodriguez-Pichardo, A. Ferrer-Dufol, R.T. Neubert, J.R. Webb, C. Rappe and D. Neubert. 2008. Polychlorinated dibenzo-p-dioxins and the human immune system: 4 studies on two Spanish families with increased body burdens of highly chlorinated PCDDs. Environ. Int. 34(3):330-344.

Sone, H. 2000. [Endocrine disrupter and reproductive disorders in women]. Nippon Rinsho. 58(12):2521-2526.

Starek, A. 2005. [Health risk related to municipal waste incineration]. Med. Pr. 56(1):55-62.

Steenland, K., G. Calvert, N. Ketchum and J. Michalek. 2001. Dioxin and diabetes mellitus: an analysis of the combined NIOSH and Ranch Hand data. Occup. Environ. Med. 58(10):641-648.

Steenland, K., P. Bertazzi, A. Baccarelli and M. Kogevinas. 2004. Dioxin revisited: developments since the 1997 IARC classification of dioxin as a human carcinogen. Environ. Health Perspect. 112(13):1265-1268.

Stefankiewicz, J., R. Kurzawa and M. Drozdzik. 2006. [Environmental factors disturbing fertility of men]. Ginekol. Pol. 77(2):163-169.

Sterling, J.B. and C.W. Hanke. 2005. Dioxin toxicity and chloracne in the Ukraine. J. Drugs Dermatol. 4(2):148-150.

Stone, R. 2007. Epidemiology. Agent Orange's bitter harvest. Science. 315(5809):176-179.

Sugihara, K., S. Kitamura, T. Yamada, S. Ohta, K. Yamashita, M. Yasuda and Y. Fujii-Kuriyama. 2001. Aryl hydrocarbon receptor (AhR)-mediated induction of xanthine oxidase/xanthine dehydrogenase activity by 2,3,7,8-tetrachlorodibenzo-p-dioxin. Biochem. Biophys. Res. Commun. 281(5):1093-1099.

Sugita-Konishi, Y., K. Kobayashi, H. Naito, K. Miura and Y. Suzuki. 2003. Effect of lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on the susceptibility to Listeria infection. Biosci. Biotechnol. Biochem. 67(1):89-93.

Svensson, C., A.E. Silverstone, Z.W. Lai and K. Lundberg. 2002. Dioxin-induced adseverin expression in the mouse thymus is strictly regulated and dependent on the aryl hydrocarbon receptor. Biochem. Biophys. Res. Commun. 291(5):1194-1200.

Sweeney, T. 2002. Is exposure to endocrine disrupting compounds during fetal/post-natal development affecting the reproductive potential of farm animals? Domest. Anim Endocrinol. 23(1-2):203-209.

Sweeney, M.H. and P. Mocarelli. 2000. Human health effects after exposure to 2,3,7,8-TCDD. Food Addit. Contam. 17(4):303-316.

Tajimi, M., R. Uehara, M. Watanabe, I. Oki, T. Ojima and Y. Nakamura. 2005. Relationship of PCDD/F and Co-PCB concentrations in breast milk with infant birthweights in Tokyo, Japan. Chemosphere. 61(3):383-388.

Takagi, T.N., K.A. Matsui, K. Yamashita, H. Ohmori and M. Yasuda. 2000. Pathogenesis of cleft palate in mouse embryos exposed to 2,3,7, 8-tetrachlorodibenzo-p-dioxin (TCDD). Teratog. Carcinog. Mutagen. 20(2):73-86.

Takemoto, K., M. Nakajima, Y. Fujiki, M. Katoh, F.J. Gonzalez and T. Yokoi. 2004. Role of the aryl hydrocarbon receptor and Cyp1b1 in the antiestrogenic activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin. Arch. Toxicol. 78(6):309-315.

Tang, N.J., J. Liu, P.J. Coenraads, L. Dong, L.J. Zhao, S.W. Ma, X. Chen, C.M. Zhang, X.M. Ma, W.G. Wei, P. Zhang and Z.P. Bai. 2008. Expression of AhR, CYP1A1, GSTA1, c-fos and TGF-alpha in skin lesions from dioxin-exposed humans with chloracne. Toxicol. Lett. 177(3):182-187.

Tani, Y., R.R. Maronpot, J.F. Foley, J.K. Haseman, N.J. Walker and A. Nyska. 2004. Follicular epithelial cell hypertrophy induced by chronic oral administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Harlan Sprague-Dawley rats. Toxicol. Pathol. 32(1):41-49.

ten Tusscher, G.W. and J.G. Koppe. 2004. Perinatal dioxin exposure and later effects--a review. Chemosphere. 54(9):1329-1336.

ten Tusscher, G.W., J. de Weerdt, C.M. Roos, R.W. Griffioen, F.H. De Jongh, M. Westra, J.W. van der Slikke, J. Oosting, K. Olie and J.G. Koppe. 2001. Decreased lung function associated with perinatal exposure to Dutch background levels of dioxins. Acta Paediatr. 90(11):1292-1298.

ten Tusscher, G.W., H.J. Guchelaar, J. Koch, A. Ilsen, T. Vulsma, M. Westra, J.W. van der Slikke, K. Olie and J.G. Koppe. 2008. Perinatal dioxin exposure, cytochrome P-450 activity, liver functions and thyroid hormones at follow-up after 7-12 years. Chemosphere. 70(10):1865-1872.

Teske, S., A.A. Bohn, J.F. Regal, J.J. Neumiller and B.P. Lawrence. 2005. Activation of the aryl hydrocarbon receptor increases pulmonary neutrophilia and diminishes host resistance to influenza A virus. Am. J. Physiol Lung Cell Mol. Physiol. 289(1):L111-L124.

Teske, S., A.A. Bohn, J.P. Hogaboam and B.P. Lawrence. 2008. Aryl hydrocarbon receptor targets pathways extrinsic to bone marrow cells to enhance neutrophil recruitment during influenza virus infection. Toxicol. Sci. 102(1):89-99.

Theobald, H.M., B.L. Roman, T.M. Lin, S. Ohtani, S.W. Chen and R.E. Peterson. 2000. 2,3,7,8-tetrachlorodibenzo-p-dioxin inhibits luminal cell differentiation and androgen responsiveness of the ventral prostate without inhibiting prostatic 5alpha-dihydrotestosterone formation or testicular androgen production in rat offspring. Toxicol. Sci. 58(2):324-338.

Thomae, T.L., E. Glover and C.A. Bradfield. 2004. A maternal Ahr null genotype sensitizes embryos to chemical teratogenesis. J. Biol. Chem. 279(29):30189-30194.

Thomae, T.L., E.A. Stevens, A.L. Liss, N.R. Drinkwater and C.A. Bradfield. 2006. The teratogenic sensitivity to 2,3,7,8-tetrachlorodibenzo-p-dioxin is modified by a locus on mouse chromosome 3. Mol. Pharmacol. 69(3):770-775.

Thomke, F., D. Jung, R. Besser, R. Roder, J. Konietzko and H.C. Hopf. 2002. Cranial nerve function in workers exposed to polychlorinated dioxins and furans. Acta Neurol. Scand. 106(3):155-158.

Thornton, A.S., Y. Oda, G.R. Stuart, B.W. Glickman and J.G. de Boer. 2001. Mutagenicity of TCDD in Big Blue transgenic rats. Mutat. Res. 478(1-2):45-50.

Thornton, A.S., Y. Oda, G.R. Stuart, J. Holcroft and J.G. de Boer. 2004. The dioxin TCDD protects against aflatoxin-induced mutation in female rats, but not in male rats. Mutat. Res. 561(1-2):147-152.

Thurmond, T.S. and T.A. Gasiewicz. 2000. A single dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin produces a time- and dose-dependent alteration in the murine bone marrow B-lymphocyte maturation profile. Toxicol. Sci. 58(1):88-95.

Timms, B.G., R.E. Peterson and F.S. vom Saal. 2002. 2,3,7,8-tetrachlorodibenzo-p-dioxin interacts with endogenous estradiol to disrupt prostate gland morphogenesis in male rat fetuses. Toxicol. Sci. 67(2):264-274.

Tohyama, C. 2006. [Exposure to dioxins in the environment and their health risk]. Nippon Eiseigaku Zasshi. 61(1):5-10.

Tokuda, N., Y. Arudchelvan, T. Sawada, Y. Adachi, T. Fukumoto, M. Yasuda, H. Sumida, S. Shioda, T. Fukuda, A. Arima and S. Kubota. 2006. PACAP receptor (PAC1-R) expression in rat and rhesus monkey thymus. Ann. N. Y. Acad. Sci. 1070:581-585.

Tomita, S., H.B. Jiang, T. Ueno, S. Takagi, K. Tohi, S. Maekawa, A. Miyatake, A. Furukawa, F.J. Gonzalez, J. Takeda, Y. Ichikawa and Y. Takahama. 2003. T cell-specific disruption of arylhydrocarbon receptor nuclear translocator (Arnt) gene causes resistance to 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced thymic involution. J. Immunol. 171(8):4113-4120.

Trasler, J. 2000. Paternal exposures: altered sex ratios. Teratology. 62(2):77-78.

Tsuchiya, M., H. Imai, H. Nakao, Y. Kuroda and T. Katoh. 2003. [Potential links between endocrine disrupting compounds and endometriosis]. J. UOEH. 25(3):307-316.

Tsuda, H., A. Naito, C.K. Kim, K. Fukamachi, H. Nomoto and M.A. Moore. 2003. Carcinogenesis and its modification by environmental endocrine disruptors: in vivo experimental and epidemiological findings. Jpn. J. Clin. Oncol. 33(6):259-270.

Tsuneoka, Y., T.P. Dalton, M.L. Miller, C.D. Clay, H.G. Shertzer, G. Talaska, M. Medvedovic and D.W. Nebert. 2003. 4-aminobiphenyl-induced liver and urinary bladder DNA adduct formation in Cyp1a2(-/-) and Cyp1a2(+/+) mice. J. Natl. Cancer Inst. 95(16):1227-1237.

Tsutsumi, O. 2000. [Effects of endocrine disruptors on preimplantation embryo development]. Nippon Rinsho. 58(12):2464-2468.

Tsutsumi, O., M. Momoeda, Y. Takai, M. Ono and Y. Taketani. 2000. Breast-fed infants, possibly exposed to dioxins in milk, have unexpectedly lower incidence of endometriosis in adult life. Int. J. Gynaecol. Obstet. 68(2):151-153.

Tuomisto, J. 2001. [Are dioxins a health problem in Finland?]. Duodecim. 117(3):245-246.

Tuomisto, J.T., J. Pekkanen, H. Kiviranta, E. Tukiainen, T. Vartiainen and J. Tuomisto. 2004. Soft-tissue sarcoma and dioxin: A case-control study. Int. J. Cancer. 108(6):893-900.

Uenotsuchi, T., K. Nakayama, S. Asahi, O. Takamichi, T. Akimoto, M. Muto, K. Kiyomizu, I. Katayama, Y. Kanzaki, Y. Kanagawa, T. Imamura and M. Furue. 2005. [Skin symptoms in Yusho patients related to blood dioxin level]. Fukuoka Igaku Zasshi. 96(5):164-168.

Uno, S., T.P. Dalton, P.R. Sinclair, N. Gorman, B. Wang, A.G. Smith, M.L. Miller, H.G. Shertzer and D.W. Nebert. 2004. Cyp1a1(-/-) male mice: protection against high-dose TCDD-induced lethality and wasting syndrome, and resistance to intrahepatocyte lipid accumulation and uroporphyria. Toxicol. Appl. Pharmacol. 196(3):410-421.

Urban, P., D. Pelclova, E. Lukas, K. Kupka, J. Preiss, Z. Fenclova and Z. Smerhovsky. 2007. Neurological and neurophysiological examinations on workers with chronic poisoning by 2,3,7,8-TCDD: follow-up 35 years after exposure. Eur. J. Neurol. 14(2):213-218.

Valic, E., O. Jahn, O. Papke, R. Winker, C. Wolf and W.H. Rudiger. 2004. Transient increase in micronucleus frequency and DNA effects in the comet assay in two patients after intoxication with 2,3,7,8-tetrachlorodibenzo- p-dioxin. Int. Arch. Occup. Environ. Health. 77(5):301-306.

van Leeuwen, F.X., M. Feeley, D. Schrenk, J.C. Larsen, W. Farland and M. Younes. 2000. Dioxins: WHO's tolerable daily intake (TDI) revisited. Chemosphere. 40(9-11):1095-1101.

Van Maele-Fabry, G., V. Libotte, J. Willems and D. Lison. 2006. Review and meta-analysis of risk estimates for prostate cancer in pesticide manufacturing workers. Cancer Causes Control. 17(4):353-373.

Vezina, C.M., S.H. Allgeier, R.W. Moore, T.M. Lin, J.C. Bemis, H.A. Hardin, T.A. Gasiewicz and R.E. Peterson. 2008. Dioxin Causes Ventral Prostate Agenesis by Disrupting Dorsoventral Patterning in Developing Mouse Prostate. Toxicol. Sci. 106(2):488-496.

Viluksela, M., Y. Bager, J.T. Tuomisto, G. Scheu, M. Unkila, R. Pohjanvirta, S. Flodstrom, V.M. Kosma, J. Maki-Paakkanen, T. Vartiainen, C. Klimm, K.W. Schramm, L. Warngard and J. Tuomisto. 2000. Liver tumor-promoting activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in TCDD-sensitive and TCDD-resistant rat strains. Cancer Res. 60(24):6911-6920.

Viluksela, M., A. Raasmaja, M. Lebofsky, B.U. Stahl and K.K. Rozman. 2004. Tissue-specific effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on the activity of 5'-deiodinases I and II in rats. Toxicol. Lett. 147(2):133-142.

Vogel, C.F., Y. Zhao, P. Wong, N.F. Young and F. Matsumura. 2003. The use of c-src knockout mice for the identification of the main toxic signaling pathway of TCDD to induce wasting syndrome. J. Biochem. Mol. Toxicol. 17(6):305-315.

Vogel, C.F., E. Sciullo and F. Matsumura. 2004. Activation of inflammatory mediators and potential role of ah-receptor ligands in foam cell formation. Cardiovasc. Toxicol. 4(4):363-373.

Vogel, C.F., N. Nishimura, E. Sciullo, P. Wong, W. Li and F. Matsumura. 2007. Modulation of the chemokines KC and MCP-1 by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice. Arch. Biochem. Biophys. 461(2):169-175.

Vorderstrasse, B.A. and N.I. Kerkvliet. 2001. 2,3,7,8-Tetrachlorodibenzo-p-dioxin affects the number and function of murine splenic dendritic cells and their expression of accessory molecules. Toxicol. Appl. Pharmacol. 171(2):117-125.

Vorderstrasse, B.A. and B.P. Lawrence. 2006. Protection against lethal challenge with Streptococcus pneumoniae is conferred by aryl hydrocarbon receptor activation but is not associated with an enhanced inflammatory response. Infect. Immun. 74(10):5679-5686.

Vorderstrasse, B.A., L.B. Steppan, A.E. Silverstone and N.I. Kerkvliet. 2001. Aryl hydrocarbon receptor-deficient mice generate normal immune responses to model antigens and are resistant to TCDD-induced immune suppression. Toxicol. Appl. Pharmacol. 171(3):157-164.

Vorderstrasse, B.A., A.A. Bohn and B.P. Lawrence. 2003a. Examining the relationship between impaired host resistance and altered immune function in mice treated with TCDD. Toxicology. 188(1):15-28.

Vorderstrasse, B.A., E.A. Dearstyne and N.I. Kerkvliet. 2003b. Influence of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the antigen-presenting activity of dendritic cells. Toxicol. Sci. 72(1):103-112.

Vorderstrasse, B.A., J.A. Cundiff and B.P. Lawrence. 2004. Developmental Exposure to the Potent Aryl Hydrocarbon Receptor Agonist 2,3,7,8-Tetrachlorodibenzo-p-Dioxin Impairs the Cell-Mediated Immune Response to Infection with Influenza A Virus, but Enhances Elements of Innate Immunity. J. Immunotoxicol. 1(2):103-112.

Vorderstrasse, B.A., J.A. Cundiff and B.P. Lawrence. 2006. A dose-response study of the effects of prenatal and lactational exposure to TCDD on the immune response to influenza a virus. J. Toxicol. Environ. Health A. 69(6):445-463.

Vreugdenhil, H.J., C.I. Lanting, P.G. Mulder, E.R. Boersma and N. Weisglas-Kuperus. 2002. Effects of prenatal PCB and dioxin background exposure on cognitive and motor abilities in Dutch children at school age. J. Pediatr. 140(1):48-56.

Vreugdenhil, H.J., P.G. Mulder, H.H. Emmen and N. Weisglas-Kuperus. 2004. Effects of perinatal exposure to PCBs on neuropsychological functions in the Rotterdam cohort at 9 years of age. Neuropsychology. 18(1):185-193.

Vulsma, T. 2000. Impact of exposure to maternal PCBs and dioxins on the neonate's thyroid hormone status. Epidemiology. 11(3):239-241.

Wagner, E., M.M. Frank and R.J. Smialowicz. 2001. 2,3,7,8-tetrachlorodibenzo-p-dioxin and natural immunity: lack of an effect on the complement system in a guinea pig model. Toxicology. 159(1-2):107-113.

Walisser, J.A., M.K. Bunger, E. Glover, E.B. Harstad and C.A. Bradfield. 2004. Patent ductus venosus and dioxin resistance in mice harboring a hypomorphic Arnt allele. J. Biol. Chem. 279(16):16326-16331.

Walisser, J.A., M.K. Bunger, E. Glover and C.A. Bradfield. 2004. Gestational exposure of Ahr and Arnt hypomorphs to dioxin rescues vascular development. Proc. Natl. Acad. Sci. U. S. A. 101(47):16677-16682.

Walker, D.B., W.C. Williams, C.B. Copeland and R.J. Smialowicz. 2004. Persistent suppression of contact hypersensitivity, and altered T-cell parameters in F344 rats exposed perinatally to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicology. 197IM(1):57-66.

Walker, N.J., M.E. Wyde, L.J. Fischer, A. Nyska and J.R. Bucher. 2006. Comparison of chronic toxicity and carcinogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in 2-year bioassays in female Sprague-Dawley rats. Mol. Nutr. Food Res. 50(10):934-944.

Wang, S.L., P.H. Su, S.B. Jong, Y.L. Guo, W.L. Chou and O. Papke. 2005. In utero exposure to dioxins and polychlorinated biphenyls and its relations to thyroid function and growth hormone in newborns. Environ. Health Perspect. 113(11):1645-1650.

Wang, S.L., Y.C. Chang, H.R. Chao, C.M. Li, L.A. Li, L.Y. Lin and O. Papke. 2006. Body burdens of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls and their relations to estrogen metabolism in pregnant women. Environ. Health Perspect. 114(5):740-745.

Wang, J., Y.Y. Zhao, H. Liu, Y.H. Li, G.Y. Li, K.L. Sun and L. Guo. 2007. [The role of insulin-like growth factor-2 gene differentially methylated regions in TCDD-induced malformation]. Zhonghua Yi. Xue. Yi. Chuan Xue. Za Zhi. 24(2):162-166.

Warner, M., S. Samuels, P. Mocarelli, P.M. Gerthoux, L. Needham, D.G. Patterson, Jr. and B. Eskenazi. 2004. Serum dioxin concentrations and age at menarche. Environ. Health Perspect. 112(13):1289-1292.

Warren, T.K., K.A. Mitchell and B.P. Lawrence. 2000. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) suppresses the humoral and cell-mediated immune responses to influenza A virus without affecting cytolytic activity in the lung. Toxicol. Sci. 56(1):114-123.

Weinstein, D.A., R.M. Gogal, Jr., A. Mustafa, M.R. Prater and S.D. Holladay. 2008. Mid-gestation exposure of C57BL/6 mice to 2,3,7,8-tetrachlorodibenzo-p-dioxin causes postnatal morphologic changes in the spleen and liver. Toxicol. Pathol. 36(5):705-713.

Weir, E. 2005. Dioxin contamination and poisoning. CMAJ. 172(7):873.

Weisglas-Kuperus, N., H.J. Vreugdenhil and P.G. Mulder. 2004. Immunological effects of environmental exposure to polychlorinated biphenyls and dioxins in Dutch school children. Toxicol. Lett. 149IM(1-3):281-285.

Weiss, B. 2002. Sexually dimorphic nonreproductive behaviors as indicators of endocrine disruption. Environ. Health Perspect. 110 Suppl 3:387-391.

Widholm, J.J., B.W. Seo, B.J. Strupp, R.F. Seegal and S.L. Schantz. 2003. Effects of perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on spatial and visual reversal learning in rats. Neurotoxicol. Teratol. 25(4):459-471.

Wigle, D.T., T.E. Arbuckle, M.C. Turner, A. Berube, Q. Yang, S. Liu and D. Krewski. 2008. Epidemiologic evidence of relationships between reproductive and child health outcomes and environmental chemical contaminants. J. Toxicol. Environ. Health B Crit Rev. 11(5-6):373-517.

Wilhelm, M., J. Wittsiepe, F. Lemm, U. Ranft, U. Kramer, P. Furst, S.C. Roseler, M. Greshake, M. Imohl, G. Eberwein, K. Rauchfuss, M. Kraft and G. Winneke. 2008. The Duisburg birth cohort study: influence of the prenatal exposure to PCDD/Fs and dioxin-like PCBs on thyroid hormone status in newborns and neurodevelopment of infants until the age of 24 months. Mutat. Res. 659(1-2):83-92.

Wu, C.H., H.L. Chen, H.J. Su, C.C. Lee, K.T. Shen, W.L. Ho, S.Y. Ho, Y.S. Ho and Y.J. Wang. 2004a. The topical application of 2,3,7,8-tetrachlorodibenzo-p-dioxin lacks skin tumor-promoting potency but induces hepatic injury and tumor necrosis factor-alpha expression in ICR male mice. Food Chem. Toxicol. 42(8):1217-1225.

Wu, Q., S. Ohsako, R. Ishimura, J.S. Suzuki and C. Tohyama. 2004b. Exposure of mouse preimplantation embryos to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) alters the methylation status of imprinted genes H19 and Igf2. Biol. Reprod. 70(6):1790-1797.

Wyde, M.E., J. Seely, G.W. Lucier and N.J. Walker. 2000. Toxicity of chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in diethylnitrosamine-initiated ovariectomized rats implanted with subcutaneous 17 beta-estradiol pellets. Toxicol. Sci. 54(2):493-499.

Wyde, M.E., V.A. Wong, A.H. Kim, G.W. Lucier and N.J. Walker. 2001a. Induction of hepatic 8-oxo-deoxyguanosine adducts by 2,3,7,8-tetrachlorodibenzo-p-dioxin in Sprague-Dawley rats is female-specific and estrogen-dependent. Chem. Res. Toxicol. 14(7):849-855.

Wyde, M.E., S.R. Eldridge, G.W. Lucier and N.J. Walker. 2001b. Regulation of 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced tumor promotion by 17 beta-estradiol in female Sprague--Dawley rats. Toxicol. Appl. Pharmacol. 173(1):7-17.

Wyde, M.E., T. Cambre, M. Lebetkin, S.R. Eldridge and N.J. Walker. 2002. Promotion of altered hepatic foci by 2,3,7,8-tetrachlorodibenzo-p-dioxin and 17beta-estradiol in male Sprague-Dawley rats. Toxicol. Sci. 68(2):295-303.

Wyde, M.E., A.P. Braen, M. Hejtmancik, J.D. Johnson, J.D. Toft, J.C. Blake, S.D. Cooper, J. Mahler, M. Vallant, J.R. Bucher and N.J. Walker. 2004. Oral and dermal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces cutaneous papillomas and squamous cell carcinomas in female hemizygous Tg.AC transgenic mice. Toxicol. Sci. 82(1):34-45.

Yamada, T., K. Mishima, K. Fujiwara, H. Imura and T. Sugahara. 2006. Cleft lip and palate in mice treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin: a morphological in vivo study. Congenit. Anom. (Kyoto). 46(1):21-25.

Yamamoto, M. 2002. [Epidemiological studies on the etiology of biliary tract cancers]. Nippon Eiseigaku Zasshi. 57(1):73-77.

Yang, C.Y., M.L. Yu, H.R. Guo, T.J. Lai, C.C. Hsu, G. Lambert and Y.L. Guo. 2005a. The endocrine and reproductive function of the female Yucheng adolescents prenatally exposed to PCBs/PCDFs. Chemosphere. 61(3):355-360.

Yang, Y.M., D.Y. Huang, G.F. Liu, J.C. Zhong, K. Du, Y.F. Li and X.H. Song. 2005b. Inhibitory effects of vitamin A on TCDD-induced cytochrome P-450 1A1 enzyme activity and expression. Toxicol. Sci. 85(1):727-734.

Yang, M., M.S. Park and H.S. Lee. 2006. Endocrine disrupting chemicals: human exposure and health risks. J. Environ. Sci. Health C Environ. Carcinog. Ecotoxicol. Rev. 24(2):183-224.

Yasuda, I., M. Yasuda, H. Sumida, H. Tsusaki, A. Arima, T. Ihara, S. Kubota, K. Asaoka, K. Tsuga and Y. Akagawa. 2005. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) affects tooth development in rhesus monkeys. Reprod. Toxicol. 20(1):21-30.

Ye, L. and L.K. Leung. 2008. Effect of dioxin exposure on aromatase expression in ovariectomized rats. Toxicol. Appl. Pharmacol. 229(1):102-108.

Yellon, S.M., D. Singh, T.M. Garrett, O.R. Fagoaga and S.L. Nehlsen-Cannarella. 2000. Reproductive, neuroendocrine, and immune consequences of acute exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in the Siberian hamster. Biol. Reprod. 63(2):538-543.

Yonemoto, J. 2000. The effects of dioxin on reproduction and development. Ind. Health. 38(3):259-268.

Yoon, B.I., T. Inoue and T. Kaneko. 2000. Teratological effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD): induction of cleft palate in the ddY and C57BL/6 mouse. J. Vet. Sci. 1(2):113-119.

Yoon, B.I., Y. Hirabayashi, Y. Ogawa, J. Kanno, T. Inoue and T. Kaneko. 2001a. Hemopoietic cell kinetics after intraperitoneal single injection of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice. Chemosphere. 43(4-7):819-822.

Yoon, B.I., Y. Hirabayashi, T. Kaneko, Y. Kodama, J. Kanno, J. Yodoi, D.Y. Kim and T. Inoue. 2001b. Transgene expression of thioredoxin (TRX/ADF) protects against 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced hematotoxicity. Arch. Environ. Contam Toxicol. 41(2):232-236.

Yoon, C.Y., M. Park, B.H. Kim, J.Y. Park, M.S. Park, Y.K. Jeong, H. Kwon, H.K. Jung, H. Kang, Y.S. Lee and B.J. Lee. 2006. Gene expression profile by 2,3,7,8-tetrachlorodibenzo-p-dioxin in the liver of wild-type (AhR+/+) and aryl hydrocarbon receptor-deficient (AhR-/-) mice. J. Vet. Med. Sci. 68(7):663-668.

Yoshida, R. and Y. Ogawa. 2000. Oxidative stress induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin: an application of oxidative stress markers to cancer risk assessment of dioxins. Ind. Health. 38(1):5-14.

Yoshikawa, Y. 2005. [Experimental behavioral tests using monkey and rat offspring born from mothers exposed perinatally to EDCs]. Nihon Shinkei Seishin Yakurigaku Zasshi. 25(3):115-124.

Yoshimura, T., J. Nakano, M. Okita, Y. Kikuchi, T. Kitamura and T. Ishikawa. 2005. [Blood cell count and blood chemical analysis in Yusho patients]. Fukuoka Igaku Zasshi. 96(5):192-203.

Yoshizawa, K., T. Marsh, J.F. Foley, B. Cai, S. Peddada, N.J. Walker and A. Nyska. 2005. Mechanisms of exocrine pancreatic toxicity induced by oral treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Harlan Sprague-Dawley Rats. Toxicol. Sci. 85(1):594-606.

Yoshizawa, K., A. Heatherly, D.E. Malarkey, N.J. Walker and A. Nyska. 2007. A critical comparison of murine pathology and epidemiological data of TCDD, PCB126, and PeCDF. Toxicol. Pathol. 35(7):865-879.

Young, A.L. and J.L. Regens. 2005. Serum TCDD levels and health effects from elevated exposure: medical and scientific evidence. Environ. Sci. Pollut. Res. Int. 12(1):1-4.

Zafar, M.B. and M.K. Terris. 2001. Prostate cancer detection in veterans with a history of Agent Orange exposure. J. Urol. 166(1):100-103.

Zetterstrom, R. 2004. Persistent organic chlorines as a threat to mother and child health. Acta Paediatr. 93(8):1012-1014.

Zhu, B.T., M.A. Gallo, C.W. Burger, Jr., R.J. Meeker, M.X. Cai, S. Xu and A.H. Conney. 2008. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin administration and high-fat diet on the body weight and hepatic estrogen metabolism in female C3H/HeN mice. Toxicol. Appl. Pharmacol. 226(2):107-118.

Zhuchenko, N.A., N.V. Umnova, V.S. Rumak, I. Revazova, I.E. Sidorova, L.V. Khripach, D.I. Lazarenko and G.A. Sofronov. 2006. [The congenital morphogenetic variants and genetic polymorphism of the system of xenobiotic detoxication in children living in dioxin-contaminated regions of South Vietnam]. Vestn. Ross. Akad. Med. Nauk(7):3-10.

Zocchetti, C., A. Pesatori and D. Consonni. 2003. [Occupational epidemiology: from analysis of the apparent to investigation of the unknown]. Med. Lav. 94(1):92-100.