

**Description**

ToxFile® covers the toxicological, pharmacological, biochemical and physiological effects of drugs, pesticides and other chemicals. Typical areas of coverage include adverse drug reactions, chemically induced diseases, carcinogenesis, mutagenesis, teratogenesis, environmental pollution, waste disposal, radiation, and food contamination.

ToxFile is created by copying the journal citations on toxicology from MEDLINE® and loading them into this database. ToxFile can be searched in the same way as MEDLINE: subjects are easily accessed by means of the NLM's Medical Subject Headings (MeSH®). ProQuest Dialog™ offers a thesaurus so searchers can take full advantage of this indexed vocabulary and easily find the right terms to locate broad groups of subjects as well as very precise topics.

**Date Coverage**

1946-present

**Geographic Coverage**

International

**Publisher**

ToxFile is produced by ProQuest Dialog based on material received from the U.S. National Library of Medicine. Questions concerning file content should be directed to:

ProQuest Dialog  
789 E Eisenhower Parkway  
P O Box 1346  
Ann Arbor, MI 48106-1346  
United States

**Telephone:**

1-734 761 4700  
1-800 334 2564  
00 800 33 34 2564  
customer@dialog.com

**E-Mail:****Subject Coverage**

- Adverse Drug Reactions
- Air Pollution
- Animal Venom
- Antidotes
- Carcinogenesis via Chemicals
- Chemically Induced Diseases
- Drug Evaluation
- Environmental Pollution
- Food Contamination
- Mutagenesis
- Occupation
- Pesticides
- Radiation
- Teratogenesis
- Toxicology
- Waste Disposal

**Update Frequency**

Daily with annual refresh. Updates are suspended for several weeks during November and December as NLM makes the transition to a new year of Medical Subject Headings (MeSH)

**Document Types**

Journal articles

In addition to [Search Fields](#), other tools available for searching are [Limit Options](#), [Browse Fields](#), [Thesaurus](#), [Command Line Common Searches](#), ["Narrow Results By" Limiters](#) and [Look Up Citation](#). Each is listed separately below. Some data can be searched using more than one tool. See indexing notes for [ToxFile: document status, annual reload, revisions](#).



Basic Search | Advanced ▾ | Command Line

Citation/Abstract < Back to results

Add to selected items

Save to My Research Email

TI  
AU  
PUB

**Humidifier disinfectant-associated children's interstitial lung disease**

Kim, Kyung Won; Ahn, Kangmo; Yang, Hyeon Jong ; Lee, Sooyoung ; Park, June Dong ; et al. **American journal of respiratory and critical care medicine** 189.1 (Jan 1, 2014): 48-56.

AB

**Abstract (summary)** [Translate](#)

**RATIONALE**

Beginning in 2006, epidemics of a fatal lung injury of unknown cause in children were observed in Korea every spring. A recent study demonstrated that this type of children's interstitial lung disease (chILD) is associated with humidifier disinfectant use.

**OBJECTIVES**

To determine the clinical characteristics of this type of chILD and to assess whether the nationwide suspension of humidifier disinfectant sales in the autumn of 2011 affected its incidence.

**METHODS**

The clinical characteristics of suspected cases between 2006 and 2011 were determined by a nationwide retrospective study. The potential causal relationship with humidifier disinfectants was examined by a prospective surveillance study after humidifier disinfectant sales were suspended.

**MEASUREMENTS AND MAIN RESULTS**

In total, 138 children were diagnosed with this type of chILD, which was characterized by rapid progression, high mortality, predominance in the spring season, and a familial tendency. The annual incidence increased in 2011 and then dropped to zero in 2012. The children were on average 30.4 months old. The most frequent symptoms at admission were cough and dyspnea. As the disease progressed, the typical complication was spontaneous air leak. Eighty children (58%) died. Two years after humidifier disinfectant-sale suspension, no more new cases were found.

**CONCLUSIONS**

This study suggests that humidifier disinfectant inhalation causes an idiopathic type of chILD that is characterized by spontaneous air leak, rapid progression, lack of response to treatment, and high mortality. Further safety studies must be performed on common environmental compounds, particularly those that enter the human body by an unusual route.

**Indexing (details)** [Cite](#)

**MeSH**

Child, Preschool;  
Disinfectants -- adverse effects (major);  
Epidemics;  
Female;  
Household Articles (major);  
Humans;  
Lung -- pathology;  
Lung -- radiography;

MESH, SU,  
MJMESH

		Male; Prospective Studies; Republic of Korea -- epidemiology; Retrospective Studies; Seasons
JCLASS SUBST	Journal classification Substance	Abridged Index Medicus, Index Medicus Substance: Disinfectants CAS: 0
TI AU	Title Author	Humidifier disinfectant-associated children's interstitial lung disease Kim, Kyung Won <sup>1</sup> ; Ahn, Kangmo; Yang, Hyeon Jong; Lee, Sooyoung; Park, June Dong; Kim, Woo Kyung; Kim, Jin-Tack; Kim, Hyun Hee; Rha, Yeong Ho; Park, Yong Mean; Sohn, Myung Hyun; Oh, Jae-Won; Lee, Hae Ran; Lim, Dae Hyun; Choung, Ji Tae; Han, Man Yong; Lee, Eun; Kim, Hyung-Young; Seo, Ju-Hee; Kim, Byoung-Ju; Cho, Young Ah; Do, Kyung-Hyun; Kim, Sun-A; Jang, Se-Jin; Lee, Moo-Song; Kim, Hwa-Jung; Kwon, Geun-Yong; Park, Ji-Hyuk; Gwack, Jin; Youn, Seung-Ki; Kwon, Jun-Wook; Jun, Byung-Yool; Pyun, Bok Yang; Hong, Soo-Jong
AF	Correspondence author	<sup>1</sup> 1 Department of Pediatrics, Yonsei University College of Medicine, Seoul, South Korea, South Korea Kim, Kyung Won 1 Department of Pediatrics, Yonsei University College of Medicine, Seoul, South Korea.
LA SL DTYPE VO ISS PG ISSN	Language Language of abstract Document type Volume Issue Pageination ISSN Electronic ISSN Publication type	English English Journal Article, Research Support, Non-U.S. Gov't 189 1 48-56 1073-449X (ISSNLinking) 1535-4970 Journal
PT, PSTYPE CM JC PBLOC, CP NT	Related record Journal code Publisher location Notes DOI	Comment In: Am J Respir Crit Care Med. 2014 Jan 1;189(1):10-2. 24381989. 9421642 UNITED STATES Publication model: Print; Cited medium: Internet <a href="http://dx.doi.org/10.1164/rccm.201306-1088OC">http://dx.doi.org/10.1164/rccm.201306-1088OC</a>
DOI	Publication date Date created Date completed	Jan 1, 2014 2014-01-02 2014-02-25
PD, YR DCRE DCOM	Source attribution Accession number Document URL	Medline, © Publisher specific 24199596 <a href="http://search.proquest.com/professional/docview/1501933598?accountid=137296">http://search.proquest.com/professional/docview/1501933598?accountid=137296</a>
AN	First available Updates	2014-02-26 2014-02-26 2014-02-27
FAV UD	Database	ToxFile® (1900 - current)

## SEARCH FIELDS

You can use field codes on the Basic Search, Advanced Search, and Command Line Search pages to limit searches to specific fields. The table below lists the field codes for this file.

Field name	Field code	Example	Description and Notes
Abstract	AB	ab("children's interstitial lung disease")	Use adjacency and/or Boolean operators to narrow search results. Use double quotes to search a precise phrase.
Abstract present	ABANY	"fatal lung injury" AND abany(yes)	Add: <i>AND ABANY(YES)</i> to a query to limit retrieval to records with abstracts.
Accession number	AN	an(24199596)	A unique document identification number assigned by the information provider, NLM.
All fields	ALL	all("spontaneous air leak")	Searches all fields. Use adjacency and/or Boolean operators to narrow search results.
All fields	--	"spontaneous air leak"	Same as ALL field code; searches all fields.
Author <sup>1</sup> Author First Name Author Last Name	AU AUFN AULN	au(lee, sooyoung) aufn(sooyoung) auln(lee)	All authors are included in articles since 2000. Before that, an abbreviated list may be present.
Author - first author	FAU	fau("kim kyung won")	The first name listed in Author field. You can look up authors in the author browse list, but you cannot specify it as a first author in the browse list.
Author affiliation	AF	af("yonsei university college") af(seoul) af("south korea")	Includes as much data as is available in the original document, such as department, organization, address, city, state, country, author email, etc.
Author email address	AU	au(vcu.edu)	The author's email address, when available, appears both in the affiliation field and here in its own field
CAS® Registry Number <sup>1</sup>	RN	rn(AAN7QOV9EA) rn(EC 2.7.10.1) rn(9002-71-5)	This contains the unique 5 to 9 digit number in hyphenated format assigned by the Chemical Abstracts Service to specific chemical substances; for enzymes, the E.C. number derived from Enzyme Nomenclature appears here. Beginning with 2013 MeSH Vocabulary, Registry Number contains Unique Ingredient Identifiers (UNII)s from the Food and Drug Administration (FDA) Substance Registration System. A zero (0) is a valid value when an actual number cannot be located or is not yet available. This is also searchable using the Substance field code (SUBST).
Corporate author	CA	Ca("epe-a study group")	The author of the article when it is an organization or group.
Clinical trial ID	STI	sti(nct01154985) sti("clinicaltrials.gov")	Present in articles about specific clinical trials.
Date completed	DCOM	dcom(>20140901) dcom(20140901-20141231)	The date on which the NLM completed the record and added MeSH indexing. Date range searching is supported.
Date created	DCRE	dcre(20150102) dcre(>20150102)	The date on which the NLM created the record; it may not have any MeSH indexing at this stage. Date range searching is supported.
Date revised	DREV	drev(20150324) drev(>20150324)	The date on which the NLM revised the document (it could be years after created/completed dates). Date range searching is supported.
Document status	DSTAT	dstat("in data review") dstat("in process") dstat.exact(medline)	ToxFile documents have one of the following status types according to its place in the NLM's flow: <b>In data review</b> – first step in the NLM's quality control; records with this value will proceed either to 'In process' or to 'PubMed-not-Medline'

<sup>1</sup> A Lookup/Browse feature is available for this field in the Advanced Search dropdown or in Browse Fields.

Field name	Field code	Example	Description and Notes
		dstat(pubmed-not-medline)  dstat(revised)	<b>In process</b> – bibliographic data is checked but no MeSH terms are added yet <b>Medline</b> – complete documents with MeSH indexing and ‘Date Completed’; the vast majority of documents in Medline are in this status. Use ‘exact’ when searching this value to differentiate it from ‘pubmed not medline’. <b>Pubmed-not-Medline</b> – records are not in scope for Medline In addition, you can use dstat to search for <b>revised documents</b> ; these are complete documents which the NLM has revised in light of new information they have received. They may be revised weeks, months or years after they were completed. There are no ‘Publisher’ records in ToxFile. The document status field is not displayed, but it is fully searchable.
Document title			See Title
Document type	DTYPE	dtype(clinical trial)	You can select the document type from a list on the Advanced Search page
DOI	DOI	doi(10.1164/rccm.201306-1088OC)	Digital Object Identifier. Search the portion of the DOI that follows <a href="http://dx.doi.org/">http://dx.doi.org/</a> .
First available	FAV	fav(20140226)	Indicates the first time the document was loaded in ToxFile on ProQuest Dialog. It will not change regardless of how many times the record is subsequently reloaded, as long as the accession number does not change.
From database <sup>2</sup>	FDB	“common environmental compounds” AND fdb(toxfile)  “common environmental compounds” AND fdb(1008295)	Useful in multi-file searches to isolate records from a single file. FDB cannot be searched on its own; specify at least one search term then AND it with FDB.
Genetic information	GEN	gen(KJ150620)	This field is present in less than 1% of ToxFile documents.
ISSN	ISSN	issn(1073-449X) issn(1073449X) issn(1535-4970)	Both the print and the electronic ISSN can be searched with this field code. Also searchable via the Look Up Citation tool.
Issue	ISS	iss(1) iss(supp)	Issue information is also searchable via the Look Up Citation tool.
Journal classification	JCLASS	jclass(“abridged index medicus”)	The NLM groups journals into these very broad subject categories. A common one is ‘Abridged Index Medicus’ which includes ToxFile’s priority journals, i.e. those which are processed before others.
Journal code (NLM)	JC	jc(9421642)	This is a code assigned by NLM to each journal indexed in ToxFile.
Journal title	JN	jn(“American journal of respiratory and critical care medicine”)	A Look-up list is available under Publication title. See also Publication title, PUB.
Language	LA	la(english)	The language in which the document was originally published.
Summary language	SL	sl(English)	All abstracts in ToxFile are in English.
MeSH subject <sup>1</sup>	MESH	mesh(heart)	Terms from the NLM’s Medical Subject Headings vocabulary.

<sup>2</sup> Click the “Field codes” hyperlink at the top right of the Advanced Search page. Click “Search syntax and field codes”, then click on “FDB command” to get a list of database names and codes that can be searched with FDB.

Field name	Field code	Example	Description and Notes
		<p>mesh.exact(heart)</p> <p>mesh("heart diseases")</p> <p>mesh.explode("heart diseases")</p> <p>mesh("heart diseases" LNK su)</p> <p>mesh("heart diseases" -- su)</p> <p>mesh.explode("heart diseases" LNK surgery)</p> <p>mesh.explode("heart diseases" LNK (su OR dh))</p> <p>mesh.explode("antipsychotic agents" LNK qx)</p>	<p>mesh(heart) = 'heart' as a single term and as part of a longer phrase (e.g. 'heart diseases') .</p> <p>mesh.exact(heart) = 'heart' as a single term only.</p> <p>MeSH terms can be selected from the online thesaurus via the link on the Advanced and Command Line search pages.</p> <p>LNK or -- is used to combine a main heading with a subheading. Subheadings can be searched as abbreviations or full terms.</p>
MeSH qualifier	QU	<p>qu(chemically induced)</p> <p>qu(adverse effects)</p>	MeSH subheadings. List available in the thesaurus and from the Help page (top right-hand corner of Advanced Page; then 'Search syntax and field codes', then 'MeSH and EMBASE codes'). QU cannot be used with Major. QU cannot be used with quick codes.
Major MeSH subject <sup>1</sup>	MJMESH	mjmesh("disinfectants -- adverse effects")	MeSH terms which describe major aspects of the article
Major subject	MJSUB	mjsub("fatty acids")	Alternative to MJMESH for crossfile searching.
MEDLINE document status			See Document status
Named person	PER	per(stanley Fiona)	
Notes	NT	nt(internet)	Notes on the publication model.
Original title	OTI	oti("interpretation von toxikologischen daten in der klinischen umweltmedizin")	Original-language document title.
Other ID	RP	rp(NLM NIHMS550259)	"Other ID" is included in documents owned by a collaborating partner of the NLM and contains the organization responsible for the information and a unique number for that document.
Pagination	PG	pg(48-54)	The start page is searchable on the Look Up Citation page.
Place of publication	PBLOC	pbloc("united states")	The place of publication of the journal.
Publication date	PD	<p>pd(20140801)</p> <p>pd(&gt;20140731)</p> <p>pd(20140801 - 20140901)</p> <p>pd(2014-08-01)</p>	Date range searching is supported.
Publication title <sup>1</sup>	PUB	<p>pub.exact(gastroenterology)</p> <p>pub("journal of pain research")</p> <p>pub("j pain res")</p>	Journal title. Full title is displayed and searchable; abbreviated form is searchable only. Field code JN also retrieves the journal title, but only in full form, not the abbreviation
Publication year	YR	<p>yr(2014)</p> <p>yr(&gt;2012)</p>	
References	RF	rf("j lipid res" lnk 2008)	References to other ToxFile or Medline articles are present in about 9% of documents. Journal name, year, volume, issue and pages are given, as well as the accession number of the referenced article.
Related record	CM	cm("crit care. 2011;15(5)")	Comments on, errata and notes on other articles are present in about 2% of documents
Source information	SRC	src("the journal of applied psychology")	Includes Publication Title, Issue, Volume, ISSN, Publication Date, and Pagination. Also searchable via the Look Up Citation tool.



Field name	Field code	Example	Description and Notes
Subjects	SU	su("diabetes mellitus")	Use SU to search both MeSH terms (MESH) and Identifiers (IF).
Substance	SUBST	subst(disinfectants) subst(AAN7QOV9EA)	The number and name of the substance are searchable with SUBST. The number is also searchable with RN – see notes above on CAS Registry Number.
Title	TI	ti(disinfectant and "lung disease")	Includes the Title, Foreign Language Title, Alternate Title and Subtitle, when available.
Title only	TIO	tio("opioid dependence")	Searches only the Title, not Subtitle, Foreign or Alternate Title.
Title, Alternate	OTI	oti(Behandling vid opioidberoende)	Includes Alternate Title, Subtitle, and Original language of document title, if available.
Updates	UD	ud(20140226)	The date(s) the record was loaded as a result of an update provided by the supplier.
Volume	VO	vo(189)	Volume is also searchable via the Look Up Citation tool.

## LIMIT OPTIONS

Limit options are quick and easy ways of searching certain common concepts. Check boxes are available for:

**Humans, Animals, Males, Females, Reviews, Clinical Trials, Abstract included**

Short lists of choices are available for:

**Article type, Language, Age group, Document status**

**Date limiters** are available in which you can select single dates or ranges for date of **publication** and date **created** (by the NLM).

## BROWSE FIELDS

You can browse the contents of certain fields by using Look up lists. These are particularly useful to validate spellings or the presence of specific data. Terms found in the course of browsing may be selected and automatically added to the Advanced Search form. Look up lists are available in the fields drop-down and in the search options for:

**Author, CAS® Registry Number, Major MeSH, MeSH**

and in the fields drop-down only for:

**Publication title**

## THESAURUS

MeSH® Thesaurus is available by clicking on the "Thesaurus" hyperlink on the Advanced and Command Line Search pages. Thesaurus terms may be searched within the thesaurus, then selected to be added automatically to the Advanced and Command Line Search forms.

MeSH subheadings are available from the Help page (top right-hand corner of any page; then 'Resources').

## COMMAND LINE COMMON SEARCHES

Find review articles with the strategy:

DTYPE(REVIEW OR "META-ANALYSIS" OR "CONSENSUS DEVELOPMENT CONFERENCE" OR GUIDELINE)

Find clinical trials with the strategy:

DTYPE("CLINICAL TRIAL\*" OR "CONTROLLED CLINICAL TRIAL" OR "MULTICENTER STUDY" OR "RANDOMIZED CONTROLLED TRIAL" OR "OBSERVATIONAL STUDY") OR MESH.EXACT.EXPLODE("CLINICAL TRIALS AS TOPIC")

Find priority journals with the strategy:

JCLASS("ABRIDGED INDEX MEDICUS")

Find complete, indexed documents with the strategy:  
DSTAT.EXACT(MEDLINE)

and in-process documents with:  
DSTAT("IN DATA REVIEW" OR "IN PROCESS")

## ***“NARROW RESULTS BY” LIMITERS***

When results of a search are presented, the results display is accompanied by a list of “Narrow results by” options shown on the right-hand panel. Click on any of these options and you will see a ranked list showing the most frequently occurring terms in your results. Click on the term to apply it to (“narrow”) your search results. “Narrow results by” limiters in ToxFile include

**Document type, Author, CAS® Registry Number, Language, MeSH Subjects, Major MeSH, Publication title, Journal classification, Publication date**

## ***LOOK UP CITATION***

If you need to trace a particular bibliographic reference, use the Look Up Citation feature. Find a link to this toward the top left of the Advanced Search page, or in the drop list under Advanced on any search form; click this and you will go to a form where you can enter any known details of the citation including:

**Document title, Author, Publication title, ISSN, ISBN, Volume, Issue, Start page, Publication date, DOI, Document ID.**

## ***TOXFILE: DOCUMENT STATUS, ANNUAL RELOAD, REVISIONS***

### *Document Status*

The documents in ToxFile are a toxicology-related subset of the documents in MEDLINE.

Documents may be in any one of the following five states: IN-DATA-REVIEW, IN-PROCESS, MEDLINE, OLDMEDLINE and PUBMED-NOT-MEDLINE. The vast majority of them are 'MEDLINE', i.e. fully indexed with MeSH headings and verified. 'In-Data-Review' and 'In-Process' documents are put into MEDLINE/ToxFile quickly to ensure currency of the information; they have no MeSH headings and may not be fully verified.

These 'in-processing' types subsequently undergo complete quality review by the NLM, and most are indexed and moved into complete MEDLINE status. At this point they are sent to ProQuest's MEDLINE/Toxfile again when they overwrite the earlier in-process records.

A few documents remain out of MEDLINE's usual scope and are not indexed with MeSH, though they stay in the database and have full bibliographic information; these are the 'PubMed-not-MEDLINE' records.

Records created in the period 1950-1965 were formerly known as 'OldMEDLINE' records, but most of these have now been re-named simply as 'MEDLINE' records as they have current MeSH terminology. A few remain as 'OldMEDLINE'.

You can search these status indicators with the DSTAT field code or choose an option from the short 'Document status' Look Up list.

### *ToxFile's Annual Reload*

Every December the NLM provides a complete reload of ToxFile to incorporate the annual changes to the MeSH headings and any other changes they may have made. The NLM ceases to update ToxFile toward the end of November, and starts again after they have supplied the reload in December.

### *Revised Documents*

The NLM carries out a continuous program of editing and revising documents as new information about older records becomes available.

Three fields toward the end of the document display the dates on which the record was created, revised and completed. Occasionally the period between the date on which the record was created and the date on which it was revised or completed is long – sometimes many years. It can therefore happen that a document created in 1965 is revised or completed in 2012. When revised or completed, the document enters the database again (as described above, as part of the review/completion process). Such documents will appear



in the results of your searches; if you wish to exclude them from your results, you should add a publication year to your strategy, e.g. AND YR(>2013).

The revisions might consist of corrections to misspellings in author names, words in the title or abstract, incorrect pagination; changes to journal abbreviations or ISSNs; the addition of registry numbers, etc. The NLM does not indicate the nature of the revision when they supply these documents.

## DOCUMENT FORMATS

You can **view** search results online in Brief View, Detailed View, KWIC, or Preview formats.<sup>3</sup>

View <sup>4</sup>	Description	Online	Export/Download
<b>Brief view result listing</b>	Title and Publication date	✓	
<b>Detailed view result listing</b>	Same as Brief view plus a 3-line KWIC window	✓	
<b>KWIC (Keyword in context)</b>	Detailed view plus all occurrences of your search terms, highlighted within the fields where the terms occur	✓	✓
<b>Preview</b>	Title, Author, Publication title, Volume, Issue, Pagination, Publication date, Abstract, Subject	✓	

To **save** a record(s), click the checkbox next to the record(s) then click "Export/Save." Under "Output To" select one of the pre-defined output options, e.g., Data Star Tagged, RIS, etc. The output option you choose will determine the formats available under "Content".<sup>5</sup>

Document format	Description	Online	Export/Download
<b>Brief citation</b>	Bibliographic record minus Abstract, Indexing and References	✓	✓
<b>Citation</b>	Bibliographic record plus Indexing	✓	✓
<b>Citation/Abstract</b>	Complete bibliographic record	✓	✓
<b>Full text</b>	The complete record with full text	✓ <sup>6</sup>	✓
<b>Full text + graphics</b>	Complete record with full text plus graphics	✓	✓
<b>Full text PDF</b>	PDF version of the original article	✓	
<b>Link to full text</b>	A link to the original document	✓	
<b>Custom</b>	Choose the fields you want		✓ <sup>7</sup>

To **download** all search results in a set use "Download All Results" and follow the same steps as for Export/Save. The search results list is included in every download and export option along with the records you choose to save.

<sup>3</sup> To view a more complete record, click on one of the pre-defined formats listed beneath the title in your Results list, e.g., Brief Citation, Citation/Abstract, Full Text, etc.

<sup>4</sup> The data contained in each view may vary by database and by the type of account you have, e.g., subscriber or transactional.

<sup>5</sup> For example, if you choose to output in XML, you can only get the most complete record. Text Only, PDF, RTF, and HTML output options allow the most format choices including Full Text (when available).

<sup>6</sup> Full text is not available for export/download where only A&I (abstract & indexing) data is available.

<sup>7</sup> Custom export/download format is available in the following mediums only: HTML, PDF, RefWorks, RTF, Text only.

If you choose records in a mix of formats you will only have certain formats to choose from when you download or export results. If you want the full text of a record, view the record using the Full Text option then save it.

## Terms & Conditions

ToxFile is the mark used by ProQuest Dialog for a collection of toxicology-related material provided by the National Library of Medicine. The following terms and conditions also apply.

NLM represents that the data provided were formulated with a reasonable standard of care. Except for this representation, NLM makes no representation or warranties, expressed or implied. This includes, but is not limited to, any implied warranty of merchantability or fitness for a particular purpose, with respect to the NLM databases, and NLM specifically disclaims any such warranties and representations.

The duplication, resale, or redistribution of data obtained under Dialog's Agreement with the NLM must conform to fair use guidelines and U.S. and international copyright law.

Unless otherwise prohibited, organizations or institutions may download small amounts of NLM-produced citations for redistribution. For ToxFile, this is about 1,000 per month or 12,000 records for each year of coverage. Since NLM makes corrections and enhancements to and performs maintenance on these records at least annually, users should plan to replace or correct the records once a year to ensure that they are still correct and searchable as a group.

NLM databases are produced by a U.S. government agency and as such the contents are not covered by copyright domestically. They may be copyrighted outside U.S. Some NLM produced data is from copyrighted publications of the respective copyright claimants. Users of the NLM databases are solely responsible for compliance with any copyright restrictions and are referred to the publication data appearing in the bibliographic citations, as well as to the copyright notices appearing in the original publications, all of which are incorporated by reference. Users should consult legal counsel before using NLM-produced records to be certain that their plans are in compliance with appropriate laws.

All records must be identified as being derived from NLM databases.

Contact: **ProQuest Dialog Global Customer Support**

Email: [Customer@dialog.com](mailto:Customer@dialog.com)

Within North America: **1 800 334 2564**

Outside North America: **00 800 33 34 2564**