

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>C Number:</b>	C55221C
<b>Lock Date:</b>	Not Entered.
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Male
<b>PWG Approval Date</b>	10/15/1997

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303701

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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone, Maxilla

**OBSERVATIONS**

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Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 555
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303901

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303702

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036001

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
Bone, Humerus	* Bone, Maxilla	Bone, Tibia	Tooth, Incisor
<b>OBSERVATIONS</b>			
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal
<b>PRIMARY CAUSE OF DEATH</b>	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 2 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 695 <b>HISTO:</b> 9303703
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
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**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	
Tooth, Incisor	Ameloblast	Degeneration	Marked
	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303902

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Oral Mucosa	Hyperplasia	Squamous, Moderate
Tooth, Molar	Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303903

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Bone, Maxilla	Tooth, Incisor		

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<b>OBSERVATIONS</b>			
Tooth, Molar	Inflammation	Suppurative, Chronic, Mild	

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036002

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Humerus	* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 583
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303904

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 10	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303905

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Molar	

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**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 11

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** 250 PPM IRR FL

**DISP:** Terminal Sacrifice

**HISTO:** 9303906

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

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**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 12	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303801

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

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**OBSERVATIONS**

Bone Marrow	Humerus	Hyperplasia	Focal, Minimal
Bone, Intervertebral Disc		Proliferation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 13

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303704

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

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**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 14	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303705

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Molar	

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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 15	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303907

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Tooth		Malformation	Focal, Marked
Tooth, Incisor	Ameloblast	Degeneration	Marked
	Odontoblast	Degeneration	Focal, Marked
	Enamel	Malformation	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal
		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 16	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 565
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303802

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Bone, Vertebra	Tooth, Molar
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

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**ANIMAL ID:** 17

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303706

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

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**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 18	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303908

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Moderate
	Odontoblast	Degeneration	Focal, Mild
	Pulp	Ectopic Tissue	Focal, Mild
	Dentine	Malformation	Mild
	Enamel	Malformation	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 19	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036003

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Tibia
Bone, Vertebra			

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**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	
	Humerus	Leukemia Mononuclear	
	Tibia	Leukemia Mononuclear	
	Vertebra	Leukemia Mononuclear	
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 20	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303803

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**  
\* Bone, Maxilla

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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 21	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036004

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

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**OBSERVATIONS**

Bone, Intervertebral Disc		Degeneration	Focal, Mild
		Inflammation	Granulomatous, Minimal
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 22	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303804

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Bone, Vertebra	Tooth, Incisor
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**OBSERVATIONS**

Bone, Intervertebral Disc	Degeneration	Focal, Mild
Tooth, Molar	Inflammation	Suppurative, Chronic, Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 23	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303707

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 24

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 583

**DOSE:** 250 PPM IRR FL

**DISP:** Moribund Sacrifice

**HISTO:** 9303909

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 25

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303708

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 26

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303709

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 29	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036005

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Intervertebral Disc	Bone, Joint
* Bone, Maxilla	Bone, Tibia	Bone, Vertebra	

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 30

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** 250 PPM IRR FL

**DISP:** Terminal Sacrifice

**HISTO:** 9303910

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 32	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303710

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 33	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303711

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Marked
	Odontoblast	Degeneration	Focal, Marked
	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Moderate
	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 34	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036006

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone, Femur

**OBSERVATIONS**

* Bone, Maxilla		Squamous Cell Carcinoma	
Oral Mucosa		Squamous Cell Carcinoma	
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 35	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303712

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 36	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 93036007

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Molar	

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Vertebra	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303805

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 38

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 611

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303713

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Molar

---

**OBSERVATIONS**

Tooth, Incisor

Odontoblast

Degeneration

Focal, Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 39	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303806

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

<b>NORMAL</b>			
Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
Tooth, Incisor			

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<b>OBSERVATIONS</b>			
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 41	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 723
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303807

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Joint	* Bone, Maxilla
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**OBSERVATIONS**

Bone, Cranium		Fibrous Osteodystrophy	Mild
Bone, Femur		Fibrous Osteodystrophy	Mild
Bone, Humerus		Fibrous Osteodystrophy	Mild
Bone, Tibia		Fibrous Osteodystrophy	Mild
Bone, Vertebra		Fibrous Osteodystrophy	Mild
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 42	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303808

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**  
\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 44

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** IRRAD WATER

**DISP:** Moribund Sacrifice

**HISTO:** 9303809

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303911

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**INSUFFICIENT TISSUE**

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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PRIMARY CAUSE OF DEATH

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-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 46	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 705
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303810

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 47	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036008

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Molar	

---

**OBSERVATIONS**

Oral Mucosa		Hyperplasia	Squamous, Marked
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 49	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036009

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 50

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 639

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303714

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Molar

---

**OBSERVATIONS**

Tooth, Incisor

Odontoblast

Degeneration

Focal, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 51	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303715

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 52	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036010

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 53	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303912

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Radius	Bone, Tibia	Bone, Vertebra	

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 54	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 704
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303716

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Vertebra
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---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 55	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036011

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Tibia
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---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 56	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 555
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303811

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

<b>NORMAL</b>			
* Bone, Maxilla	Tooth, Molar		
<b>OBSERVATIONS</b>			
Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
<b>PRIMARY CAUSE OF DEATH</b>	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 57	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303717

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	* Bone, Maxilla
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---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 59	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 716
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303718

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Marked
	Odontoblast	Degeneration	Focal, Marked
	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Moderate
	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 60	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 639
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036012

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 61	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303812

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	* Bone, Maxilla
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**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Moderate
	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 62	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303913

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 63	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303914

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 64	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303813

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Bone, Intervertebral Disc		Degeneration	Focal, Mild
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 66	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303915

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Moderate
	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Moderate
	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 67	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303719

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Bone, Tibia
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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 68

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036013

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Tooth, Incisor

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**OBSERVATIONS**

Bone, Cranium

Squamous Cell Carcinoma

\* Bone, Maxilla

Squamous Cell Carcinoma

Oral Mucosa

Squamous Cell Carcinoma

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 69	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303916

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 70	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036014

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Tooth, Molar		

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	
	Humerus	Leukemia Mononuclear	
	Tibia	Leukemia Mononuclear	
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 71	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036015

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 72	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303917

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Tibia
Bone, Vertebra	Tooth, Molar		

---

**AUTO PRECLUDES DIAG.**

Bone Marrow

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**OBSERVATIONS**

Oral Mucosa

Note: autolysis includes: lt. stifle, maxilla, rt femur, rt humerus, rt tibia, vertebrae

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 73	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303918

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Oral Mucosa		Hyperplasia	Squamous, Mild
Tooth, Incisor	Ameloblast	Degeneration	Marked
	Odontoblast	Degeneration	Focal, Marked
	Dentine	Malformation	Minimal
	Enamel	Malformation	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 74	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303919

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 75	<b>TRT#:</b> 2 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 695 <b>HISTO:</b> 9303720
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

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**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Focal, Minimal
	Dentine	Malformation	Mild
	Enamel	Malformation	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 78	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303721

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 79	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303722

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 80	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 93036016

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia			

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 82	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303920

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Molar
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Mild
	Dentine	Malformation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 83	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303723

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 84	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 93036017

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Tooth, Incisor		

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303814

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
Bone, Vertebra			

---

**OBSERVATIONS**

Tooth, Incisor		Dysplasia	Moderate
		Dysplasia	Mild
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 87	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303921

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 88	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303724

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 90	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303815

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Pelvis	Bone, Tibia	Bone, Vertebra	Tooth, Incisor

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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 91	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303922

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Oral Mucosa		Hyperplasia	Squamous, Mild
Tooth, Incisor	Ameloblast	Degeneration	Mild
	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild
Note: cycts present			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 92	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303725

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Humerus	* Bone, Maxilla
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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Moderate
	Dentine	Malformation	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 93	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303726

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Bone, Rib	Costochon Jct	Degeneration	Moderate
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 94	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036018

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 95	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303923

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Vertebra	Tooth, Incisor
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**OBSERVATIONS**

Bone Marrow	Femur	Hyperplasia	Focal, Mild
	Humerus	Hyperplasia	Focal, Mild
	Vertebra	Hyperplasia	Focal, Mild
* Bone, Maxilla		Squamous Cell Carcinoma	
Oral Mucosa		Squamous Cell Carcinoma	
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 96	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 711
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303816

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 97	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 583
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303817

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 98

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303818

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Minimal

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 99

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** 93036019

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**AUTO PRECLUDES DIAG.**

Tooth, Incisor

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**OBSERVATIONS**

\* Bone, Maxilla

Squamous Cell Carcinoma

Oral Mucosa

Squamous Cell Carcinoma

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 100	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 702
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303819

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Tibia
Bone, Vertebra			

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**OBSERVATIONS**

Bone, Intervertebral Disc		Degeneration	Focal, Minimal
Bone, Joint		Sarcoma	Metastatic (Uncertain Primary Site)
Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 101	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303924

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	* Bone, Maxilla
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**OBSERVATIONS**

Bone Marrow	Femur	Hyperplasia	Minimal
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 102

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036020

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

Tooth, Molar

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 103	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303820

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia			

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**OBSERVATIONS**

Bone Marrow	Femur	Hyperplasia	Minimal
	Humerus	Hyperplasia	Minimal
	Tibia	Hyperplasia	Minimal
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 104

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM IRR FL

**DISP:** Natural Death

**HISTO:** 9303925

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 105	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303821

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Humerus	* Bone, Maxilla
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---

**OBSERVATIONS**

Bone, Rib	Costochon Jct	Degeneration	Mild
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 106

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 696

**DOSE:** VEHICLE CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 93036021

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Odontoblast

Degeneration

Focal, Marked

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 107	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036022

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	Bone, Tibia
Bone, Vertebra	Tooth, Incisor		

---

**OBSERVATIONS**

Bone, Intervertebral Disc		Degeneration	Focal, Moderate
* Bone, Maxilla	Nasolacrim Dct	Cyst	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 108	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303926

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 109	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 667
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036023

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Vertebra	Tooth, Incisor		

---

**OBSERVATIONS**

Bone Marrow	Humerus, Joint	Hyperplasia	Mild
	Humerus, Vertebra	Hyperplasia	Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 110	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Accidentally Killed	<b>HISTO:</b> 9303927

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 111	<b>TRT#:</b> 3 <b>DOSE:</b> IRRAD WATER	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 583 <b>HISTO:</b> 9303822
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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Bone, Intervertebral Disc		Degeneration	Focal, Mild
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 112	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303823

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 113	<b>TRT#:</b> 2 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 667 <b>HISTO:</b> 9303727
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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	Bone, Tibia
Bone, Vertebra			

---

**OBSERVATIONS**

* Bone, Maxilla		Squamous Cell Carcinoma	
Oral Mucosa		Squamous Cell Carcinoma	
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 114

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303824

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone, Maxilla

Tooth, Molar

**OBSERVATIONS**

Bone, Cranium

Inflammation

Suppurative, Chronic, Focal, Marked

Tooth, Incisor

Ameloblast

Degeneration

Marked

Odontoblast

Degeneration

Focal, Marked

Dentine

Malformation

Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 115	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 639
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Accidentally Killed	<b>HISTO:</b> 9309928

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	Bone, Tibia	Tooth, Incisor
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**OBSERVATIONS**

* Bone, Maxilla		Squamous Cell Carcinoma	
Oral Mucosa		Squamous Cell Carcinoma	
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 116	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303929

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Tibia	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 118

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** 250 PPM IRR FL

**DISP:** Natural Death

**HISTO:** 9303930

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Oral Mucosa		Inflammation	Suppurative, Chronic, Focal, Mild
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:41

**First Dose M/F:** NA / NA

**Lab:** NIEHS

**ANIMAL ID:** 119

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 695

**DOSE:** IRRAD WATER

**DISP:** Natural Death

**HISTO:** 9303825

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone, Maxilla

Tooth, Molar

**OBSERVATIONS**

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 120

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303826

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 121	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303931

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
-------------	-------------	-----------------	-------------

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Mild
	Dentine	Malformation	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 122

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036024

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 123	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303728

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 124	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303932

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 125

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM IRR FL

**DISP:** Terminal Sacrifice

**HISTO:** 9303933

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 126

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 691

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303729

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Bone, Vertebra

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 129

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303827

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

\* Bone, Maxilla

Bone, Scapula

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 130

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 565

**DOSE:** IRRAD WATER

**DISP:** Moribund Sacrifice

**HISTO:** 9303828

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Minimal

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 131	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 93033934

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Moderate
	Odontoblast	Degeneration	Focal, Moderate
	Dentine	Malformation	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:41  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 132

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036025

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Bone, Tibia	Periosteum	Hyperplasia	Moderate
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 133

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303829

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone, Maxilla

Bone, Vertebra

Tooth, Incisor

**OBSERVATIONS**

Bone, Intervertebral Disc

Degeneration

Focal, Moderate

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 134	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303830

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Molar
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---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
	Dentine	Malformation	Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 136

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 555

**DOSE:** 250 PPM IRR FL

**DISP:** Natural Death

**HISTO:** 9303935

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Odontoblast

Degeneration

Focal, Moderate

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 137

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 697

**DOSE:** VEHICLE CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 93036026

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 139	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303936

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Rib
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Bone Marrow	Femur	Histiocytic Sarcoma	Metastatic (Uncertain Primary Site)
	Humerus	Histiocytic Sarcoma	Metastatic (Uncertain Primary Site)
	Rib	Histiocytic Sarcoma	Metastatic (Uncertain Primary Site)
	Tibia	Histiocytic Sarcoma	Metastatic (Uncertain Primary Site)
	Vertebra	Histiocytic Sarcoma	Metastatic (Uncertain Primary Site)
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 140

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303831

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 141	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 583
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303832

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Tooth, Molar		

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Maxilla	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
	Pulp	Ectopic Tissue	Focal, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 142

**TRT#:** 2  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 667  
**HISTO:** 9303730

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:42

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 143

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** 93036027

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

Tooth, Molar

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:42

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 144

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 710

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** 93036028

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 146	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036029

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
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---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 147	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036030

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Tibia
Tooth, Incisor			

---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 148	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036031

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Tibia
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---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 149

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036032

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 150

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 639

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303731

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 152	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 723
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036033

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla
-------------	-------------	-----------------

---

**OBSERVATIONS**

Bone, Tibia	Endosteum	Hyperostosis	Focal, Mild
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 153

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303833

---

**OBSERVATIONS**

\* Bone, Maxilla

Oral Mucosa

Tooth, Incisor

Tooth, Molar

Odontoblast

Squamous Cell Carcinoma

Squamous Cell Carcinoma

Degeneration

Inflammation

Focal, Marked

Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 154	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303732

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Focal, Mild
	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 155

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 695

**DOSE:** VEHICLE CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 93036034

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

\* Bone, Maxilla

Tooth, Molar

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 156

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303834

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Mild

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 157

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** VEHICLE CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 93036035

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Tooth, Incisor

---

**OBSERVATIONS**

\* Bone, Maxilla

Sarcoma

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 158	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303937

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Bone, Mandible		Osteosarcoma	
Tooth, Incisor	Ameloblast	Degeneration	Focal, Moderate
	Odontoblast	Degeneration	Focal, Moderate
	Dentine	Malformation	Moderate
	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 160

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** IRRAD WATER

**DISP:** Terminal Sacrifice

**HISTO:** 9303835

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Minimal

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 161	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303938

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Adrenal Cortex	Bone, Femur	Bone, Humerus	Bone, Joint
* Bone, Maxilla	Bone, Tibia		

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 162	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303836

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Tibia	Tooth, Molar
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 163	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036036

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Molar	

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 164

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 696

**DOSE:** 250 PPM IRR FL

**DISP:** Moribund Sacrifice

**HISTO:** 9303939

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex

\* Bone, Maxilla

**OBSERVATIONS**

Tooth, Incisor

Ameloblast

Degeneration

Focal, Minimal

Pulp

Ectopic Tissue

Focal, Minimal

Enamel

Malformation

Focal, Mild

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 165	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303733

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	* Bone, Maxilla
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**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Mild
	Odontoblast	Degeneration	Focal, Marked
	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 166

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303734

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 167	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 565
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036038

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 168	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303837

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Humerus	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Joint	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
	Tibia	Leukemia Mononuclear	Metastatic (Uncertain Primary Site)
Bone, Intervertebral Disc		Degeneration	Focal, Minimal
Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 170

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** 250 PPM IRR FL

**DISP:** Terminal Sacrifice

**HISTO:** 9303940

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

Bone, Humerus

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

Bone, Vertebra

Tooth, Incisor

Tooth, Molar

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 171	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036039

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	Bone, Tibia
Tooth, Incisor			

---

**OBSERVATIONS**

Bone, Mandible		Osteosarcoma	
* Bone, Maxilla		Squamous Cell Carcinoma	
Oral Mucosa		Squamous Cell Carcinoma	
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 172	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303735

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Vertebra
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---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 173	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 527
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303839

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Vertebra	Tooth, Molar
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
	Dentine	Malformation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 174	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303840

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Vertebra	Tooth, Molar
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 175	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 611
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 93036040

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

<b>NORMAL</b>			
Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia			
<b>OBSERVATIONS</b>			
Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal
<b>PRIMARY CAUSE OF DEATH</b>	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 176

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 555

**DOSE:** 250 PPM IRR FL

**DISP:** Natural Death

**HISTO:** 9303941

---

**OBSERVATIONS**

\* Bone, Maxilla

Oral Mucosa

Tooth, Incisor

Tooth, Molar

Pulp

Squamous Cell Carcinoma

Squamous Cell Carcinoma

Ectopic Tissue

Inflammation

Focal, Minimal

Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:42

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 178

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 716

**DOSE:** 250 PPM IRR FL

**DISP:** Natural Death

**HISTO:** 9303942

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

Tooth, Incisor

Tooth, Molar

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 179	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 667
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036041

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
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**OBSERVATIONS**

Oral Mucosa		Inflammation	Suppurative, Chronic, Focal, Marked
		Ulcer	Marked
Tooth, Incisor		Dysplasia	Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 180

**TRT#:** 2  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 712  
**HISTO:** 9303736

---

**OBSERVATIONS**

\* Bone, Maxilla

Oral Mucosa

Tooth, Incisor

Tooth, Molar

Odontoblast

Squamous Cell Carcinoma

Squamous Cell Carcinoma

Degeneration

Inflammation

Focal, Moderate

Suppurative, Chronic, Marked

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 181	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303943

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
Tooth, Incisor			

---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 182

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036042

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone, Femur

Bone, Humerus

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

Bone, Vertebra

Tooth, Incisor

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 183	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 702
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303841

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Joint	Bone, Tarsal
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**OBSERVATIONS**

Bone Marrow	Femur	Leukemia Mononuclear	
	Humerus	Leukemia Mononuclear	
	Tibia	Leukemia Mononuclear	
	Vertebra	Leukemia Mononuclear	
Bone, Femur	Endosteum	Hyperostosis	Mild
Bone, Humerus	Endosteum	Hyperostosis	Mild
Bone, Tibia	Endosteum	Hyperostosis	Mild
Bone, Vertebra	Endosteum	Hyperostosis	Mild
Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 184

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 716

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 9303737

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone, Vertebra

**OBSERVATIONS**

\* Bone, Maxilla

Inflammation

Suppurative, Chronic, Focal, Marked

Squamous Cell Carcinoma

Oral Mucosa

Squamous Cell Carcinoma

Tooth, Incisor

Pulp

Ectopic Tissue

Focal, Minimal

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 186

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036043

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 187	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 583
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303944

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Bone, Vertebra
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---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Focal, Minimal
	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 188	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303738

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Molar
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---

**OBSERVATIONS**

Tissue NOS		Osteosarcoma	
Tooth, Incisor	Enamel	Malformation	Focal, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 189

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 611

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** 93036044

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 190

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 639

**DOSE:** VEHICLE CONTROL

**DISP:** Natural Death

**HISTO:** 93036045

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

Tooth, Molar

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 191	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036046

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
-------------	-------------	-----------------	-------------

---

**OBSERVATIONS**

Bone, Humerus		Cyst	Mild
Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 192	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303945

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Bone, Maxilla	Tooth, Incisor
-----------------	----------------

---

**OBSERVATIONS**

Oral Mucosa	Hyperplasia	Squamous, Mild
Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 194	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303739

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	* Bone, Maxilla
-------------	-----------------

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Moderate
	Odontoblast	Degeneration	Focal, Marked
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 195

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 583

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 9303740

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 196	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Accidentally Killed	<b>HISTO:</b> 9303946

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Ameloblast	Degeneration	Mild
	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
	Enamel	Malformation	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:23:42

**First Dose M/F:** NA / NA

**Lab:** NIEHS

---

**ANIMAL ID:** 197

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 9303741

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Humerus

Tooth, Incisor

---

**OBSERVATIONS**

\* Bone, Maxilla

Squamous Cell Carcinoma

Oral Mucosa

Squamous Cell Carcinoma

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 198	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 93036047

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 199

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** IRRAD WATER

**DISP:** Moribund Sacrifice

**HISTO:** 9303842

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Bone, Tibia

Bone, Humerus  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 200

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 738

**DOSE:** 250 PPM IRR FL

**DISP:** Terminal Sacrifice

**HISTO:** 9303947

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

Bone, Humerus

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

Bone, Vertebra

Tooth, Incisor

---

**OBSERVATIONS**

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 202

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 737

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 93036048

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur  
Bone, Tibia

Bone, Humerus  
Bone, Vertebra

Bone, Joint

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor  
Tooth, Molar

Pulp

Ectopic Tissue  
Inflammation

Focal, Minimal  
Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 203

**TRT#:** 2  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736  
**HISTO:** 9303742

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 204	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 709
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9303948

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Joint	* Bone, Maxilla	Bone, Tibia
-------------	-------------	-----------------	-------------

---

**OBSERVATIONS**

Tooth, Incisor	Enamel	Malformation	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 205

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 611

**DOSE:** IRRAD WATER

**DISP:** Moribund Sacrifice

**HISTO:** 9303843

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur

Bone, Humerus

Bone, Joint

\* Bone, Maxilla

Bone, Tibia

Bone, Vertebra

Tooth, Incisor

Tooth, Molar

---

**OBSERVATIONS**

Oral Mucosa

Inflammation

Suppurative, Chronic, Focal, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 206	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 93036049

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Vertebra	Tooth, Incisor
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**OBSERVATIONS**

Bone, Intervertebral Disc	Degeneration	Focal, Mild
	Proliferation	Focal, Mild
* Bone, Maxilla	Squamous Cell Carcinoma	
Oral Mucosa	Squamous Cell Carcinoma	
Tooth, Molar	Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 207	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 583
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303743

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Enamel	Malformation	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

**ANIMAL ID:** 208

**TRT#:** 2  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736  
**HISTO:** 9303744

---

**OBSERVATIONS**

\* Bone, Maxilla

Oral Mucosa

Tooth, Incisor

Odontoblast

Pulp

Dentine

Squamous Cell Carcinoma

Squamous Cell Carcinoma

Degeneration

Ectopic Tissue

Malformation

Inflammation

Focal, Mild

Focal, Minimal

Minimal

Suppurative, Chronic, Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 209

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 639

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 9303745

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Bone, Femur  
Bone, Tibia

Bone, Humerus  
Tooth, Incisor

Bone, Joint

\* Bone, Maxilla

**OBSERVATIONS**

Bone Marrow

Femur  
Humerus

Sarcoma

Metastatic (Uncertain Primary Site)

Sarcoma

Metastatic (Uncertain Primary Site)

Bone, Rib

Sarcoma

Metastatic (Uncertain Primary Site)

Bone, Vertebra

Sarcoma

Metastatic (Uncertain Primary Site)

Tooth, Molar

Inflammation

Suppurative, Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 210	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303844

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra	Tooth, Incisor	

---

**OBSERVATIONS**

Tooth, Molar	Inflammation	Suppurative, Chronic, Mild
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---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 211	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303949

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Bone, Maxilla

---

**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 212	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 723
	<b>DOSE:</b> 250 PPM IRR FL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303950

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone Marrow	Bone, Joint	* Bone, Maxilla
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**OBSERVATIONS**

Bone, Femur		Fibrosis	Focal, Minimal
	Endosteum	Hyperostosis	Minimal
Bone, Humerus		Fibrosis	Focal, Mild
	Endosteum	Hyperostosis	Mild
Bone, Tibia		Fibrosis	Focal, Mild
	Endosteum	Hyperostosis	Mild
Bone, Vertebra		Fibrosis	Focal, Mild
	Endosteum	Hyperostosis	Mild
Tooth, Incisor	Odontoblast	Degeneration	Focal, Marked
	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 214	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303845

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Oral Mucosa	Squamous Cell Carcinoma	
	Ulcer	Mild
Tooth, Molar	Inflammation	Suppurative, Chronic, Moderate

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 215	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 639
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Accidentally Killed	<b>HISTO:</b> 9303846

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Vertebra	Tooth, Incisor		

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**OBSERVATIONS**

Bone, Tibia	Endosteum	Hyperostosis	Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05131-03  
Test Type: CHRONIC  
Route: DOSED WATER  
Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: SODIUM FLUORIDE

Date Report Requested: 10/19/2014  
Time Report Requested: 03:23:42  
First Dose M/F: NA / NA  
Lab: NIEHS

ANIMAL ID: 216

TRT#: 1

SEX: Male

DAY ON TEST: 639

DOSE: VEHICLE CONTROL

DISP: Moribund Sacrifice

HISTO: 93036050

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone, Maxilla                      Tooth, Incisor

**OBSERVATIONS**

Bone Marrow	Joint	Lymphoma Malignant	Metastatic (Uncertain Primary Site)
	Maxilla	Lymphoma Malignant	Metastatic (Uncertain Primary Site)
	Vertebra	Lymphoma Malignant	Metastatic (Uncertain Primary Site)
Bone, Femur		Atrophy	Mild
		Lymphoma Malignant	
Bone, Joint		Lymphoma Malignant	
Bone, Pelvis		Lymphoma Malignant	
		Osteosarcoma	
Bone, Tibia		Atrophy	Mild
		Lymphoma Malignant	
Bone, Vertebra		Atrophy	Mild
		Lymphoma Malignant	
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 218	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303847

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Bone, Tibia
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**OBSERVATIONS**

Tooth, Incisor	Pulp	Ectopic Tissue	Focal, Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 221	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303748

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Bone, Maxilla

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**OBSERVATIONS**

Tooth, Incisor	Dentine	Malformation	Minimal
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 222	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303749

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	Bone, Joint	* Bone, Maxilla
Bone, Tibia	Bone, Vertebra		

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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Moderate
Tooth, Molar		Inflammation	Suppurative, Chronic, Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 223	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303848

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone, Maxilla	Tooth, Incisor
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**OBSERVATIONS**

Bone, Scapula	Degeneration	Focal, Mild
Tooth, Molar	Inflammation	Suppurative, Chronic, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 224	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9303849

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
Bone, Joint	* Bone, Maxilla	Tooth, Incisor	
<b>OBSERVATIONS</b>			
Tooth, Molar		Inflammation	Suppurative, Chronic, Minimal
<b>PRIMARY CAUSE OF DEATH</b>	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:42  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 225	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 667
	<b>DOSE:</b> IRRAD WATER	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9303850

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Bone, Femur	Bone, Humerus	* Bone, Maxilla	Bone, Tibia
Bone, Vertebra			

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**OBSERVATIONS**

Tooth, Incisor	Odontoblast	Degeneration	Focal, Mild
Tooth, Molar		Inflammation	Suppurative, Chronic, Mild

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PRIMARY CAUSE OF DEATH

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**\*\* END OF REPORT \*\***