

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

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]  
Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:23:17  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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

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F 344/N Rat MALE	VEHICLE CONTROL	250 PPM	IRRAD WATER	250 PPM IRR FL
<b>Disposition Summary</b>				
Animals Initially In Study	50	50	49	50
<b>Early Deaths</b>				
Accidentally Killed			1	3
Moribund Sacrifice	17	14	11	7
Natural Death	7	8	8	6
<b>Survivors</b>				
Natural Death	2			2
Terminal Sacrifice	24	28	29	32
Animals Examined Microscopically	49	49	49	50
<b>ALIMENTARY SYSTEM</b>				
Oral Mucosa	(7)	(5)	(4)	(8)
Hyperplasia, Squamous	1 [4.0]			4 [2.3]
Inflammation, Suppurative, Chronic, Focal	1 [4.0]		2 [2.5]	1 [2.0]
Ulcer	1 [4.0]		1 [2.0]	
Tooth	(0)	(0)	(0)	(1)
Malformation, Focal				1 [4.0]
Tooth, Incisor	(47)	(49)	(48)	(47)
Ameloblast, Degeneration		6 [3.5]	2 [3.0]	8 [2.8]
Ameloblast, Degeneration, Focal		2 [1.5]		3 [1.7]
Dentine, Malformation		9 [2.0]	2 [1.0]	7 [2.0]
Dysplasia	1 [3.0]		2 [2.5]	
Enamel, Malformation, Focal		6 [1.8]		9 [2.6]
Odontoblast, Degeneration, Focal	10 [2.8]	21 [3.1]	15 [3.2]	15 [3.1]
Pulp, Ectopic Tissue, Focal	11 [1.1]	16 [1.1]	20 [1.1]	14 [1.2]
Tooth, Molar	(49)	(49)	(49)	(50)
Inflammation, Suppurative, Chronic	41 [1.7]	44 [1.8]	39 [1.7]	46 [1.5]
<b>CARDIOVASCULAR SYSTEM</b>				

a - Number of animals examined microscopically at site and number of animals with lesion  
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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None				
ENDOCRINE SYSTEM				
Adrenal Cortex	(0)	(0)	(0)	(2)
GENERAL BODY SYSTEM				
Tissue NOS	(0)	(1)	(0)	(0)
GENITAL SYSTEM				
None				
HEMATOPOIETIC SYSTEM				
Bone Marrow	(9)	(2)	(5)	(4)
Femur, Hyperplasia			1 [1.0]	1 [1.0]
Femur, Hyperplasia, Focal				1 [2.0]
Humerus, Hyperplasia			1 [1.0]	
Humerus, Hyperplasia, Focal			1 [1.0]	1 [2.0]
Humerus, Joint, Hyperplasia	1 [2.0]			
Humerus, Vertebra, Hyperplasia	1 [1.0]			
Tibia, Hyperplasia			1 [1.0]	
Vertebra, Hyperplasia, Focal				1 [2.0]
INTEGUMENTARY SYSTEM				
None				
MUSCULOSKELETAL SYSTEM				
Bone, Cranium	(1)	(1)	(1)	(0)
Fibrous Osteodystrophy			1 [2.0]	
Inflammation, Suppurative, Chronic, Focal		1 [4.0]		
Bone, Femur	(28)	(19)	(19)	(21)
Atrophy	1 [2.0]			
Endosteum, Hyperostosis			1 [2.0]	1 [1.0]
Fibrosis, Focal				1 [1.0]

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Fibrosis, Focal				1 [1.0]
Fibrous Osteodystrophy			1 [2.0]	
Bone, Humerus	(21)	(13)	(16)	(14)
Cyst	1 [2.0]			
Endosteum, Hyperostosis			1 [2.0]	1 [2.0]
Fibrosis, Focal				1 [2.0]
Fibrous Osteodystrophy			1 [2.0]	
Bone, Intervertebral Disc	(4)	(0)	(7)	(0)
Degeneration, Focal	3 [2.3]		6 [1.8]	
Inflammation, Granulomatous	1 [1.0]			
Proliferation, Focal	1 [2.0]		1 [2.0]	
Bone, Joint	(23)	(16)	(17)	(17)
Bone, Mandible	(1)	(0)	(0)	(1)
Bone, Maxilla	(49)	(49)	(48)	(50)
Inflammation, Suppurative, Chronic, Focal		1 [4.0]		
Nasolacrim Dct, Cyst	1 [2.0]			
Bone, Pelvis	(1)	(0)	(1)	(0)
Bone, Radius	(0)	(0)	(0)	(1)
Bone, Rib	(0)	(2)	(1)	(1)
Costochon Jct, Degeneration		1 [3.0]	1 [2.0]	
Bone, Scapula	(0)	(0)	(2)	(0)
Degeneration, Focal			1 [2.0]	
Bone, Tarsal	(0)	(0)	(1)	(0)
Bone, Tibia	(28)	(17)	(19)	(20)
Atrophy	1 [2.0]			
Endosteum, Hyperostosis			2 [1.5]	1 [2.0]
Endosteum, Hyperostosis, Focal	1 [2.0]			
Fibrosis, Focal				1 [2.0]
Fibrous Osteodystrophy			1 [2.0]	

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Periosteum, Hyperplasia	1 [3.0]			
Bone, Vertebra	(14)	(15)	(18)	(14)
Atrophy	1 [2.0]			
Endosteum, Hyperostosis			1 [2.0]	1 [2.0]
Fibrosis, Focal				1 [2.0]
Fibrous Osteodystrophy			1 [2.0]	

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NERVOUS SYSTEM

None

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RESPIRATORY SYSTEM

None

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SPECIAL SENSES SYSTEM

None

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URINARY SYSTEM

None

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**\*\* END OF REPORT \*\***

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