

# Xerostomia and Oral Health for Caregivers

*also commonly called dry mouth or hyposalivation*



# Mission Statement

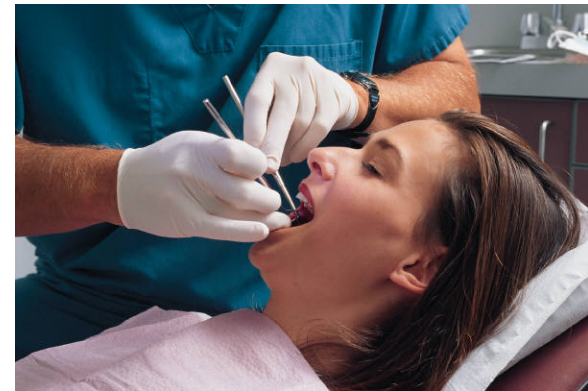
Together with the Halton  
Community, the Health  
Department works to achieve  
the best possible health for all

# What is Xerostomia or Dry Mouth ?

- Dry Mouth is when not enough saliva is produced to properly lubricate the oral cavity

# What Does Saliva Do?

- Maintains the proper PH of the mouth
- Contains enzymes that protect the oral mucosa and teeth against harmful substances (infection)
- Lubricates the mouth
- Facilitates digestion
- Enhances the taste of food



# What Causes Dry Mouth?

- Medications
- Systemic diseases - Sjogrens Syndrome (found in 1-4% population)
- Head and Neck Radiation

# XEROSTOMIA

DRY MOUTH – The hidden cause of gum disease and in 3 of every 10 adults.  
Examples of drugs causing DRY MOUTH

Brand Name	Generic Name	Brand Name	Generic Name	Brand Name	Generic Name
<b>ANOREXIC</b>					
Adipex-P, Fastin, Isonamin, Zenfryl	phentermine	Bucladin	buclicone	Cogentin	benztropine mesylate
Anorex SR, Adipost, Benti POM	phenmetrazine	Compazine	prochlorperazine	Comtan	entacapone
Didrex	benzphetamine	Dramamine	dimenhydrinate	Eldepryl	selegiline
Lorammin, Fastin	phenentermine	Marezine	cyclizine	Kemadrin	procyclidine
Meridia	sibutramine	Reglat	metocloropramide	Larodopa	levodopa
Terbutal, Tapanil, Ten-Tab	diethylpropion	Tigan	trimethoprimamide	Naprosyn	naproxen
		Torecan	flibitergiprazone	Parlodol	bramopriptine
		Transderm-Scop	scopolamine	Permax	pergolide
				Symmetrel	amantadine
				Sisemet	carbidopa with levodopa
				Tasmar	tolcapone
<b>ANTIACHINE</b>					
Accutane	isotretinoin	<b>ANTIHISTAMINE</b>			
<b>ANTIANKIETY</b>					
Atarax, Vistaril	hydroxyzine	Actifed	triprolidine with pseudoephedrine	<b>ANTIPSYCHOTIC</b>	
Ativan	lorazepam	Allegra	fekofenadine	Clazril	clazapine
Centrax	prazepam	Aslein	azelastine	Compazine	prochlorperazine
Equamint, Milown	meprobamate	Claritin	loratadine	Esakalith	lithium
Librium	chlordiazepoxide	Dimetane	brompheniramine	Lasix	furosemide
Serax	oxazepam	Hismanal	astemizole	Mellaril	thioridazine
Smequan	doxepin	Nolahist	phenindamine	Moban	moxidone
Tranavan	clorazepate	Ogimene	azastadine	Navair	thiothixene
Xanax	alprazolam	Pericatin	cyproheptadine	Orap	pirimozide
		Phenergan	promethazine	Permitil, Prolixin	fluphenazine
		Polaramine	dexchlorpheniramine	Serentil	mesoridazine
		Pyribenzamine (PBZ)	tripelenamine	Stelazine	trifluoperazine
		Tavist	clemastine	Thorazine	chlorpromazine
		Zytac	cetirizine	Trifluon	perphenazine
				Vesprin	trifluoromazine
				Zyprexa	olanzapine
<b>ANTICHOLINERGIC/ANTISPASMODIC</b>					
Anaspaz	hyoscamine	<b>ANTIHYPERTENSIVE</b>			
Bellergal	belladonna alkaloids	Accupril	quinapril	<b>BRONCHODILATOR</b>	
Berlyl	dicyclanole	Accoon	perindopril	Alupent	metaproterenol
Cardil	mepanolate	Adomet	methylglath	Atrovent	ipratropium
Daricon	oxyphenycyclimine	Altace	remipril	Combivent	ipratropium/albuterol
Detrol	tolterodine	Betapace	setolol	Maxair	pirbuterol
Dilatop	oxybutynin	Blocadren	timolol	Proventil, Ventolin	albuterol
Dornatal, Kinased	hyoscyamine with atropine	Capoten	captopril		
Librax	chlordiazepoxide with cldinium	Cardura	doxazosin	<b>DECONGESTANT</b>	
Pamine	methscopolamine	Cartol	carteolol	Sudafed	pseudoephedrine
Pathlon	tridoxethyl chloride	Corng	carvedilol	<b>DIURETIC</b>	
Pro-Banthine	propantheline	Catsare	clonidine	Aidaction	spironolactone
Quazam	clidinium	Coreg	carvedilol	Hydromax	quinnethione
Robinal	glycopyrrate	Coreg	carvedilol	Bumex	bumetanide
Transderm-Scop	scopolamine	Corgard	nadolol	Daranide	dichlorphenamide
Urispas	flavoxate	Flonase	fluticasone	Demadex	torsemterene
		Hydrel	guanadrel	Duair	chlorzoxazone
		Hytrin	terazosin	Diamox	acetazolamide
		Inversine	mecamylamine	Duress	trichlormethazide
		Inderal	propranolol	Duacardin	hydroflumethazide
		kerlone	betaxolol	Dyazide, Maxzide	frameterene and hydrochlorothiazide
		Leatol	penbutolol	Dyrenium	trimetazene
		Lopressor	metoprolol	Edecrin	ethacrynic acid
		Lotensin	lisinopril	Endurin	methyclothiazide
		Maxiv	trandolapril	Evra	benzthiazide
		Minipress	prazosin	Glauc Tabs	methazolamide
		Monopril	lisinopril	HydroDIURIL, Esidrix	hydrochlorothiazide
		Norodyne	labetolol	Hydroton	chlorbutolone
		Pirenil, Zestril	lisinopril	Lasix	furosemide
		Sectral	acebutolol	Lozol	indapamide
		Tenex	guanfacine	Malamyl	amloride
		Tenormin	atenolol	Naturetin	benzoflumezazone
		Univas	moexigil	Renese	polythiazide
		Vasotec	enalapril	Zaroxolyn	metolazone
		Visken	pindolol		
		Wytenin	guanabenz	<b>MUSCLE RELAXANT</b>	
		Zebeta	bisoprolol	Flexair	cyclobenzaprine
				Lioresal	baclofen
				Norflex, Dural	carphenadrine
<b>ANTIINFLAMMATORY ANALGESIC</b>					
Dolebid	diffenisal	<b>ANTINAUSEANT</b>			
Feldene	fenoprofen	Antivert	meclizine	<b>NARCOTIC ANALGESIC</b>	
Motrin	ibuprofen	Dramamine	diphenhydramine	Demerol	meperidine
Naprosyn	naproxen	Marezine	cyclizine	MS Contin	morphine
				<b>SEDATIVE</b>	
		Akineton	biperiden	Dalmane	flurazepam
		Artane	trihexyphenidyl	Doral	quazepam
				Halcion	triazolam
				Restoril	temazepam

Over 400+ medications cause dry mouth  
Lists are available from various sources

# What can Happen if Dry Mouth is not Treated Properly ?

- Dry mouth can be severe and increases the potential for cavities, gum disease, and ongoing discomfort of the individual
- Individuals may have a decreased ability to eat because of mouth pain including :
  - sores
  - burning mouth
  - burning tongue
- Individuals may take an increased amount of time to recovery from other health related illnesses due to secondary oral infections

# Multiple Signs of Dry Mouth

- Constant thirst
- Difficulty with oral function ( moving food around in the mouth)
- Dysphagia
- Altered speech
- Difficulty wearing dentures
- Oropharyngeal infections
- Mucous accumulation
- Food retention
- Plaque accumulations
- Changes in oral flora
- Mucosal tissue changes
- Dental caries
- Taste changes

# What Can Be Done to Decrease the Risk of Oral Health Problems from Dry Mouth?

- Identify the underlying cause
- Implement an effective oral care protocol
- Monitor and change protocols according to individual needs
- Use sugarless products (gum or candies)
- Additional fluoride or chlorhexide regimes if ordered by a dentist or physician
- Limit smoking as it further irritates mouth tissues

# What Does Dry Mouth Look Like ?

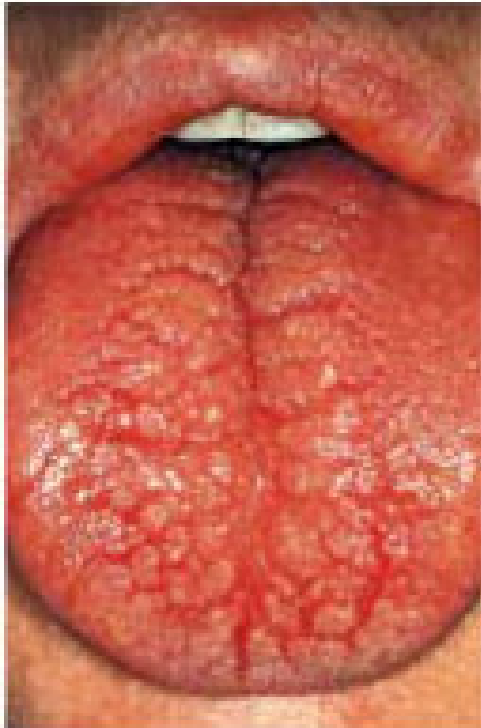


Photo courtesy Peri-Products UK



Photo courtesy WHO

# Dry Mouth Oral Care Protocol

## Do's

- Minimum 2x to max. 6x per day- lips moisturized (Non- petroleum products)
- Minimum 2x to max. 6x per day – use a dry mouth product
- Minimum 2x to max. 4x per day - rinse mouth before and after meals and at bedtime with:
  - saline solution, or
  - soda water or
  - non- alcohol fluoride rinse
- Minimum 2x daily use a soft-bristle (ultra – soft) toothbrush after meals and at bedtime. If you are assisting with oral care use a patting motion vs. traditional brushing methods .Use alternate flossing method 1 once a day
- Use mild gel products, non- alcohol mouthwash, or water for daily care
- For swallowing difficulties use a moist disposable cloth or gauze (4x4) to help remove debris

# Oral Care Products/Protocols

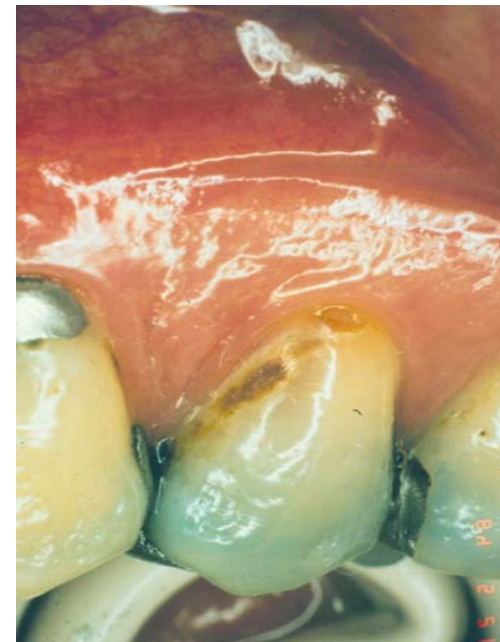
## Don'ts

- No mouthwash with alcohol
- No lemon or glycerine swabs
- No medium/hard bristled toothbrushes
- No petroleum based products for lip care (can promote infection)
- No products that have strong or spicy taste

## Other Effects of Dry Mouth



Dental Plaque is very sticky  
Can cause gum problems



Cavity at gum line

# Products for Optimal Oral Health

## Brushes:

- Soft
- Small head
- Replace frequently
- Replace before and after mouth infections



## Tooth pastes:

- Use only if individual is able to swallow and expectorate
- Use paste with fluoride

## Other

- Use gel or non-alcohol mouth wash



# Products for Optimal Oral Health

## Inter-dental devices (if not able to floss)

- Sulca brush
- Stimudents
- Inter- proximal–end tuft brush



Inter-proximal brush



## Mouthwashes

- Non- alcohol



# Products for Optimal Oral Health

## Dry Mouth Products

- Use minimum 2x a day to max. of 6x per day



## Other things to use

- Frequent sips of water
- Sugarless candy or gum



## Antifungal Products

- Various products ordered by dentist or physician



# Reference Sources

- Gupta A, Epstein JB, Sroussi H, Dept of Oral Medicine, University of Illinois: Chicago, US. JCDA Nov 2006 72(9)
- <http://www.cda-adc.ca/jcda/vol72/issue9/841.pdf>



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