#### MINUTES OF THE HOUSE HEALTH AND HUMAN SERVICES COMMITTEE

The meeting was called to order by Chairperson Brenda Landwehr at 1:30 P.M. on February 20, 2008 in Room 526-S of the Capitol.

All members were present except:

Rep. Holland, excused

Rep. Mast, excused

#### Committee staff present:

Norman Furse, Revisor of Statutes Office Dianne Rosell, Revisor of Statutes Office Melissa Calderwood, Kansas Legislative Research Department Cindy Lash, Kansas Legislative Research Department Chris Haug, Committee Assistant

#### Conferees appearing before the committee:

Chad Austin, Kansas Hospital Association Representative Mitch Holmes Larry Asher, General Manager Commercial Laundry Sales & Services Mary Lou Davis, Executive Director Kansas Board of Cosmetology Willa DeCastro, American Adoptions

#### Others Attending:

See Attached List.

Chad Austin, representing the Kansas Hospital Association, gave a presentation on the Importance of the Health Care Sector to the State of Kansas. (Attachment 1) There are many trends and indicators which show health care's economic importance. Health Services is among the fastest growing sectors. Demographic trends suggest that growth will continue. Attracting and retaining businesses and retirees depends on adequate health care services. A sustainable health care system is essential for local health and economic opportunity.

Chairperson Landwehr opened the hearing on HB2855 - Cleaning process used by certain laundries

#### Proponents:

Representative Mitch Holmes gave a brief testimony in favor of <u>HB2855</u>. (<u>Attachment 2</u>) This bill is a measure that can save energy for state agencies as well as private businesses. The use of ozone is safer than the handling of bleach and other chemicals.

Larry Asher, General Manager Commercial Laundry Sales & Services, gave testimony in favor of using Ozone in the Laundry process in regulated facilities. (<u>Attachment 3</u>) He stated using Ozone can have a great economic and environmental impact in Kansas. Ozone works best in cold water. It can save 75-85% of an energy bill. It decreases the drying time and leaves no environmental pollution.

No one else wished to testify. The Kansas Department of Health and Environment was notified of the hearing but did not testify.

The hearing on **HB2855** and closed.

The hearing on **HB2721 - Board of cosmetology, relating to licensing requirements** was opened.

#### Proponents:

Mary Lou Davis, Executive Director Kansas Board of Cosmetology testified in support of this bill. (<u>Attachment 4</u>) Ms. Davis stated this proposed legislation contains revisions for regulatory responsibility for cosmetology professions, body art professions and tanning facilities. For Cosmetology, which is covered in pages 1-16, language in the bill is being revised to more adequately define the practices of cosmetology professions. The bill would add cosmetic tattooing to the list of regulated professions.

#### **CONTINUATION SHEET**

MINUTES OF THE House Health and Human Services Committee at 1:30 P.M. on February 20, 2008 in Room 526-S of the Capitol.

The board believes one instructor per 25 students is necessary in the theory classroom and one instructor to 25 is necessary to adequately supervise the practice floor. The number of aestheticians has nearly doubled from 2004 to 2007 (From 337 licensees to 610). The board is seeking the ability to discipline tanning facility licensees in the same manner as the cosmetology and body art professions and facilities. Regarding body art, the training revision in the proposed legislation more clearly outlines the necessary training requirements. The language does eliminate the option where an individual may attain training in a licensed school.

Written testimony was supplied by the Academy of Aesthetics Arts. (Attachment 5) They support the request to amend the required hours for the esthetics branch of cosmetology.

Dianne Roselle, Revisor of Statutes provided the language changes for the bill.

Chairperson Landwehr closed the hearings on HB2721.

HB2570 - Persons authorized to make adoption assessments. Willa DeCastro, representing American Adoptions, stated the former two balloons were rolled into one balloon, which is balloon 3. In lines 17 and on, they added the various job titles and where in the statutes those titles were defined. This was recommended by the revisor. Balloon 3 was reviewed. Representative Rhoades made the motion to adopt balloon 3 and Representative Neighbor seconded. The motion carried. Representative Rhoades made the motion to pass the bill favorably, as amended, out of committee. Representative Storm seconded the motion. The motion carried. Representative Rhoades will carry the bill.

Chairperson Landwehr turned the committee's attention to <u>HB2695 - Athletic trainer licensure</u>. Norm Furse, Revisor of Statutes gave the overview of the changes to the proposed amendment. <u>Representative Storm moved we accept the balloon. Representative Neighbor seconded. The motion carried. Rep. Storm moved we pass HB2695 out of committee, favorably as amended. <u>Representative Neighbor seconded the motion.</u> The motion carried.</u>

The deadline to work bills in our committee is Tuesday, February 26.

The meeting was adjourned at 3:08 p.m. The next meeting will be February 21, 2008.

### HOUSE HEALTH AND HUMAN SERVICES COMMITTEE GUEST LIST

DATE: February 20, 2008

NAME	REPRESENTING
Mong Low Davis	Konsus Bond of Cosmetodom
Chad Questin	KAA
Mitch Holmes	
Lany Olahin	
	,



Kansas Hospital Association

The Importance

of the

Health Care Sector

to the

State of Kansas



## Kansas Hospitals

125 Community Hospitals

- Non-Profit
- For-Profit
- Governmental Hospitals
- Critical Access Hospitals
  - Program started in late 1990's
  - Annual average length of stay less than 96 hours
  - Maximum 25 inpatient beds
  - 24 hour emergency care
  - Network-based program

Kansas Hospital Association

Health & Human Services Committee

Date: 2-20-08

Attachment:



# Kansas Community Hospital Statistics 2006

Kansas Hospital Association

- 9,704 Staffed Beds
- 319,158 Inpatient Admissions
  - 139,160 Medicare admissions
  - 42,370 Medicaid admissions
- 1,959,447 Inpatient Days
- 40,050 Births
- 1,014,354 ED Visits
- 241,163 Outpatient Surgeries



## Health Care Trends Impacting Kansas Communities

Kansas Hospital Association

- Change in the structure of health care delivery system
- Difficult for some individuals to obtain health coverage
- · Insurance premiums have increased
- Rural providers reimbursed differently than urban counterparts
- · Loss of local control



### Research Study Objectives

- Kansas Hospital Association
- Promote a viable, sustainable health care system in Kansas counties
  - Health care and economic development
  - Identify trends and changes in local health care needs
  - Identify the economic impact of health care on the state and county economy



### Health Care Spending

Kansas Hospital Association

- 1980, avg. person spent \$1,102 on health care
- 2005, avg. person spent \$6,697 on health care
- 1980, Health care was 9.1% of GDP
- 2005, Health care was 16.0% of GDP
- 2016, Health care projected at 19.6% of GDP

Sources: Bureau of Labor Statistics; Bureau of Economic Analysis; Centers for Medicare and Medicaid Services



Health Care in the Community

Kansas Hospital Association

Many people don't realize the importance of health care to the local economy

- Rural communities should learn about their health care needs and take stock of their health care system
- Rural communities must act to avoid loss of health care jobs and local services

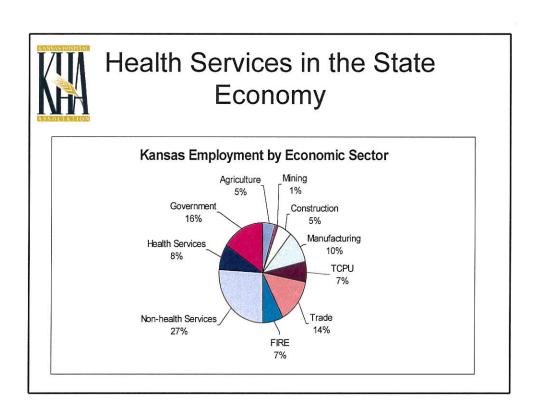


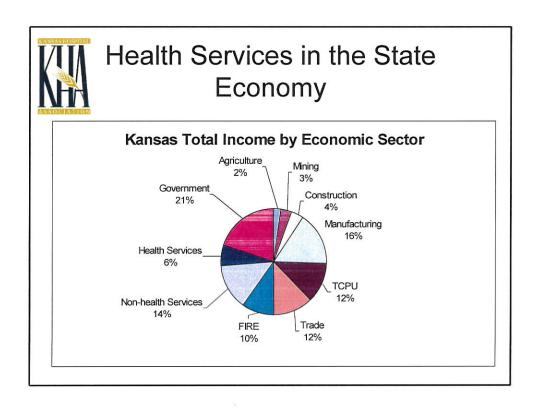
## Health Care and the Rural Development Connection

Kansas Hospital Association

Why is health care important for community economic development?

- Attract and retain business and industry
- · Attract and retain retirees
- · Create jobs in the local economy







## Planning for Future Health Care Needs

Kansas Hospital Association

- · Demographics and projections
- Sources of income
- · Health indicators
  - Medicare, Medicaid
  - Indicators of family and financial stress
  - Indicators of maternal and children's health



### Health Sector Impact

- Kansas Hospital Association
- The spending by health care businesses and the income paid to employees "ripples" throughout the county economy
- Each job created in the health sector creates additional employment in the county
- Each dollar of earned income in the health sector creates additional income in the county



Kansas Hospital Association

## Total Health Care Impact

Industry Sector	Direct Employment	Employment Multiplier	Total Employment Impact	
Health and Personal Care Stores	10,531	1.38	14,578	
Veterinary Services	5,618	1.38	7,750	
Home Health Care Services	7,517	1.33	10,017	
Offices of Doctors and Dentists	38,919	1.78	69,163	
Other Ambulatory Health Care Services	12,628	1.91	24,131	
Hospitals	65,342	1.77	115,619	
Nursing and Residential Care Services	37,030	1.34	49,469	
TOTAL:	177,585		290,728	



## Health Care Impact

Kansas Hospital Association

Industry Sector	Direct Total Income (millions)		Income Multiplier	Total Income Impact (millions)		
Health and Personal Care Stores	\$	390.873	1.64	\$	641.219	
Veterinary Services	\$	130.695	2.00	\$	261.378	
Home Health Care Services	\$	228.019	1.64	\$	374.866	
Offices of Doctors and Dentists	\$	3,027.072	1.60	\$	4,828.513	
Other Ambulatory Health Care Services	\$	824.067	1.84	\$	1,518.705	
Hospitals	\$	3,418.779	1.88	\$	6,411.999	
Nursing and Residential Care Services	\$	934.585	1.76	\$	1,642.611	
TOTAL:	\$	8,954.090		\$	15,679.291	



### Health Care Impact

Kansas Hospital Association

Industry Sector		otal Income Impact (millions)	Retail Sales (millions)		
Health and Personal Care Stores	\$	641.219	\$	224.427	
Veterinary Services	\$	261.378	\$	91.482	
Home Health Care Services	\$	374.866	\$	131.203	
Offices of Doctors and Dentists	\$	4,828.513	\$	1,689.979	
Other Ambulatory Health Care Services	\$	1,518.705	\$	531.547	
Hospitals	\$	6,411.999	\$	2,244.200	
Nursing and Residential Care Services	\$	1,642.611	\$	574.914	
TOTAL:	\$	15,679.291	\$	5,487.752	

### **Summary and Conclusions**

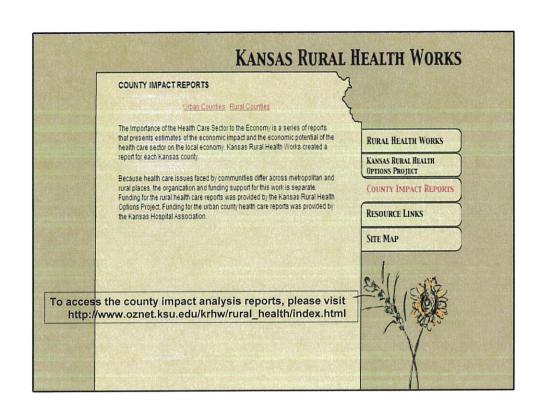
Kansas Hospital Association

- Trends and indicators show health care's economic importance
- · Health services among the fastest growing sectors - demographic trends suggest growth will continue
- Attracting/retaining businesses & retirees depends on adequate health care services
- Sustainable health care system essential for local health and economic opportunity



### **Summary and Conclusions**

- Economics of health care are rapidly changing
- Maintaining a sustainable local health care system is a community-wide challenge
- Strategic health care planning must be ongoing and inclusive



/~ 9





## Acknowledgements

- Kansas State University
  - John Leatherman, Director, Office of Local Government
  - Craig Smith, Extension Associate, Office of Local Government
- · Kansas Rural Health Options Project
  - Kansas Department of Health and Environment, Office of Local and Rural Health
  - Kansas Hospital Association
  - Kansas Medical Society
  - Kansas Board of EMS

#### DRAFT

## The Importance of the Health Care Sector to the Kansas Economy - Executive Summary -

Economic impact arises directly from the sales, wages and employment generated by business activity. It also arises indirectly through the "ripple" effect of businesses purchasing goods and services from other local businesses, and through health care workers spending wages and other income for household goods and services. These linkages tend to distribute the impact of an activity or event very broadly throughout the economy.

This report estimates the "gross" economic contribution associated with health care sector to the State of Kansas. The estimates presented represent the annual impact to the state's economy renewed each year by the continuing activity in the sector.

## Estimated Total Economic Contribution of the Health Care System to the Kansas Economy, 2006 (2006\$)

Health Sector	Employment	Total Income (millions)	Retail Sales (millions)
Health and Personal Care Stores	14,578	\$641.22	\$224.43
Veterinary Services	7,750	261.38	91.48
Home Health Care Services	10,017	374.87	131.20
Offices of Doctors and Dentists	69,163	4,828.51	1,689.98
Other Ambulatory Health Care Services	24,131	1,518.71	531.55
Hospitals	115,619	6,411.999	2,244.200
Nursing and Residential Care Services	49,469	1,642.61	574.91
Total	290,728	\$15,679.291	\$5,487.752

Although the connections between health care services and local economic development are often overlooked, there are at least three important linkages to be recognized. A strong health care system can (1) help attract and maintain business and industry growth, (2) attract and retain retirees, and (3) create jobs in the local area. A vigorous and sustainable health care system is essential not only for the health and welfare of community residents, but to enhance economic opportunity as well.

While industry trends related to health care are generally positive, significant challenges remain for many communities. If a community wants to maintain the benefits associated with accessible and affordable health care, it must actively work to meet these challenges. The challenges cannot be met by those directly responsible for health care administration alone. They require a community-wide response involving government, business and civic leaders. It also requires supportive state- and federal-level policies and programs to assist communities that may not have the wherewithal to respond to all of the needs that may exist.

#### **DRAFT**

Table 3. Kansas Health Sector Impact on State Employment, 2006 (2006\$)

			Total
	Direct	<b>Employment</b>	<b>Employment</b>
Industry Sector	<b>Employment</b>	Multiplier	Impact
Health and Personal Care Stores	10,531	1.38	14,578
Veterinary Services	5,618	1.38	7,750
Home Health Care Services	7,517	1.33	10,017
Offices of Doctors and Dentists	38,919	1.78	69,163
Other Ambulatory Health Care Services	12,628	1.91	24,131
Hospitals	65,342	1.77	115,619
Nursing and Residential Care Services	37,030	1.34	49,469
Total	177,585		290,728

Table 4. Kansas Health Sector Impact on State Income and Retail Sales, 2006 (2006\$)

	Direct Total		Total Income	Retail
Industry Sector	Income (millions)	Income Multiplier	Impact (millions)	Sales (millions)
Health and Personal Care Stores	\$390.873	1.64	\$641.219	\$224.427
Veterinary Services	130.695	2.00	261.378	91.482
Home Health Care Services	228.019	1.64	374.866	131.203
Offices of Doctors and Dentists	3,027.072	1.60	4,828.513	1,689.979
Other Ambulatory Health Care Services	824.067	1.84	1,518.705	531.547
Hospitals	3,418.779	1.88	6,411.999	2,244.200
Nursing and Residential Care Services	934.585	1.76	1,642.611	574.914
Total	\$8,954.090		\$15,679.291	\$5,487.752

#### STATE OF KANSAS HOUSE OF REPRESENTATIVES

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#### MITCH HOLMES

114TH DISTRICT

#### Testimony in Favor or HB2855 February 20, 2008

This bill is simply a measure that we can save energy for state agency's as well as private businesses. There are several manufacturers of commercial laundry equipment that have machines that use ozone as a purifier instead of heat. The machines create ozone by extracting oxygen from the ambient air and mixing it with the water/detergent. The energy saving is significant since the alternative is to use water heated to 165 degrees.

Current regulations require the hot water or a chemical substitute. Ozone, as well as any other chemical, is not mentioned specifically in regulations. This bill simply makes it clear that these laundry machines can be sold and used in Kansas. These machines have been in use in other states for a number of years, but KDHE has not allowed them to date, apparently because ozone is not explicitly allowed.

Ozone is safe. Indeed, many household air purifiers create ozone because of it's purifying effect. It is what creates the fresh smell after a lightning storm. The use of ozone is safer than the handling of bleach and other chemicals used for sterilization.

It makes sense to clarify that state and private entities are free to use these machines that utilize ozone in order to conserve energy and save money.

thich tolmis

Health & Human Services Committee

Date: 2-20-08

Attachment: 2

## Testimony before House Committee Regarding Using Ozone in the Laundry Process in Regulated Facilities

As we face the future, we all need to pay closer and closer attention to the economic and environmental impact of the decisions we make. This is true, not only for us as individuals, but for institutions and governments as well. There are many different ways we can soften our impact on the environment, but few of them come with the potential for significant economic savings at the same time. The laundry room would seem to be a very unglamorous and odd place to look for such benefit, but there is an opportunity for significant economic savings along with a softening of the environmental impact of doing laundry. This can be done through reducing utility costs, reducing the use of harsh chemicals, and higher efficiency.

The answer is by using Ozone in the laundry process. However, as our company has pursued the opportunity to sell ozone-generating laundry equipment in the State of Kansas, we and our equipment manufacturer have been told on several occasions that using ozone in the laundry room in health facilities in Kansas is not allowed because use of ozone is not mentioned in the regulations.

First, let me clarify just how great the economic and environmental impact can be in Kansas, just for the health industry alone.

The average cost of doing one pound of laundry in an institutional setting today is at least \$0.40. In many places you would find that the real cost is \$0.50 or greater. In health care facilities, where it is mandated that water temperatures be 160 or 165 degrees there is the potential of saving 19% or more of the laundry processing cost.

Nineteen percent of \$0.40 (7.7 cents) for a pound of laundry does not sound very big. However, consider that the laundry facility at the Hutchinson Hospital does 2 million pounds of laundry in a years time. At a savings of 7.7 cents per pound, that is equal to an operational savings of at least \$154,000. per year by using ozone in the wash water. They are in the process of developing a new laundry facility along with other improvements and would like to consider ozone.

We are presently working with a very large nursing home in Wichita which processes more than 1.5 million pounds of laundry per year.

The aveage 100 bed nursing home facility will process between 800 and 900 pounds of laundry per day, six days a week -- \$07.7 per pound is a savings of Health & Human Services Committee

Date: Z-20-08

Attachment: 3

\$20,000. per year. For a 50 or 60 bed facility the annual operational savings is more than \$10,000. If you consider that there are more than 500 health care facilities in the State of Kansas, - a modest savings of \$10,000 amounts to at least \$5 million per year. Many of the institutions are much larger, so the savings could be greater.

This, by itself, is more than enough to justify the use of ozone in the laundry room, however, consider that

- Ozone (O<sub>3</sub>) is a powerful disinfectant just what we want in the laundry
  - It is stronger than chlorine
  - o It works faster than chlorine
- Ozone works best in cold water temperatures of 70 degrees and slightly above
  - o This saves 70-85% on heating laundry water
- Ozone opens fabric fibers to allow easier cleaning
- Ozone reduces the amount of other harsh chemicals needed to process laundry by enhancing chemical reactions
- Ozone, through opening the fabric fibers also allows more water to be spun out of the laundry, thus reducing drying time by 10-20% (a further energy savings)
- Ozone has a half-life of 2 ½ to 7 min. When it breaks down, unlike chlorine, it leaves no environmental pollution as it ultimately reverts to O<sub>2</sub>. You may be aware that ozone is often used extensively in water purification and gray water recovery processes.
- During the wash process, ozone is contained inside the sealed wash tub,
   allowing little or no escape of ozone into the atmosphere in the laundry area.

The manufacturer of our equipment, the EDRO Corporation, is located on the east coast and until recently concentrated its efforts in that region of the country as well as providing laundry facilities onboard US Navy ships and many cruise ships. However, EDRO Corporation is not the only business providing ozone solutions in the laundry room.

Utilizing ozone in the laundry room can afford an overall cost savings of 15 – 20%, through lower energy, utility chemical and labor costs. However it is one which Kansas seems not ready to accept. At the Clean Show in Las Vegas we saw no less than 4 or 5 other systems, all designed to inject ozone gas into the washtub as laundry is being processed. It is an area of savings and environmental protection which we cannot turn our backs on.

A number of hospitals, nursing homes and other health care facilities, along with hotels, prisons, fitness centers, etc. use EDRO equipment and ozone in their laundry process in the states of NH, MA, NJ, NY, CT, VT & RI. We personally have been told of ozone equipment by other manufacturers being used in health facilities in many other states, including MO which supposedly has stricter standards than KS.

I have a handout summarizing the State Laundry Sanitation Guidelines for the US as they relate to the temperature requirements. This summary has been developed by one of the major laundry chemical companies in the US – Ecolab. They have specific chemical products designed for use when ozone is used in the laundry process. Other chemical companies have the same.

As you can see, the majority of the states either have no temperature requirements or use other criteria which do allow processing laundry in cold water and thus allowing the use of ozone. In fact, you can see that even Kansas, since 8/99, allows lower temperature wash with sanitizers. However, we have been told specifically, that this regulation does not cover nor allow the use of ozone in the laundry of health care facilities.

The Kansas Deptartment of Corrections allows the use of ozone in the laundry process and at least 5 facilities have ozone generators for the laundry process, though none of them are installations we have made. They were made before we entered this business.

We are aware of a number of situations where those responsible for the laundry operations in their health care institutions are informed about the economic and environmental impact of ozone in the laundry room and would like to use it, however, it is being blocked by the interpretation of the present regulations.

Allowing ozone to be used in the laundry process has the potential of reducing operational costs in the health care industry in Kansas by more than \$5 million per year and soften our environmental footprint at the same time.

Presently, Greensburg, a city determined to come back "green", is not allowed to even consider the use of ozone in the laundry process of its new hospital or other health care facilities as they are developed.

#### STATE LAUNDRY SANITATION GUIDELINES TABLE

C:\MyDocuments\Results\StateSan.xls
Created F 3/3/2000

STATE ABBR. NAME	SANITATION GUIDELINE
AL Alabama AK Alaska	160°F unless manufacturer documents effective sanitation at lower temp None
AR Arkansas AZ Arizona	Strict Temperature Regulation: 160°F 120°F w/150 ppm sanitizer Follow CDC Guidelines.
CA California CO Colorado CT Connecticu DC District of C	Strict Temperature Regulation:160°F/24 min 140°F/24 Psychiatric w/ironing (No reg LT Follow manufacturer's directions. Follow manufacturer's directions.  olumbia None
DE Delaware FL Florida GA Georgia HI Hawaii IA lowa ID Idaho	No requirements. Follow CDC Guidelines and APIC. Follow manufacturer's directions. Follow manufacturer's directions plus CDC Guidelines. No temperature requirements. No temperature requirements.
IL Illinois IN Indiana KS Kansas KY Kentucky LA Louisiana MA Massachus MD Maryland	Strict Temperature Regulation: 160°F/25 min 140°F/100ppm Cl <sub>2</sub> /10 min (LT Care follow Follow manufacturer's directions.  Strict Temperature Regulation: 160°F. Effective 8/99 will allow lower temp + sanitizer No temperature requirements.  160°F/lower if sanitizer used/directions must specify 160°F or lower with sanitizer - Outcome Based 160°F or 140°F/sanitzer or lower if sanitizer directions specify
ME Maine MI Michigan MN Minnesota MO Missouri MS Mississippi MT Montana NC North Carol ND North Dakot NE Nebraska NH New Hamps NJ New Jersey NM New Mexico	a 160°F or lower if sanitizers used, follow manuf. Instructions No temperature requirements. hire No temperature requirements. No temperature requirements.

NV	Nevada	160°F/150°F or lower if sanitizers used/follow manufacturer's instructions.
NY	New York	No temperature requirements.
OH	Ohio	Follow manufacturer's directions.
OK	Oklahoma	No temperature requirements. Outcome based.
OR	Oregon	No temperature requirements.
PA	Pennsylvania	No temperature requirements.
RI	Rhode Island	None
SC	South Carolina	No temperature requirements.
SD	South Dakota	Strict Temperature Regulation: 160°F 140°F w/100 ppm chlorineApproval process
TN	Tennessee	Strict Temperature Regulation: 160°F Approval process for lower temp/sanitizers
TX	Texas	Follow CDC Guidelines.
UT	Utah	160°F or lower if sanitizer
VA	Virginia	Strict Temperature Regulation: 160°F Negative language regarding bleach damage in
VT	Vermont	No temperature requirements.
WA	Washington	Strict Temperature Regulation: 160°F/15 min 140°F/15 min-sanitizer: Long Term Care/
WI	Wisconsin	No temperature requirements. Outcome based.
205 33	2	•

WV	West Virginia	Strict Temperature Regulation:	160°F 140°F with Sanitizer
WY	Wyoming	No temperature requirements.	Follow manufacturer's directions.



#### Benefits of Ozonation in Nursing Home & Hospital Laundries

Is the DynOzone System right for your laundry?



#### Cost of doing laundry.

Average cost of doing laundry = \$0.40 /pound or more\*

LAUNDRY TODAY, Jan. 2007 Vol. 11 # 1 "It's A Pre-Wash by Susan Caparrelle

## Costs involved in the laundry process.

·Hard and soft costs:

- 41% Labor
- 20% Linen replacement
- 19% Utilities (gas, electric, water, sewer)
- 12% Equipment (property taxes,
- depreciation)
- 5% Maintenance
- 3% Chemistry



Ozone washing focuses on reductions in utility consumption, specifically hot water and overall water consumption, and extending linen life.



#### **Ozone Facts**

- Is a powerful disinfectant
- Works faster and is stronger than chlorine
- Works best in cold water
- Enhances chemical reactions
- Opens fabric fibers to allow faster
   & better cleaning



#### What is Ozone?

- Ozone is created when air contacts with ultraviolet light or electricity.
- Fractured molecules reassemble with other O2 molecules, resulting in the formation of ozone, known as O3.



#### What is Ozone?

- Ozone is very unstable. As soon as ozone is formed, it starts to break down to oxygen.
- The half life is 2.5 to 7 minutes in most conditions.
- There is little or no chance of negative residual effects.



#### **Action of Ozone**

- Because ozone is unstable, it creates oxidation potential 3,000 times faster and 150% more effective than chlorine.
- Ozone does this in cold water.
- In the normal laundry situation chlorine and other chemicals work effectively only when activated in hot water.
- Hence, state regulations for 160 degree water.



## How does ozone work in the laundry?

- The DynOzone System injects ozone into the laundry water throughout the wash process.
- Ozone reacts very rapidly in the water loosening the fabric fibers, causing soils to break away from the fabric and disintegrate.
- At the same time it serves as a safe bleach and powerful disinfectant.



#### In the Wash Tub

- Ozone loosens fabric fibers to release dirt, stains & wash chemicals easier.
- The oxidation power of ozone sterilizes and deodorizes.
- The loose fibers allow more of the water to be spun out.
- It all happens using cold water, resulting is less gas consumption.



#### In the Wash Tub (cont.)

- Ozone then reverts to oxygen, leaving:
  - No chemical residue in linens and thus longer linen life.
  - No environmental pollution!



#### In the Tumbler

#### Less residual water in fabrics

- Reduces drying time
- Lowers gas requirements
- Saves time, increasing volume &/or efficiency



#### **Reduced energy costs**

- Hot water savings
  - 70-80% less energy use for heating laundry water.
- Shorter drying time
  - 20% less energy use for drying.



#### **Improved linen quality**

- Whiter linens or brighter colors
  - Reduced residue buildup
  - Stronger bleaching qualities
- Fluffier linens, especially towels
  - Fibers opened by ozone and oxygen, will leave linen feeling softer and fluffier.
- Fresh fragrance to laundry.



#### Longer linen life

- Shorter and fewer wash cycles & reduced chemicals, reduced dryer time results in longer linen life.
- Longer linen life = reduced linen costs by an average of 10-20%



#### **Time Savings**

- Shorter wash cycles and drying times lends to reduced labor costs or
- Doing a larger volume of laundry in the same amount of time

	W	las	sh	Fo	rmul	a C	om	a	ris	on	
egul	ar Washe	ег — м	ledium S	Soil		Dyna	Wash® O	zone	Syste	m – N	ledium S
Step	Function	Time	Water	Level	Chemical	Step	Function	Time	Water	Level	Chemical
1	Bush	2	Hot	High		1	Flush	2	Cold	High	2.5
2	Drain	1				2	Drain	1			
3	Break / Suds	0	Hot	Low	Detergent: 2 oz/cwt	3	Break / Suds		Warm	Low	Detergent 1 oz/cwt
1	Drain	1				1					Blench: 6 pz/cwt
5	Rinse	2	Warm	High	. 9	4	Drain	1			0 64/cm
6	Drain	1				5	Rinse	2	Cold	High	-
7	Break	5	Hot	Low	Sleach: S oz/cwt	6	Drain	1	Conu		
8	Drain	1				7	Rinse	2	Cold	High	
9	Rinse	2	Warm	High			Drain	1			
10	Drain	1				9	Sour	3	Cold	Law	Sour: 1 oz/cwt
11	Rinse	2	Cold	High		10	Extract	8		High	
12	Drain	1				11	Tumble	1			
13	Sour	3	Cold	Low	Sour: 1 oz/cwt		TOTAL TIME	30			
14	Extract	8		High							
15	Tumble	1				DynaM	ash® Ozon	e Sve	tem ws	sedec i	in shorte



#### **Environmentally Friendly**

- Fewer wash cycles reduces total water consumption
- Cold water usage reduces gas and electricity consumption
- Ozone releases no harmful agents into the water or atmosphere

## Costs involved in the laundry process.

Hard and soft costs:

- 41% Labor
- 20% Linen replacement
- 19% Utilities (gas, steam, electric, water, sewer)
- 12% Equipment (property taxes,
- depreciation)
  5% Maintenance
- 3% Chemistry

Ozone washing focuses on reductions in utility consumption, specifically hot water and overall water consumption, and extending linen life.





#### Savings

Savings / pound of laundry with ozone @ cost of \$0.40 / pound

- 19% Utilities .40 x .19% x .70% = <u>5.3 cents</u>
- 20% Linen replacement
  - .40 x .20% x .10% = 0.8 cents
- 41% Time/Labor or
- Increased Efficiency (10% or more)

.40 x .41% x .10% = 1.6 cents

With Dynaozone

Total Savings / Pound

7.7 cents

(Approx. 19%)



#### **Average Daily Savings**

Total Pounds of Laundry x 7.7cents =

- 200 # x 7.7 = \$ 15.40 / day
- **300** # x 7.7 = \$ 23.10 / day
- 500 # x 7.7 = \$ 38.50 / day
- 700 # x 7.7 = \$ 53.90 / day
- 900 # x 7.7 = \$ 69.30 / day



#### **Savings**

Monthly Yearly

200 # = \$ 15.40 x 30 = \$ 462. \$ 5,544.

■ 300 # = \$ 23.10 x 30 = \$ 693. \$8,316.

= 500 # = \$ 38.50 x 30 = \$ 1155. \$13,860.

• 700 # = \$ 53.90 x 30 = \$ 1617. \$19,404.

900 # = \$ 69.30 x 30 = \$ 2079. \$24,948

#### livan County Healthcare'

#### w Ozone Powered Laundry

October 15, 2006 — UNITY, NH. It reduces operating expenses and produces super clean laundry, all while helping the environmen "It" is ozone gas—a supercharged oxygenated air stream—and the laundry at Sullivan County Healthcare in Unity, New Hampshire has recently discovered just how powerful it can be.

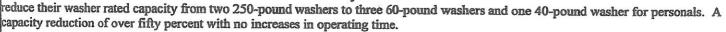
"The new machines have improved the laundry operation in a few ways" says Heather Presch Director of Environmental Services for the facility. "The wash cycles are much shorter, allowing us to wash the

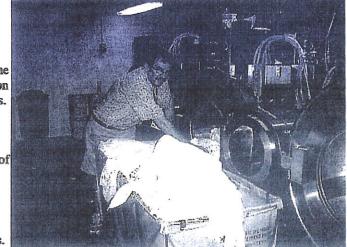
same volume of laundry with smaller machines."

The Sullivan County Healthcare facility consists of 135,000 square feet with additional areas for administrative offices and support services. The home is licensed for 156 dually certified beds. Those beds are located on four nursing floors including one Alzheimer's unit consisting of 32 beds. In addition, there are several outside services offered by the facility including a respite program, dedicated skilled unit, and an area for seminars, training and community functions. All this adds up to a large amount of laundry to be processed. And Sullivan County processes all of its own laundry, as well as all of the laundry requirements for the local hospital in Claremont, New Hampshire for a total of 517,000-pounds annually.

The new ozone powered washers replaced traditional steam heated units.

The operational efficiencies of the new washers allowed the facility to





#### What make ozone gas special in the laundry?

Ozone gas is highly unstable, and this property also makes it a very powerful oxidizing, cleaning and bleaching agent. Ozone is created when air is exposed to either: ultraviolet light sources, lightening or man made high voltage electric arcs. Any of these conditions caus some of the oxygen (O2) molecules to fracture into two oxygen (O) atoms. These activated oxygen atoms then combine with other O2 molecules, forming a molecule of ozone; consisting of a group of three oxygen atoms (O3). Ozone is very reactive and is natures own way of destroying pollutants and cleaning up the atmosphere. Ozone works best in cold water - hot water breaks ozone down before it can perform as intended - it attacks most organic soils and kills bacteria more effectively faster than chlorine bleach at similar concentrations. Ozone is totally biodegradable and when it completes its function, it reverts rapidly back to oxygen (O2), leaving no chemical residues behind. Because it is so reactive, ozone readily attaches itself to fatty and other soils that bind dirt to clothing, destroying them rapidly. As one of the strongest known oxidizing agents, ozone is capable of breaking down virtually any organic soil into innocuous compounds such as carbon dioxide and water. And being a gas in solution, ozone penetrates and opens individual garment fibers, allowing faster cleaning and bleaching of garments with the use of less chemicals. The overall effect results in reductions in the washing cycle times, and whiter, cleaner and softer garments.

The major reduction in washing capacity at Sullivan County is attributable to the operating efficiency of the ozone powered washers. As the ozone gas is directly injected into the sump of each washer, it speeds the cycle time be eliminating lengthy time while heating steps and costly rinses. Equipped with independent ozone generators, each machine is capable of washing with colder water saving time and heating resources by making a smaller capacity ozone powered washer process more laundry per day than a traditional steam heated counterpart. The ozone gas also acts a water treatment method cleaning the water as the water and chemicals clean the laundry, so the sewer discharge is cleaner.

The laundry operation has four washers: three 60-pound and one 40-pound EDRO DynOzone washers; four 125-pound dryers, a large piece folding machine, a small piece folding machine, as well as a household washer and dryer. There are seven fulltime laundry workers with assistance on a daily basis from two Department of Corrections workers. The laundry operates approximately 60 hours per week: 5:30 am to 3:00 pm weekdays, 6:00 am to 2:00 pm on Saturday, and 7:00 am to 3:00 pm on Sunday. There is one working laundry supervisor. Typically, there is one fulltime person and one DOC worker assisting them, on the washer side. One person is devoted entirely to delivering personal clothing and collecting soiled linen from the facility. Two people label and sort personal clothing. And two people run the dryers and fold with the assistance of one DOC worker. Everyone does some folding throughout the day.

d that heavily soiled items come and reasier and we end up with less staining and less rewash. Laundry staff feels the ozone mas made a difference in the look and feel of the linen as well as the smell. This is important to the quality of life of the residents we serve. If we can give them softer towels, brighter looking personal clothing and overall fresher smelling linen, that is important to us."

#### For more information contact.

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Internet: www.edrodynawash.com E-Mail: sales@edrodynawash.com

Back to News



#### HOSPITALITY

Marriott Courtyard Amherst, MA Contact: Pat McLaughlin Phone: 413-256-5454

Double Tree Hotel Syracuse, NY Contact: Bill Phone: 315-432-1684

#### **LAUNDRIES**

Love Cleaners
Bay Shore, NY
Contact: Scott Singer
Phone: 631-665-1800

Specialty Cleansing Providence, RI Contact: John Fargnoli Phone: 401-861-4844

#### FIRE RESTORATION

CRDN Long Cleaners Miamisburg, OH Contact: Larry Long Phone: 937-866-4341

#### **HEALTHCARE**

Hebrew Home & Hospital West Hartford, CT Contact: Audrey/Scott Phone: 860-523-3965

Walnut Hill Care Center New Britain, CT Contact: Bill Dadlani Phone: 860-223-3617

#### **PRISONS**

State of Connecticut Bridgeport, CT Contact: Jay Harder Phone: 203-806-2267

Bedford Hills Correctional Bedford Hills, NY Contact: Vinnie 914-241-3100x3450

#### **FITNESS CENTERS**

Town Sports
New York, NY
Contact: Matt Alexander
315-729-7001

Hi Don,

This is what we *recommend* in Ecolab accounts with ozone systems. However, our Field Associates are using a wide variety of Ecolab products in ozone accounts with good success. We believe in a co-operative effort between the customer, the ozone company and Ecolab.

## **Ecolab Recommended Products, Formulas** and

#### **Dilution Rates**

1.Suds Cycle: Two new products have been added to the laundry program, specifically designed to provide optimum results in an ozone/reduced temperature laundry environment...Detergent Oz and Builder Oz. These products are designed to be injected together during the "suds" cycle. Detergent Oz and Builder Oz are specially formulated to perform in low wash temperatures along with an injection of ozone gas.

- 2. Bleach: A number of ozone companies are recommending the use of oxygen bleach only, while others insist on chlorine. Set your bleaching product according to the ozone company's recommendations. However, feedback from the field has indicated better performance with chlorine. If oxygen bleach is in use, and bleachable stains are an issue...try chlorine.
- Softener: The use of softener in the last rinse is optional.
   However, most ozone companies do not recommend it. Tests have indicated linen washed in an ozone environment may not require a fabric softener.
- Conditioner: We recommend a conditioning product be used in water with hardness levels over 4 gpg, and/or TDS levels over 100 ppm if results are unsatisfactory. Add 1-2 ounces [CWT] to the suds bath. If results are unsatisfactory due to high iron, add the conditioner to the bleach bath.

Sour: Increase your sour dilution rate by 1-2 ounces [CWT] in

Fax: (785) 296-3002

e-mail: kboc@kboc.state.ks.us website: www.accesskansas.org/kboc

## KANSAS BOARD OF COSMETOLOGY

KATHLEEN SEBELIUS, GOVERNOR

#### HOUSE COMMITTEE ON HEALTH AND HUMAN SERVICES

Presentation by Mary Lou Davis, Executive Director Wednesday, February 20, 2008

Madam Chair and Members of Committee:

The Kansas Board of Cosmetology has regulatory responsibility for cosmetology professions, body art professions and tanning facilities. This proposed legislation contains revisions for each of those above listed responsibilities.

#### Cosmetology - pages 1-16

In 1927 the legislature determined cosmetology practitioners be licensed to provide services and that the facilities in which these services were provided also be licensed and routinely inspected to ensure the health and safety of the consuming public. This mission to protect the consuming public is as vital today as it was in 1927.

The cosmetology professions include those practitioners licensed as cosmetologists (hair, skin and nails), manicurists (nail technology), estheticians (skin care) and electrologists (permanent hair removal by needle only). Currently the Board licenses approximately 25,000 individuals and over 3800 facilities. The Board also has regulatory authority for 34 cosmetology schools.

The initial revisions in this section includes language to more adequately define the practices of the cosmetology professions. For instance, on page one the word "temporary" is inserted when referring to hair removal. This change more clearly defines the practice of hair removal for cosmetology and esthetics, but it is a proactive means to inform the practitioner of their standard of practice.

After study and review by the Board – and in an effort to ensure quality education – the Board determined the law regarding the student-to-instructor ratio for cosmetology schools should be revised. Most often instruction is occurring in a theory classroom while advanced students are providing services for consumers on the practice floor. Current law states the student-to-instructor ration is one-to-25. The Board believes one instructor per 25 students is necessary in the theory classroom and one instructor to 25 students is necessary to adequately supervise the practice floor. This provision outlines this requirement.

Although there is an overall growth in the number of cosmetology professionals, the number of licensed estheticians has nearly doubled from 2004 (337 licensees) to 2007 (610 licensees). Consumers are driving this trend. And to meet the consumers desire for these services, new skin care techniques are constantly being introduced.

In 1962 cosmetology law was rewritten whereby instructional hours necessary for cosmetology licensure were increased from 1,000 clock hours to 1,500 clock hours. In 1995 the legislature enacted a separate licensure for esthetics which currently requires 650 instructional hours. This proposed legislation, before you today, would increase the instructional hours for esthetic practitioners from 650 to 1,000 clock hours. In a two-year methodical study of skin care and public health concerns, the Board determined increasing the instructional hours more adequately prepares the student and safeguards the public health when the licensee enters the workforce.

Health & Human Services Committee

Committee

Date: 2-20-08

Attachment:

Currently a licensure applicant is required to submit a physician's statement that the applicant is "free from infectious or contagious disease." At no time during the renewal process is the licensee required to submit a similar physician statement. The Board believes this requirement is unnecessary and places an additional expense on the licensure applicant.

Due to varying interpretations of K.S.A. 65-1908, the Board is seeking a revision in the disciplinary action options allowing the Board to issue a monetary fine as well as the ability to deny renewal of a "license, or revoke, suspend, censure, limit or condition a license." KSA 65-1908 does currently outline nine separate criteria for which the Board may take disciplinary action.

#### Tanning - Page 16

In 1993, the legislature enacted law regulating tanning facilities. Approximately 680 facilities are currently licensed by the Kansas Board of Cosmetology.

One revision is sought regarding the licensure of tanning facilities. The Board is seeking the ability to discipline tanning facility licensees in the same manner as for the cosmetology and body art professions and facilities.

Disciplinary action would include the ability to "deny, refuse to renew" a license in addition to the current law which states the Board may "revoke, cancel, suspend or place on probation" a facility license. This revision would also allow the Board to issue a monetary fine, "not in excess of \$1,000 against a licensee."

#### Body Art - Pages 17-26

The professions of body art – tattoo artists, body piercers and permanent cosmetic practitioners – and the facilities in which these services are provided came under the authority of the Board as the result of legislative action in 1998. Currently the Board licenses 133 body art practitioners and 69 facilities.

Much of the language included in this bill regarding body art is a reflection of current terminology. For example, the term permanent cosmetic technician is replaced with "cosmetic tattoo artist." Definitions have been added for clarification within the law itself.

Section 13 includes language prohibiting body scarification which is a trend more prevalent on the east and west coasts, but the Board believes language prohibiting said services should be included in Kansas body art law.

Body art applicants must attain training as outlined in law and regulation and must also successfully complete written and practical exams. Training is attained through an apprenticeship under direct supervision of a Board licensed trainer. The training revision included in the proposed legislation more clearly outlines the necessary training requirements. The language does eliminate the option whereby an individual may attain training in a licensed school.

Current regulation requires a continuing education requirement for renewal. Although renewals are annual, 15 hours of CE is currently required each third year. With current health risks, the Board believes it is necessary each body art practitioner attain "five hours of continuing education, approved by the board, in infection control and blood-borne pathogens" for each annual renewal.

Other revisions include language that all body art fees are non-refundable, delinquency licensure periods are more clearly outlined and the necessary CE for delinquency renewal is included in the revisions. Additionally disciplinary action revisions would provide consistency among all professions regulated by the Board including Board review of any body art applicant who has been convicted of a felony.

Madam Chair, the Board requests review of this proposed legislation and favorable action.



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February 20, 2008

To Kansas Legislature,

We support the request to amend the required hours for the esthetics branch of cosmetology. We believe that the additional hours recommended will allow us to better prepare our students for current job market demands. We also support the recommended definition between classroom instructor to student ratio and clinic instructor to student ratio. This will be in both the best interest and safety of the public and the students.

Thank You,

Malinda McHenry Director of Admissions

Health & Human Services Committee

Date: 2-20-08

Attachment: 5