

SB

145

HFIN

FILE

HOUSE COMMITTEE REPORT

(11)

Date Referred: April 24, 1993

FURTHER REFERRALS:

Date of Committee Action: 4/27/93

The FINANCE Committee considered:

CSSB 145(STA) am

CS FOR SENATE BILL NO. 145(STA) am

POSITION OF STATE MEDICAL EXAMINER

"An Act establishing the position of state medical examiner; and relating to preparation of death certificates."

RECOMMENDATIONS: [] the same title
 be replaced with _____ [] a new title

[] have attached amendments(s)

[X] do pass

[] do not pass

[] no recommendations

[] individual recommendations

[] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(S): (Dept)

APPROVES PREVIOUS: (Dept/Date)

[] fiscal impact _____

1 [X] fiscal note(s) SFC 4/20/93

[] zero fiscal note _____

Count 4/7/93
 2 [X] zero fiscal note(s) DPS 4/7/93

SIGNING <u>DO PASS</u>	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
<i>Ed MacArthur</i> <u>MacArthur</u>					
<i>Donald J. Larson</i> <u>Larson</u>	X				
<i>Mark Hanley</i> <u>HANLEY</u>	X				
<i>Ribe Navarre</i> <u>Navarre</u>	X				
<i>Larry Martin</i> <u>MARTIN</u>	X				
<i>Jan Grussendorf</i> <u>Grussendorf</u>	X	<i>Sean Parnell</i> <u>Parnell</u>		X	
<i>Mr. Theriault</i>	X				

Ed MacArthur
 CHAIRMAN'S SIGNATURE

FISCAL NOTE

STATE OF ALASKA
1993 LEGISLATIVE SESSION

BILL NO: SB 145

Revision Date: 4/2/93 Dept. Affected: Public Safety
 Title: "An act establishing the position
of state medical examiner" BRU: DPS Statewide Support
 Component: Laboratory Services
 Sponsor: Senate HESS
 Requestor: Senate STA COMPONENT SERIAL NO. 527

EXPENDITURES/REVENUES: (Thousands of Dollars) (inflation not included)

OPERATING	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE FUND SOURCE:						
----------------------	--	--	--	--	--	--

FUNDING: (Thousanus of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year (FY 93) impact: \$ 0.0

ANALYSIS: (Attach a separate page if necessary.)

The Department's original fiscal note was in error, due to miscommunication. Passage of this bill will help to contain the growing costs for services provided by the Crime Lab. See attached budget amendment.

Prepared By: Francis C. Allan Phone: 269-5291

Division: Alaska State Troopers Date: 4/02/93

Approved by Commissioner:  Date: 4/02/93

Agency: Richard L. Burton, Dept. of Public Safety

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

For further distribution information call the Governor's Legislative Office

AS 12.65.025 assigns the responsibility for designating facilities at which autopsies are performed to the Commissioner of the Department of Health and Social Services. AS 12.65.040 authorizes the coroner to inquire into the cause of death. The Department of Public Safety's Crime Laboratory receives bodies for autopsy but has no authority to question or screen referrals from the coroner. Additionally, the Crime Laboratory has never been permanently funded to perform or assist in a significant number of autopsies.

Due to the tremendous growth in the number of autopsies, resources including forensic professionals are being diverted to assist in autopsies to such an extent that approximately 10% of the Labs resources are now allocated to autopsy work.

The resulting impact limits the major forensic focus of the lab which is to provide forensic support to police in the processing of cases involving latent fingerprints (21,500), criminalistics (6,900), narcotics (11,000), crime scene investigations, administering the breath alcohol program and perform drawings and facial reconstructions.

During the first 6 months of FY 93, 301 autopsies were performed at the Public Safety Crime Laboratory. Of the total \$2,000.5 authorized, an estimated \$225.2 was spent for autopsy support. With the expectation of handling over 800 bodies during FY 93, the Laboratory cannot handle this volume of work with only two autopsy assistants or afford the overtime to receive these remains after hours. During FY 93, other Laboratory caseload has increased to a level where current laboratory personnel can no longer handle this increased workload.

GBA

ADDITIONAL
EXPLANATION
FORM

AGENCY Department of Public Safety

BRU DPS Statewide Support

COMPONENT Laboratory Services

Page 2 of 2

Revised Date

FY 94

FISCAL NOTE

No. 4

Bill Version: CSSB 145 (STA)

(S) Publish Date: 4-20-93

STATE OF ALASKA
1993 LEGISLATIVE SESSION

Revision Date: 4/20/93 Dept. Affected: Health and Social Service
 Title: Establish State Medical Examiner Position BRU: State Health Services
 and Preparation of Death Certificates Component: Post Mortem Examinations
 Sponsor: SHES
 Requestor: SFIN COMPONENT SERIAL NO. #293

Expenditures/Revenues: (Thousands of Dollars)

	FY94	FY95	FY96	FY97	FY98	FY99
OPERATING						
PERSONAL SERVICES	35.6	35.6	35.6	35.6	35.6	35.6
TRAVEL						
CONTRACTUAL	53.4	53.4	53.4	53.4	53.4	53.4
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	89.0	89.0	89.0	89.0	89.0	89.0

CAPITAL						
----------------	--	--	--	--	--	--

REVENUE FUND SOURCE						
----------------------------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	89.0	89.0	89.0	89.0	89.0	89.0
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
TOTAL						

POSITIONS:

FULL-TIME	1.0	1.0	1.0	1.0	1.0	1.0
PART-TIME						
TEMPORARY						

Estimate of current year (FY93) impact \$ none

ANALYSIS: (Attach a separate page if necessary)

Line 100						
Clerk IV	rg 9	GGU	ANCH	PFT		35.6
Line 300						
Post Mortem Examinations (at \$1098 each)						53.4

Prepared by: Senate Finance Committee Phone: 465-4993
 Division: _____ Date: 4/20/93
 Approved by Commissioner: [Signature] Date: 4/20/93
 Agency: _____

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
 For further distribution information call the Governor's Legislative Office

FISCAL NOTE

STATE OF ALASKA
1993 LEGISLATIVE SESSION

Bill No. SB 145

Revision Date: _____ Department Affected: Alaska Court System
 Title: An Act establishing the position of State BRU: Trial Courts
medical examiner Components: _____
 Sponsor: Senate HESS
 Requestor: _____ COMPONENT SERIAL NO. 768

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS & CLAIMS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL						
REVENUE						
FUND SOURCE:						

FUNDING: (Thousands of Dollars)

1002 FEDERAL RECEIPTS						
1003 GF MATCH						
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/PROGRAM RECEIPTS						
1006 GF/MHTIA						
OTHER						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year (FY 93) impact: None

ANALYSIS: (Attach a separate page if necessary)
No fiscal impact.

Prepared by: C. S. Christensen III, Staff Counsel *CSC* Phone: 264-8228
 Division: Alaska Court System Date: 03/11/93
 Approved by: Arthur H. Snowden, II, Administrative Director *AHS* Date: 03/11/93
 Agency: Alaska Court System

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

POSITION PAPER

SENATE BILL NO. 145

A Bill for an Act entitled: "An Act establishing the position of state medical examiner; and relating to preparation of death certificates."

SB 145 establishes the position of state medical examiner within the Department of Health and Social Services. It provides that coroners may request the state medical examiner, under regulations to be adopted by the department, to conduct an external and/or internal examination of the body and to take other appropriate actions to determine the cause of death and to certify it.

BACKGROUND

The existing system for the medical investigation of deaths required to be reported to coroners in Alaska involves four agencies: the Departments of Public Safety, Health and Social Services and Law, and the Alaska Court System.

AS 12.65 specifies the types of deaths which must be reported to coroners and gives coroners the responsibility for establishing the cause of death in these cases. In some of these reported cases, a physician is willing to certify the cause of death and the coroner may determine that no further action is required. In other cases, a physician is not willing to certify the cause or the circumstances of death are such that the coroner may decide to require a post mortem examination which, under current conditions, usually includes an autopsy. Physicians who conduct post mortem examinations work under a fee for service arrangement. Coroners certify that the physician's service has been rendered and DHSS pays the bills. In addition to physician fees, there are also costs for laboratory services, ground or air transportation of bodies for examination and fees payable to funeral homes for the use of facilities and other services provided. The Department of Public Safety provides facilities and support for certain post mortem examinations conducted at its Anchorage Crime Lab facility.

Historically, the costs of the program for medical investigations of death have been significantly underfunded. Supplementals or revised budget requests have been required each year.

POSITION PAPER

STATE OF ALASKA * DEPARTMENT OF HEALTH & SOCIAL SERVICES

	<u>Orig Auth</u>	<u>RP/SUPP</u>	<u>Final Auth</u>	<u>Actuals</u>
FY88	463.4	180.6	644.0	618.3
FY89	463.4	333.2	796.6	767.3
FY90	463.4	310.0	773.4	754.5
FY91	453.4	346.6	810.0	809.1
FY92	696.0	102.0	798.0	796.2
FY93	696.0	229.6 (Req)		

The marked projected increase in FY93 is accounted for by an estimated 11 percent increase in the number of autopsies performed and a higher cost per unit of service.

Also historically, Alaska has had a higher rate of autopsy examinations than other states. Contributory factors include the relatively young age of the population and the high incidence of violent deaths, both accidental and deliberate.

DISCUSSION

The purpose of this bill is to control escalating costs through improving the decision making process for selection of cases to be autopsied. The only way to make significant changes in the rate of cost increases is to limit the number of autopsies and associated transportation expenditures. However, it is absolutely essential that these changes be achieved while simultaneously guaranteeing that autopsies and other types of post mortem examinations be performed where they are necessary for the purposes of law enforcement and public health.

It is anticipated that the number of autopsies can be reduced by focusing on deaths which are classified as accidental or natural. In FY 1991, Alaska autopsied 84 percent of the accidental and 22 percent of the natural death cases reported while the national average for these two categories is 50 percent and 11 percent respectively. In FY 1992, 538 or 68.7 percent of autopsies performed related to accidental or natural deaths at a cost of \$546.6.

There are two critical cost-related issues which can be addressed by a state medical examiner:

- 1) which cases require full autopsies or other post mortem examinations, including toxicology screens; and
- 2) whether transportation of a body is necessary, and if so to what destination. E.g., can the drawing of body fluids for toxicology screens be done locally or at a regional facility rather than in Anchorage?

The state medical examiner will provide consultation to the coroners and law enforcement agencies on forensic medical considerations in death scene investigations, on

POSITION PAPER

STATE OF ALASKA * DEPARTMENT OF HEALTH & SOCIAL SERVICES

interpretation of decedents' medical histories, and on the interpretation of the findings of external body examinations. He or she will also perform about 125 autopsies per year while other required autopsies will continue to be done by contract pathologists. A quality control program will also be established. The state medical examiner will also provide training and monitoring of the work of physicians who are appointed as medical examiners in the judicial districts. Once these activities are in place and functioning, it should be possible to contain the costs of the program.

POSITION

The Department of Health and Social Services strongly endorses SB 145. Discussions have been held with the Court System and the Departments of Law and Public Safety over a period of years to try to arrive at a realistic cost containment strategy. While the Court System has attempted to limit the proportion of cases sent for autopsy examination, significant changes have not occurred. We believe that the establishment of a state medical examiner program will ensure that appropriate post mortem examinations are performed when necessary for reasons of public safety or public health, while also providing the department with the tools it needs to control escalating program costs.

Recommended by:

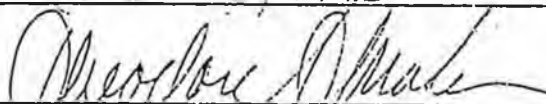


Peter M. Nakamura, MD, MPH
Director, Division of Public Health

Date:

March 10, 1993

Approved by:



Theodore A. Mala, MD, MPH
Commissioner, Department of Health and Social Services

Date:

10 March 1993

Alaska State Legislature

Senator Steve Rieger, Chair
Senator Bert Sharp, Vice Chair
Senator Loren Leman
Senator Mike Miller
Senator Jim Duncan
Senator Johnny Ellis
Senator Judith Salo



State Capitol
Room 516
Juneau, Alaska 99801
(907) 465-3762

Senate Committee on Health, Education and Social Services

Sponsor Statement on:

SB 145 "An Act establishing the position of state medical examiner; and relating to preparation of death certificates."

Senate Bill 145 is a Senate HESS bill which has the support of the Departments of Public Safety and Health and Social Services and the Alaska Court System. Currently, a coroner determines whether post mortem examinations are necessary, physicians conduct the post mortem examinations under a fee for service arrangement, and the Department of Health and Social Services pays for the exams and associated costs.

Senate Bill 145 creates a new position of state medical examiner in the Department of Health and Social Services. It provides that coroners may request the state medical examiner, under regulations to be adopted by the department, to conduct an external and/or internal examination of the body and to take other appropriate actions to determine the cause of death and to certify it.

It is the expectation of the Committee that a state medical examiner will be able to reduce the total number of post mortem exams performed by eliminating unnecessary exams.

BILL NO: SB 145

DATE: March 18, 1993

TITLE: "An Act establishing the position of state medical examiner. . ."

CONTACT: C.E. Swackhammer
Deputy Commissioner
465-4322

RECEIVED

SB 145 establishes the position of state medical examiner within the Department of Health and Social Services. It provides that coroners may request the state medical examiner, under regulations to be adopted by the Department, to conduct an external and/or internal examination of the body and to take other appropriate actions to determine the cause of death and to certify it.

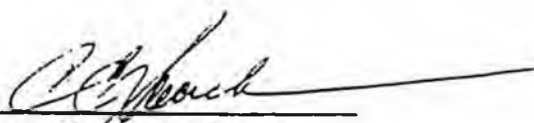
Since 1988, DPS autopsy costs have escalated from 0 to \$225.0 projected for FY93. A state medical examiner can assist in helping to reduce the growth of these costs by being the central point of contact to coroners and law enforcement agencies on forensic medical considerations in death scene investigations, on interpretation of decedents' medical histories, on the interpretation of the findings of external examinations so that a decision can be made to determine:

Which cases require full autopsies or other post mortem examinations and including toxicology screens;

Whether the transportation of the body for post mortem examination is necessary; and if so to what location can autopsy/toxicology screens be performed.

A state medical examiner program will help ensure that appropriate post mortem examinations are performed when necessary for reasons of public safety or public health, while also providing the department with a mechanism to help contain growth in autopsy costs. A state medical examiner will also establish a quality control program to provide training and monitoring of the work of physicians who are appointed as medical examiners in the judicial districts.

The Department of Public Safety strongly endorses SB 145.


Richard L. Burton
Commissioner

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH

P.O. BOX 110610
JUNEAU, ALASKA 99811-0610
PHONE: (907) 465-3090

March 30, 1993

Honorable Steve Rieger
Room 516
State Capital

Dear Senator Rieger:

The department projects the following costs associated with the Post Mortem Program for FY 94. Our latest projections anticipate that the program will have to pay for 524 post mortem exams in FY 94. This new projection is down from our original projection of 880 as a result of more current data. We have prepared an amended fiscal note based upon this new projection. Our analysis is also based upon an average cost of \$1,098.00 per post mortem examination. This average was discussed in the original fiscal note and is still our best estimate of actual costs after all fee increases have been realized in the system.

Table one shows the projected cost of 824 post mortem exams under the existing system is \$905,000. This compares with \$825,000 if SB 145 passes and a State Medical Examiner (ME) is hired.

TABLE 1

	Without Medical Examiner	With Medical Examiner
Personal Services		\$191.0
Travel		\$ 25.0
Contractual		
post mortem exams(824@\$1,098)	\$905.0	
post mortem exams(500@\$1,098)		\$549.0
Toxicological panels(100@\$250)		\$ 25.0
Office and phones		\$ 5.0
Supplies		\$ 5.0
Equipment		\$ 25.0

Total Estimated Cost	\$905.00	\$825.00

Estimated Savings With Medical Examiner \$80.0

This first year savings of approximately \$80,000 occurs because the ME is expected to do 110 autopsies per year along with other administrative duties and court appearances. The analysis further assumes that approximately 150 deaths will be certified based upon

Senator Reiger

-2-

a death investigation alone and 100 can be certified on the basis of a toxicology panel alone at a cost of \$250.

Savings in future years will depend primarily upon the rate of increase in the cost of contracted services. However, with the proposed Medical Examiner system in place these services will be under the administrative and financial control of the Department.

Truly Yours,

A handwritten signature in cursive script, reading "Peter M. Nakamura". The signature is written in dark ink and is positioned above the typed name and title.

Peter M. Nakamura MD, MPH
Director

SCIENTIFIC CRIME DETECTION LABORATORY

MISSION

To provide forensic support for all law enforcement agencies and to help solve serious crimes anywhere in Alaska.

STATUTORY AUTHORITY

AS 18.65.050
AS 18.65.090
AS 44.41.020

STAFFING

All crime laboratory staff are civilian employees. The breakdown of staff assignments is:

Administrative Support	5
Breath Alcohol	2
Controlled Substances / Toxicology	
Computer / and Evidence	7
Criminalistics	6
<u>Latent Fingerprint / Autopsy / Maint.</u>	<u>8</u>
Total	28*

*no positions federally funded

PROGRAM OVERVIEW

The Scientific Crime Detection Laboratory provides forensic services with scientists specialized in criminalistics (toxicology, serology, chemical analysis) and latent fingerprint examiners. Services include examination and analysis of evidence in criminal cases and assistance with crime scene investigations. Laboratory staff testify in court on the results of evidence testing. Training is provided to law enforcement officers in proper evidence collection and preservation. The Crime Lab provides autopsy space, personnel, and evidentiary custody of remains submitted by the coroner/magistrate in cases where criminal activity is suspected or identity needs to be established.

Figure 16: Laboratory Cases Submitted by Agency

Agency	Cases	%
City Police	1415	45%
AST	908	29%
Drug Units	496	16%
Federal Agencies	92	3%
FWP	43	1%
Coroners/Magistrates	42	1%
Fire Protection	39	1%
Airport Police	30	1%
Dept. of Corrections	20	1%
Others	22	1%
Parks	1	<1%

The Crime Lab maintains the statewide breath alcohol program which tests instruments used for evidence in Driving While Intoxicated (DWI) cases. The Intoximeter program, which is essential for successful prosecution of DWI cases, has never received funding for the full-time position needed for equipment repairs, supervisor certification, etc. Federal funds are providing a position through at least FY 1993, but may not do so in the future operation of the breath alcohol program is a State responsibility. The Governor's budget includes an increment to reflect the federally-funded position and anticipates the continued support of this effort by the federal government, although this is not certain at this time.

Figure 17: Other Laboratory Support for Law Enforcement

Court Appearances	178
Crime Scenes Investigated	39
Laboratory Tours	99

CONTROLLED SUBSTANCES / TOXICOLOGY / COMPUTER / EVIDENCE SECTION

The Drug / Toxicology Section provides controlled substance and toxicology analysis, maintenance of various Laboratory databases and computer equipment; and receipt, maintenance of chain of custody, and return of evidence from criminal cases. The Drug/Toxicology Section noted that during 1992, marijuana was the most-received drug, with cocaine second, and cocaine base (crack) third.

Figure 18: 1992 Activity for the Drug / Toxicology Section

DRUG cases	1301
Items analyzed	3453
Analyses performed	12279
Reports issued	1335
Case backlog	175
TOXICOLOGY cases	215
Items analyzed	226
Analyses performed	471
Reports issued	204
Case backlog	13

CRIMINALISTICS SECTION

The Criminalistics Section provides analysis of trace evidence, firearm / toolmark, serology, footwear / tiretrack, arson, wildlife, and crime scene investigation.

LATENT FINGERPRINT SECTION

The Latent Fingerprint Section provides fingerprint analysis, photography, composite drawing, facial reconstruction, crime scene investigation, autopsy support and laboratory maintenance.

STATEWIDE BREATH ALCOHOL PROGRAM:

The Scientific Crime Detection Laboratory maintains the Statewide Breath Alcohol Testing Program with 1,000 certified breath test

Figure 19: 1992 Activity of the Criminalistics Section

CRIMINALISTICS cases	710
Items analyzed	2987
Analyses performed	7064
Reports issued	523
Case backlog	119
CRIMINALISTICS cases by type of offense:	
Arson	42
Firearm/Toolmark	136
Fish/Wildlife	16
Footwear/Tiretrack	33
Questioned Documents	5
Serology	231
Skeletal Remains	13
Trace Evidence	217
Other	37

Village Public Safety Officers
grade schools, middle schools, and high schools statewide

DNA TESTING IN ALASKA

The Serology Section of the Alaska State Crime Laboratory is now offering a form of DNA testing known as DQ α typing. This new technique makes use of the Polymerase Chain Reaction (PCR) to amplify and produce millions of copies of a specific region of the DQ α gene. This allows extremely small or partially degraded samples of blood, semen, or tissue to be typed. The technique is so sensitive that in a recent homicide case, the Laboratory successfully determined the DQ α type from the root of a single foreign hair found at the scene. This was compared with and found to match the suspect's DQ α type. There are 21 different DQ α types of which the least common occurs in approximately 1% of the Caucasian population and the most common is approximately 11%. While this is not as discriminating as the DNA typing being performed at the FBI Laboratory, it is much more sensitive and results can be obtained in only eight hours as opposed to three months for traditional DNA typing. Samples can be screened initially by DQ α typing and those not excluded can (sample size permitting) still be forwarded to the FBI Laboratory for further characterization.

operators, 100 certified breath test supervisors, and 70 Intoximeter 3000 breath test instruments. The Breath Alcohol Testing Program also maintains statistics on every DWI breath test conducted in Alaska. Some of these results are presented in figures 23 and 24 at the end of this section.

Figure 20: 1992 Activity of the Latent Fingerprint Section

LATENT cases received	946
Items analyzed for latent prints	10382
Latent prints identified	678
ID through AAFIS	41
Reports issued	1291
Case backlog	103
Composites (13 cases)	18
Facial Reconstructions (4 cases)	1
Autopsies assisted	521

NATIONAL RECOGNITION

The Crime Lab encourages the scientific staff to conduct research projects in Laboratory topics, to present at professional organizations, and to write for professional journals. The following national recognition was received by Crime Lab staff in 1992:

- The Latent Fingerprint Section received a federal grant for \$88,576.00 from the Department of Justice, Forensic Research Division, National Institute of Justice, to study the feasibility of combining cyanoacrylate fuming characteristics with laser dye luminescence in latent impression enhancement.
- The Latent Fingerprint Section supervisor has been appointed to the International Association for Identification Subcommittee on AFIS to study the effects live scan capabilities will have on the success of latent comparisons and AFIS Systems.
- Presentations at National Meeting
 1. "Expert Witnesses Who Give Questionable Courtroom Testimony," presented at the 23rd Annual Association of Firearm and Toolmark Examiners Training Seminar, Miami, Florida, April 1992 (R. Shem, BS).
 2. "Dental Stone Casting of Snow Impressions" and "The Detection and Comparison of Luminol Enhanced Latent

TRAINING:

The Scientific Crime Detection Laboratory provides training to law enforcement and to the public. In 1992, training was offered to the following agencies and groups:

- Anchorage Police Department
- Department of Corrections
- DPS Academy classes
- Fish & Wildlife Protection
- National Park Rangers
- Statewide Breath Alcohol Program

Figure 21: Scientific Crime Detection Laboratory Activity, 01/01/92 to 12/31/92

	CASES	Latent Prints	Criminalistics	Drugs	Toxicology	Composite Drawings	Crime Scenes	Vehicle Exams	Facial Reconstruction	Skeletal Remains	Questioned Documents	Autopsy
Submitted by Agencies	3118	1291	523	1335	204	14	1	0	11	0	1	N/A
Analyses Required	3751	946	710	1301	215	13	19	11	0	10	5	521
Reports Issued	3380	1291	523	1335	204	14	11	0	1	0	1	N/A

Footwear Impressions," presented at the 77th Annual International Association for Identification Educational Conference, Atlantic City, New Jersey, July 1992 (C. Beheim, BS).

3. "Identification of Furbearer Blood in a Cooperative State - Federal Investigation," "Physical Matching a Skull and Hide to a Poached Bear Carcass," and "A Practical Digital Imaging System for Evidence Documentation and Analysis," at the Northwest Association of Forensic Scientists Fall Meeting, Portland, Oregon, October 1992 (J. Wolfe, MS)
- Publications (Authored by R. Shem, BS.)
 1. Association of Firearm and Toolmark Examiners Journal:
 - a. "Patina Patterns on Brass Cartridge Cases"
 - b. "Factory Installed Trace Material on Bullets and Cartridge Cases"
 - c. "Preserving Trace Evidence from Blood Extracted Garments"
 2. American Journal of Forensic Medicine and Pathology:

"Wounds Caused by Contact with Muzzle-Life Relief Ports (Mag-Na-Port)"

**CRIME LAB PERSONNEL MEMBERSHIP
IN PROFESSIONAL ORGANIZATIONS**

Crime Laboratory personnel are members of the following professional organizations:

- Alaska Chiefs of Police Association (ACOPA)
- Alaska Peace Officers Association (APOA)
- American Academy of Forensic Sciences (AAFS)
- American Chemical Society (ACS)
- American Society of Crime Lab. Directors (ASCLD)
- Association of Firearm and Toolmark Examiners (AFTE)
- Forensic Photographers Association (FPA)
- International Association for Identification (IAI)
- Midwest Association of Forensic Scientists (MAFS)
- National Safety Council Committee on Alcohol & Drugs
- Northwest Association of Forensic Scientists (NWAFS)
- Southwest Association of Forensic Scientists (SWAFS)

Figure 22: Backlog of Crime Lab cases has been reduced 54% from December 1991 to December 1992.

	Dec '91	Dec '92	Change
Latents	379	103	-73%
Drugs	353	175	-50%
Toxicology	13	13	0%
General Criminalistics	6	5	-17%
Arson	3	2	-33%
Skeletal Remains	6	3	-50%
Firearm / Toolmark	46	39	-15%
Wildlife	12	3	-75%
Foot / Tire Track	7	4	-43%
Serology	44	64	+45%
Trace	20	2	-90%
Total Backlog	889	413	-54%

NOTEWORTHY 1992 CASES

- A. During the course of an investigation of a brutal sexual assault/homicide, the Laboratory was able to provide troopers with key information which led to the arrest of a suspect. Foreign head, pubic, and body hairs recovered from the victim were examined at the Lab. Two early suspects were eliminated as a result of this exam. These hairs were later associated with an individual with a prior arrest record for sexual assault. Examination of the suspect's watch revealed microscopic traces of blood. Subsequent DNA analysis of this blood resulted in a DQα type matching the victim. Semen and several foreign hair roots located on the victim's underpants were found to exhibit the same DNA type as that of the suspect.
- B. Thorne Bay Homicide: After a several-hour drinking session in Thorne Bay, the suspect and his female companion became embroiled in an argument. In an effort to intervene on behalf of the female, the victim become involved in the dispute. The argument escalated to the point that the suspect retrieved a 270 Winchester caliber rifle and took a shot at, but missed, the victim. Sometime later, as the victim attempted to leave the residence in his pickup truck, the suspect fired two more shots, killing the victim. A subsequent crime scene search uncovered some interesting evidence; the suspect apparently was a reloader as one of the cartridge cases recovered was a 30-06 caliber cartridge converted to fit the suspect's 270 caliber rifle. Additionally, it was noted that the victim's denim jacket possessed on its back a soot-like pattern around the bullet entrance hole. It was discovered, through Laboratory testing, that this soot-like material was vaporous lead. This lead was produced as the bullet's soft lead nose impacted the sheet metal of the pickup. Both of these somewhat unique occurrences were of such forensic interest that they are the subjects of two scientific articles that are scheduled to appear in the Association of Firearm and Toolmark Examiners Journal in 1993.
- C. Fairbanks Police Department flew a 67-year-old rape victim to the Crime Laboratory in Anchorage for a composite interview with the Laboratory's forensic artist. A composite was generated in less than an hour. The victim returned to Fairbanks with composite drawing in hand. Fairbanks P.D. ran the composite drawing in the local newspaper. A probation officer called advising Fairbanks P.D. of a suspect which matched the appearance of the composite drawing. The suspect was interviewed and immediately confessed.
- D. A deceased individual from Naknek, believed by local law enforcement officers to be an alcohol-related death, arrived at Crime Lab for autopsy. No foul play was suspected. Autopsy revealed the deceased had been stabbed, thus triggering a homicide investigation.
- E. Key evidence was presented by the Crime Lab at the trial of a Ketchikan woman charged with murdering her common-law husband whose decomposed body was found under a tarp in their

front yard. During a search of the couple's residence, a large bloodstain was found soaked through a foam cushion on the living room couch. The stain was hidden from view by the seat cover which had been washed free of blood and replaced. It was detected only after luminol, an extremely sensitive presumptive test for blood, was applied to the surfaces of the living room.

Figure 23: Number of breath alcohol (BrAC) tests conducted by hour of day for agencies equipped with advanced model test instruments capable of reporting performance and test data to Crime Lab electronically.

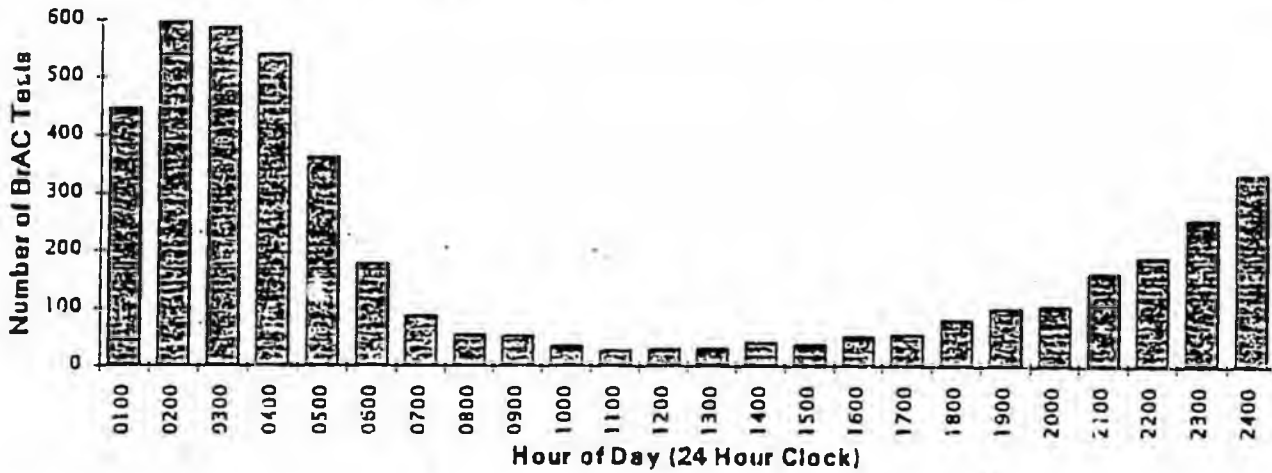
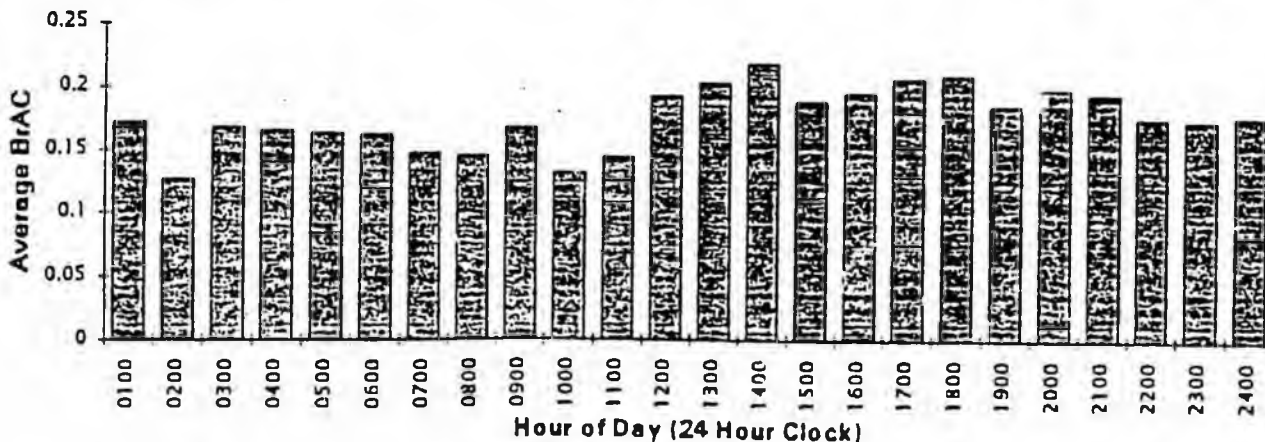
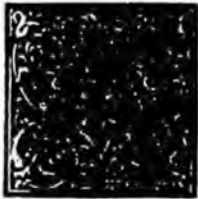


Figure 24: Average breath alcohol level measured by hour of day for agencies equipped with advanced model test instruments capable of reporting performance and test data to Crime Lab electronically.





ALASKA STATE MEDICAL ASSOCIATION

4107 Laurel Street • Anchorage, Alaska 99508-5334 • (907) 562-2662

RECEIVED MAR 31 1993

March 30, 1993

Senator Steve Reiger
Alaska State Senate
State Capitol
Interdepartmental Mail Stop: 3100
Juneau, AK 99801-1182

Dear Senator Reiger:

The Legislative Affairs Committee of the Alaska State Medical Association recently reviewed Senate Bill 145 regarding the position of a State Medical Examiner. After a lengthy discussion we feel it necessary to oppose this bill. It will not represent an improvement over the current system. It was also felt that this would be a more expensive means of dealing with unattended deaths in Alaska. I would encourage you to oppose this bill. If you have any questions regarding this, please feel free to contact me.

Sincerely yours,

Donald R. Lehmann, M.D., A.B.F.P.
Chairman, Legislative Affairs Committee
Alaska State Medical Association

DRL:bj