

**Virginia Department of Health Data Standards**  
**July 30, 2009**

- VDH does not create standards for others.
- VDH uses national standards, where they exist, and frequently uses standards required by funders, like CDC and EPA, commonly as part of a GOTS application
- VDH does have internal standards for custom development involving common elements such as:
  - Name
  - Address
  - Telephone number
  - SSN
  - Dates
  - Table naming and other database naming standards
- VDH currently has 119 applications in production and
- 20 critical applications

Application	Work Unit	Notes
VENIS	EH	Environmental system for restaurant inspection, wells, septic, etc.
Oracle - EMS Trauma Registry	EMS	Tracks medical reports on each patient transported to an ER by ambulance (Replacement for PPCR below)
Oracle - Prehospital Patient Care Rep	EMS	Tracks medical reports on each patient transported to an ER by ambulance
Oracle - Rescue Squad Assistance Fund	EMS	Tracks grants to local EMS providers.
Strategic National Stockpile	EP&R	Tracks federal drugs provided during an emergency
Volunteer Management	EP&R	Registers medical volunteers for deployment in an emergency
Vaccine Registry (VIIS)	EPI	Statewide immunization registry.
ADAP (@ VCU)	EPI (DDP)	Access database is used to collect AIDS Drug Assistance Program (ADAP) client level data. Data sent to the Health Resources and Services Administration.
VaCRS (@ VCU)	EPI (DDP)	Web-based system is used to collect HIV client-level case management data. Data sent to the Health Resources and Services Administration (HRSA).
ESSENCE	EPI (DSI)	Syndromic surveillance system. Receives and analyzes daily data from hospital ERs to detect emerging patterns of disease syndromes. Accessed by DSI and District staff.
NEDSS	EPI (DSI)	A CDC developed application for tracking reports of notifiable diagnoses.
Cancer Registry	OFHS	Central Office application for tracking and reporting cancer.
VISITS	OFHS	Birth defects tracking
WICNet	OFHS	Federal nutrition program
Financial & Admin System (F&A)	OIM	Administrative support and front end to CARS. Includes Web F&A
HAN	OIM	Alerting system for medical providers.

WebVISION	OIM	Patient management system for clinics
Health Statistics (Mainframe)	VR	Vital statistics data (in process of move off mainframe)
Marriages & Divorces (Minnie)	VR	Production system to track marriages and divorces.
Vital (Vital-Beta2)	VR	Vital records production system

**“Health related”**

Application	Work Unit
Oracle - EMS Trauma Registry	EMS
Vaccine Registry (VIIS)	EPI
ESSENCE	EPI (DSI)
NEDSS	EPI (DSI)
Cancer Registry	OFHS
WICNet	OFHS
WebVISION	OIM
Birth (Vital above)	VR
Death (Under development)	VR

- Trauma:
  - Uses the NEMESIS XML NHTSA V2.2.1 standards
  - 400+ standards
  - [www.nemesis.org](http://www.nemesis.org)
- VIIS
  - Developed in Wisconsin (WIR) under a CDC grant
  - 20 states in cooperative maintaining and improving the WIR system
  - SNOMED (Systematized Nomenclature of Medicine -- Clinical Terms)
  - NIP table values (National Immunization Program)
  - CPT 4
  - CVX - vaccine groups
  - Race Codes and Ethnicity Codes are based on CDC's HISSB from the U.S. Office of Management and Budget (OMB) and the U.S. Bureau of the Census (BC) - as with other VDH applications  
[http://www.cdc.gov/nedss/datamodels/intro\\_race\\_ethnicity.pdf](http://www.cdc.gov/nedss/datamodels/intro_race_ethnicity.pdf)
  - MVX - vaccine manufacturer
  - Logical Observation Identifiers Names and Codes (LOINC®)
  - Federal Information Processing Standard (FIPS)
  - HL7 v2.3.1 and 2.4
  - Implementation guide for HL7 data receipt
  - Can receive flat files written to our file format
- ESSENCE
  - DARPA at JH APL
- NEDSS
  - CDC vocabulary set
- Cancer Registry
  - NAACCR Data Standards for Cancer Registries
- WICNet

- USDA
- Crossroads Consortium
- EBT
- WebVISION
  - CPT
  - ICD-9
  - NDC
  - EDI 837
- Vital Records
  - NCHS (CDC) 2003

**Appendix:**

Element	Scoring
Availability	Amount of uptime that is acceptable: (1) Low - occasional use systems, (2) Medium, (3) High, and (4) Highest - nearly always available
Sensitivity	What kind of data: (1) Public, (2) Internal, (3) Confidential, and (4) Secret (VDH does not currently house any secret data).
Impact	Importance to the business: (1) Routine (simple administrative functions, manual options exist), (2) Important (used for day-to-day operations, manual process difficult to implement, but possible) (3) Critical (used for day-to-day operations, manual processes very difficult and unlikely to be used), and (4) Vital (necessary for operations and no manual options exist)
Risk	Overall Internet risk: (1) Firewall protected, (2) Internet facing, and (3) Vendor hosted
Scope	How much of the agency is dependent upon the application: (1) Minor, few employees, (2) Division, (3) Office/district, and (4) Enterprise

**Determination of "Sensitive Systems"**

- Scope = 4 and Sensitivity = 3 and Impact = 2 to 4, or  
 Scope = 4 and Risk = 3 and Sensitivity = 2 to 4, or  
 Scope = 4 and Impact = 3 to 4, or  
 Scope = 3 and Sensitivity = 3 to 4 and Impact = 4