

Index

- 911/FMS data, 59
- Absenteeism, 63–64, 104
- Access control, 134, 241, 245, 308, 311, 331–332
- Accuracy, 52, 86, 147, 274, 386, 407, 414–415
- Aeroallergens, 71–72
- AIMC, 448–449
- Air quality, 43, 60, 72, 77, 273, 284, 319, 333, 359
- Alarm rates, 166, 183, 185
- Algorithm, 27–28, 30, 44–45, 48, 50, 58–59, 66, 122, 144, 146–147, 150–155, 158, 165–167, 183, 188–189, 193, 195–198, 213–214, 216–220, 222, 224, 226, 240–241, 269, 271–273, 282, 286, 289, 291, 293, 310, 312, 314–315, 318–328, 330, 339–340, 342, 345, 359, 361–362, 376, 378–379, 403–406, 408, 413–415, 419–421, 448, 452–454
- American Medical Informatics Association, 435, 437
- AMOC curve, 413–414, 419
- Analytic process, 143, 193, 452, 454
- ANCR system, 289
- Animal, 9, 12, 15, 21, 26, 32, 70, 74, 101–102, 272, 455
- Anomaly, 27–28, 44, 52, 71, 111, 149, 151–152, 163, 172, 183, 195, 216, 218–220, 223, 227, 230, 240–241, 269–271, 273–274, 276, 278, 284–289, 293, 295–296, 298–300, 312, 320–321, 360
- ANSI, 97, 113, 116, 118, 451
- Anthrax, 15, 22–25, 66, 68, 73–74, 99, 269, 271, 408, 429
- Architecture, 4, 28, 33, 134, 193–197, 199, 201–202, 205–206, 208–209, 216, 305, 307, 332, 452
- Archiving, 9, 33, 109, 446, 450, 454
- AUC, 415, 419
- Authentication, 246, 249–250, 308, 332
- Authentic data, 405, 407
- Baseline data, 152–153, 164, 176, 345, 361
- Batched feed, 123–123
- Behavior, 3, 12, 48–49, 51, 75, 77, 100, 143–144, 146–147, 149, 151–152, 154–155, 162, 164, 170, 174, 184, 189, 241, 349, 419, 453
- Benefit, 99, 108, 112–113, 196–197, 205, 217, 219, 222, 227, 241–242, 246, 255, 286, 317, 353, 358–363, 375, 379–380, 402, 422, 449, 454
- Bias, 48, 51, 151, 167, 168, 177, 179, 181, 357
- Biological weapon, 15, 20–25
- Biogense, 34, 69, 119, 220, 230, 232, 238, 291–294, 296, 298–299, 447, 449
- Bioterrorism, 1–2, 14, 25, 28, 30–32, 72–74, 85, 99–103, 145, 155–156, 269, 273, 285, 288, 292–293, 298–300, 305, 318, 401, 405, 445–446, 452, 455
- Black death, 15
- Browser, 206–208, 246, 251–252
- Business process, 10, 27–28, 31, 306, 316, 454
- Cards, 249–250
- Casualty, 6, 19, 21–22
- CDC public health information network, 33, 119, 292
- Certificate, 9–10, 133–134, 247, 437
- CEWS, 305, 318–319, 321–322, 331–332, 334
- CFR, 105–110
- Chief complaint, 26–28, 45, 65–66, 98, 129–131, 137, 155, 159, 212–214, 228, 269–271, 274, 276, 279, 292–293, 295, 322–324, 374, 453
- Cholera, 3, 5–6, 16, 22, 266, 370–371, 375
- Classification, 45, 50, 65, 103, 115, 117–118, 146, 158, 181, 210, 242–244, 272, 292–294, 307, 312–314, 320–321, 323–327, 363
- Client-server, 194–197, 256
- Cluster, 27, 29–30, 50, 100–102, 113, 146, 151, 176–183, 224, 238, 253–254, 272–274, 276, 296, 318, 373, 380
- Communicable disease, 2, 65, 100, 102, 157, 319, 341, 360, 408–409
- Community health, 2–3, 33, 35, 105, 111, 265–266, 268, 389, 292
- Control chart, 146, 150, 153, 155, 158–159, 161, 163–164, 176, 189, 342–343, 347
- Core competency, 427–428, 435
- Covered entity, 105, 107, 109–111, 134, 447
- CRUSEM chart, 161–162

- Database, 9, 33, 49, 52, 58, 67, 74, 91-92, 94, 97, 135, 143, 182, 184, 194, 198-205, 207, 209, 210, 216, 245, 248-249, 307-308, 310, 314, 315, 319, 322, 325-326, 331-332, 359, 361, 373, 374
- Data collection, 33, 58, 97-99, 108-109, 114, 122, 164, 189, 310, 370, 374, 413, 455
- Data disclosure, 98, 104, 107, 109, 112-113
- Data exchange, 114-115, 130, 195, 306, 314, 315
- Data feeds, 26, 27, 31, 34, 98, 103, 122-124, 126, 136, 155, 292, 321
- Data source, 45, 47-48, 54, 61, 63, 65, 68, 75, 79, 81, 83-85, 113, 122-123, 133, 137, 148-149, 152, 221, 232, 251, 271, 285, 287, 314, 323, 453
- Data standards, 4, 113-114, 321
- Data streams, 27-28, 48, 49, 71, 85, 91, 98, 99, 103, 112, 122, 143-144, 146, 149, 155, 164, 172, 183, 186, 193, 271-272, 284, 286-287, 299, 322, 404
- DBMS, 95, 97, 135, 199-202
- Defense Tri-Service Healthcare System, 451
- Diagnosis, 6, 9, 28, 56, 65, 68, 117, 118, 129, 136, 144-151, 156, 158, 164, 183-185, 210, 229, 266, 268, 269, 274, 292, 295, 318, 323, 333, 340, 346, 349, 354, 361, 373, 374, 387, 392
- Disclosure, 107, 110, 112-113
- Disease control, 1, 11, 15, 32, 60, 99, 149, 265, 435, 446
- EARS, 31, 196, 271-2/2, 326
- Edgington, 186
- Emergency department, 26, 28, 31, 34, 44, 66, 91, 98, 117, 119, 121, 123, 126, 129, 131, 147, 154, 159, 183, 208, 212, 221, 222, 224, 228, 269, 318, 339-340, 345, 352, 445-449, 451, 453
- Emerging infectious disease, 269, 271, 276, 300, 369, 371, 380, 389, 392, 405
- EMS, 58, 60, 64, 65, 75, 79, 81, 83-85, 210
- Encryption, 119, 132-134, 245, 247, 251
- Epidemic, 15, 16, 21, 30, 32, 50, 99-102, 156-157, 166, 270, 345, 363, 369-370, 373, 381, 408-409
- Epidemiology, 3, 6, 14, 27-28, 30, 32, 63, 84, 86, 99, 143, 146, 147, 150-151, 155, 163, 168, 177, 179, 181, 216, 241, 265, 270, 273, 274, 276, 284, 288, 289, 298, 300, 310, 316, 319, 325, 326-328, 330, 354, 341, 342, 346, 360, 362, 373, 376, 378-381, 385, 390, 445
- Error, 65, 95, 115, 136, 153, 162, 169-170, 172, 174-175, 184-185, 213, 246, 254, 298, 345, 375, 385, 386, 405
- Essential services, 2, 265, 266, 428, 435, 438
- Evaluation, 1, 11, 31, 63, 69, 79, 86, 118, 242, 266, 269, 276, 287, 292, 322, 331, 338, 360-363, 380-381, 392, 393, 401, 405, 407-409, 412-414, 422-423, 434
- Event detection, 34, 69, 286, 317, 323, 363
- EWORS, 373-376, 378-381, 392
- False alarm, 28, 71-72, 143-147, 159, 163, 164, 403, 454
- Fever, 16, 25, 45, 64, 66, 69, 79, 81, 228, 266, 276, 292, 339, 342, 347-350, 370-371, 382
- Firewall, 92-93, 198, 246
- Florence Nightingale, 5-6
- Flu, 6, 17, 19-20, 50, 59, 64, 79, 81, 156, 270, 279, 359
- Forecasting, 59, 146, 149, 154, 167-170, 172-177, 306, 349
- Free-text data, 86, 210, 212, 293, 298
- FTE, 94, 132, 133, 135, 272
- Gastrointestinal syndrome group, 62, 145
- Geographic information system, 208-209, 218, 223, 226, 256, 310, 315, 329, 331, 345, 374, 390
- Healthcare information technology standard panel, 113, 448
- Health department, 1, 3, 9-10, 14, 26-28, 31-34, 54, 58, 68, 91, 120, 123, 132, 134, 166, 183, 189, 202, 265-266, 268-274, 276, 278-279, 282, 284, 289, 299, 300, 375, 392, 402-403, 423, 445-449, 452, 454
- Health Protection Agency, 337, 341
- Health-seeking behavior, 44, 48-49, 360
- HIPAA, 104, 111, 113, 117-118, 125-126, 134, 417, 452
- HITSIP, 113, 116, 448, 449, 451
- HL7, 68-69, 116-119, 121-122, 131, 133-134, 271, 307, 314, 319, 321, 452
- HMO, 61-62, 67, 103, 105, 451
- ICD-9 code, 45, 60, 65, 67, 69, 76-77, 79, 137, 233, 235, 271
- ILI, 59, 62, 65, 79, 81, 117-118, 156, 180, 279
- Incubation period, 73, 156, 158
- Indicator, 9-10, 12, 14, 26, 31, 33, 35, 43, 44, 54, 58, 61, 63, 67, 69, 71, 73, 75, 81, 85, 86, 91, 98, 103, 104, 111, 113, 117, 119, 120, 143, 168, 170, 172, 175, 210, 255-256, 273, 279, 292, 293, 295, 348, 390, 453
- Individually identifiable health information, 105
- Infectious disease, 1, 14, 16, 25, 30-33, 43, 69, 72, 99, 101-102, 145, 155, 157, 163, 266, 269, 272, 276, 288, 305, 316, 333, 337, 348, 363, 370-371, 373, 374, 379, 382, 386-387, 392, 407-408, 446, 448
- Influenza, 1, 2, 16, 19, 25, 30-31, 44, 54, 59, 65, 75-76, 79, 81, 85, 101, 145, 151, 155-156, 183, 189, 268, 273, 276, 279, 285, 293, 300, 309, 340, 347, 348, 354, 356, 357, 359, 361, 364, 369, 373, 380-381, 390, 392, 446
- Informatics, 3, 4, 35, 113, 152, 154, 286, 306, 429, 435-438, 446, 454
- Injury, 3, 4, 12, 58, 60, 63, 272

- Institute of Medicine, 2, 427
- Interface, 92, 193, 198, 207–208, 216–218, 228, 229, 243, 294, 310, 322, 387, 390
- International health regulation, 370
- Internet, 2, 31, 91–94, 97, 123, 133, 143, 195, 202, 205, 206, 248, 272, 322, 334, 370, 374, 382–383, 385, 389, 390, 393
- Interoperability, 4, 446–451, 454
- Laboratory test, 34, 67–71, 114, 117, 274, 292
- Latency, 45, 48, 52, 56, 59, 61, 65, 75
- Line listing, 219, 221, 232, 233, 271, 282, 345–346
- Linux, 202, 205, 209
- LOINC, 68, 117, 119, 292, 307, 314
- Mapping, 45, 52, 83, 92, 195, 209–211, 226, 273, 292–293, 321, 322, 326, 345, 359
- Medical informatics, 69, 91, 429, 436
- Medical record, 9, 111, 114, 126, 129, 136, 212, 298, 354, 450
- Medicare, 118, 452
- Moving average, 54, 76, 153, 172, 271, 293, 326–327
- Multivariate, 183–184
- MySQL, 203
- National electronic disease surveillance system, 33, 119, 125, 447
- National enteric surveillance program, 309
- National syndromic surveillance conference, 59
- NCR, 269, 288, 289, 449
- Network, 2, 4, 10, 31, 33, 69, 92–95, 105, 115, 119, 122–123, 132, 136, 195, 196, 198, 201, 203, 205, 213, 243, 246, 251–255, 268, 289, 298, 331, 338, 363, 370, 371, 375, 378, 383, 386, 389, 392, 405, 435, 437, 446–452, 454
- NHS direct, 62, 63, 337, 339, 341–361, 363–369
- Notifiable disease, 32, 33, 68, 69, 99, 266, 268, 293, 341
- Null hypothesis, 182–186
- OTC, 26–28, 43, 49, 52, 54, 56, 58, 67, 70–72, 75, 76, 79, 83–86, 117, 119, 136, 143, 149, 155, 167, 169, 173, 183, 220–222, 251, 270–271, 279, 285, 317, 319, 321, 323, 324, 333–334, 453
- Outbreak, 1, 2, 5, 6, 9, 10, 12, 14, 16–17, 20, 25, 28, 32, 35, 43, 45, 47, 50, 52, 54, 56, 58, 63, 65, 67, 69–70, 72–76, 79, 81–83, 85–86, 98–103, 111, 112, 143–152, 154–156, 163–164, 167, 169, 172–173, 176, 181–184, 189, 216, 222, 227, 241, 255, 268, 271–272, 276, 279, 282, 284, 286, 305, 307, 310, 314, 317–318, 322, 328, 333–334, 340–342, 348, 349, 360–361, 370, 371, 373, 375–376, 378–379, 381–382, 386–388, 391–393, 401–408, 412–415, 419, 422–423
- Pandemic, 1, 6, 16–20, 102, 145, 151, 156, 300, 359, 369, 380–381, 390, 392
- Password, 132–133, 246–250, 254, 298
- Pathogen, 12, 22, 24, 48, 70, 71, 74, 156, 310, 356–358, 369, 388
- PCR, 71, 354, 388
- PDA, 32, 203, 206, 208, 390
- Permissible disclosure, 107, 109–110
- PHL, 107, 108, 110, 125–126, 134
- PHN, 33–34, 119, 131, 134–135, 292, 448, 449
- Pneumonia, 279, 293
- Pollen, 48, 52, 71–72, 273, 276, 349, 350, 359
- Prescription, 49, 54, 58, 64, 69, 75–77, 79, 81–83, 117, 128
- Prevention, 2, 4, 11, 32, 60, 99, 149, 243, 265, 310, 338, 435, 446
- Preventive medicine, 30
- Privacy rule, 104–105, 107, 113, 447
- ProMED, 70, 276, 278, 284
- Public health authority, 108–109
- Public health informatics, 1, 3–4, 10, 266, 269, 427, 435, 437, 446, 448
- Public health informatics institute, 10, 402
- Public health information network, 10, 119, 448
- Public health intelligence, 331
- Public health response, 14, 34, 48, 274, 285, 287, 299, 362, 369
- Public health service, 5, 6, 435
- Qualitative data, 70, 378, 422
- Real Time Outbreak Detection System, 31, 271
- Regional health information organization, 449
- Regression, 56, 149, 151, 153, 168, 172, 174–176, 296, 328–329, 356, 359, 361
- Reportable disease, 272, 384, 389, 446, 452
- Resource-poor setting, 370, 292, 393
- Respiratory, 1, 20, 28, 45, 48, 50, 54, 56, 59–63, 65, 66, 69, 72, 76, 78, 79, 81, 144, 151, 167, 170, 174, 181, 183, 271, 276, 279, 286, 292–293, 333, 340, 352–354, 356–359, 370, 380–382, 384, 388
- Response protocol, 289, 298, 403, 405, 407, 412–413, 422, 423
- RCC, 413–415, 419
- Rotavirus, 354, 358
- SalScan, 177–178, 180–181, 360
- Scan statistics, 151, 177, 178, 180, 182, 189
- School absenteeism, 26, 44, 63–64, 75, 79, 81, 83, 84, 119, 157, 189
- Security, 4, 92, 104, 105, 111, 115, 119, 123, 133–135, 137, 194, 197, 202, 205, 209, 241, 243–251, 253–254, 256, 289, 310, 370, 405, 452
- Sensitivity, 45, 47–49, 52, 54, 61, 65, 67, 72, 85, 146, 149–150, 158, 176, 183, 185, 189, 218, 219, 247, 271–272, 286, 322, 406, 409, 414, 415, 419–421, 423, 453
- Sentinel surveillance system, 241, 361
- Simulation, 28, 59, 180, 182, 222, 230, 322, 362, 380, 404, 413, 419, 422–423
- Situational awareness, 291, 401, 402

- Smallpox, 14–16, 22, 24, 266
- Spatial information, 47, 151, 176–177, 182
- Specificity, 4, 30, 35, 45, 48–49, 54, 66–67, 85, 91, 158, 163, 279, 322, 361, 406, 414–415, 419–421, 449–450, 453
- SQL, 97, 200, 202, 228–229, 322
- Stratification, 126, 150, 219, 229–230
- Surveillance system, 1–2, 4, 11, 14, 26–35, 52, 59, 62, 63, 65–66, 68–69, 86, 91, 98, 103, 112–113, 119–124, 126, 132, 133–137, 143, 154–155, 163, 166, 170, 173, 181, 188–189, 193, 195–196, 198–199, 207, 209–210, 216–220, 224, 226–228, 230, 238, 240–243, 245–256, 265–266, 268–274, 276, 278, 284–289, 291, 299–300, 305–307, 309–310, 313, 318, 322–323, 327, 330, 334, 337, 341, 345, 348–349, 351, 353, 355–363, 369–371, 379, 381–382, 390, 392–393, 401–405, 407, 412–413, 415, 422–423, 445, 447–449, 453–455
- Syndromic surveillance, 11, 31, 44–45, 49–50, 52, 54, 59, 68–70, 98–99, 103–104, 111–113, 146, 159, 164, 213, 273, 282, 284, 286, 300, 317–319, 322–324, 327, 330–331, 334, 337–338, 341–342, 347–349, 351, 353–354, 358–364, 378, 381, 388, 392, 401–402, 422
- System administration, 248, 253–254
- System architecture, 27, 33, 193, 195
- System evaluation, 380
- System flexibility, 389
- Telephone outage, 60–62, 337–341, 360, 363–364
- Thick client application, 197, 203
- Threshold, 28, 59, 145, 150–153, 162, 166–167, 172, 179, 181, 184–185, 220, 224, 241, 273, 296, 352, 376, 403–404, 414–415, 419, 421, 447
- Time lag, 48, 61, 266, 381, 453
- Timeliness, 4, 35, 54, 60, 75, 77, 81, 84–85, 91, 268, 278, 310, 318, 341, 385, 414, 419–421, 423, 450
- Time series, 28, 56, 76, 84, 86, 144, 146, 148, 155–156, 158–159, 162, 164–166, 170, 172–175, 177, 184–185, 189, 221, 224, 276, 279, 282, 295, 298, 374, 405, 408, 411, 419–420
- Training, 32, 151–152, 159, 164, 168–169, 172, 174, 213, 256, 278, 287, 316, 331, 338, 373–376, 379–381, 391–392, 401, 422, 427, 429, 434–438
- User interaction, 195–196, 204–208
- User interface, 196–199, 207, 228–229, 231, 307, 310, 319–320, 322, 325
- Virus, 1–2, 12, 15, 17, 19–20, 25, 73, 92, 182, 247, 252–253, 271, 279, 293, 354, 369, 380
- Visualization, 28–30, 33–34, 188–189, 193, 195, 197, 207, 210, 218–220, 222–223, 227, 229–232, 237, 292, 299, 329, 390, 446
- Vocabulary, 4, 114–115, 119, 135, 210–214, 314, 449
- Web applications, 92, 195, 203, 205–207, 243
- Web browser, 197, 203, 206, 208, 245–247, 252, 272
- Web server, 94, 194, 203, 205–207, 248, 325
- World Health Organization, 15, 59, 118, 276, 333, 369, 429
- X-bar chart, 161–162, 165–166
- XML document, 130, 134