

BULGARIA

**VHPB BALKAN
MEETING**

*INTRODUCTION IN THE
HEALTH CARE SYSTEM
AND INFECTIOUS
DISEASE SERVICE*



BULGARIA COUNTRY PROFILE

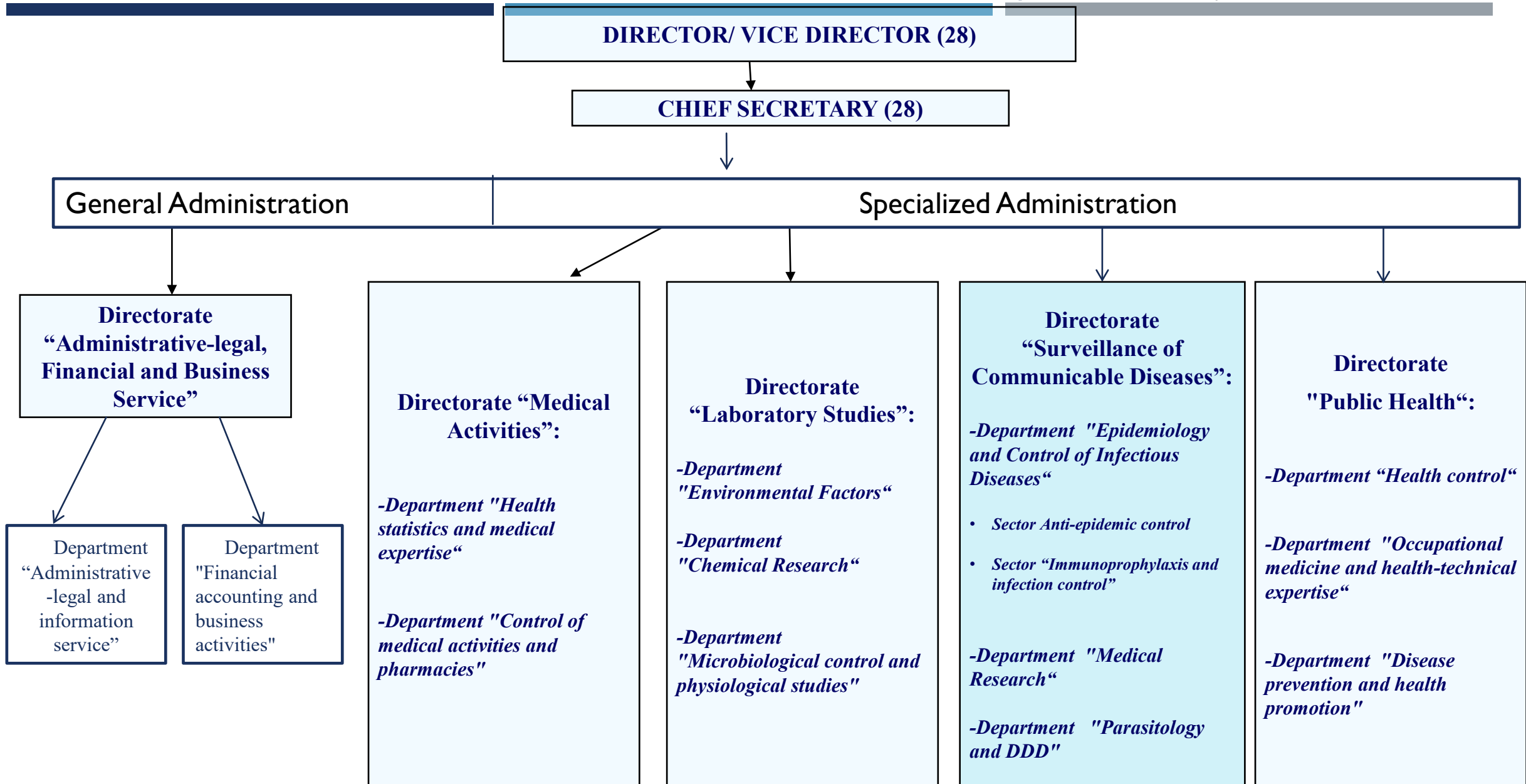
- Population (in millions) (year): **6 838 937**
(31.12.2021, National Statistical Institute, Bulgaria)
- Gross national income per capita (US\$) (year): **10.720**
(2021, The Atlas method, by the World Bank)
- Health spending per capita (Euro): **1,311 (8.1% of GDP)**
(Z.Mitkova, G.Petrova. Front. Public Health, 02 July 2021)
- Life expectancy (year): **73.6**
(2019 – 2021, National Statistical Institute, Bulgaria)



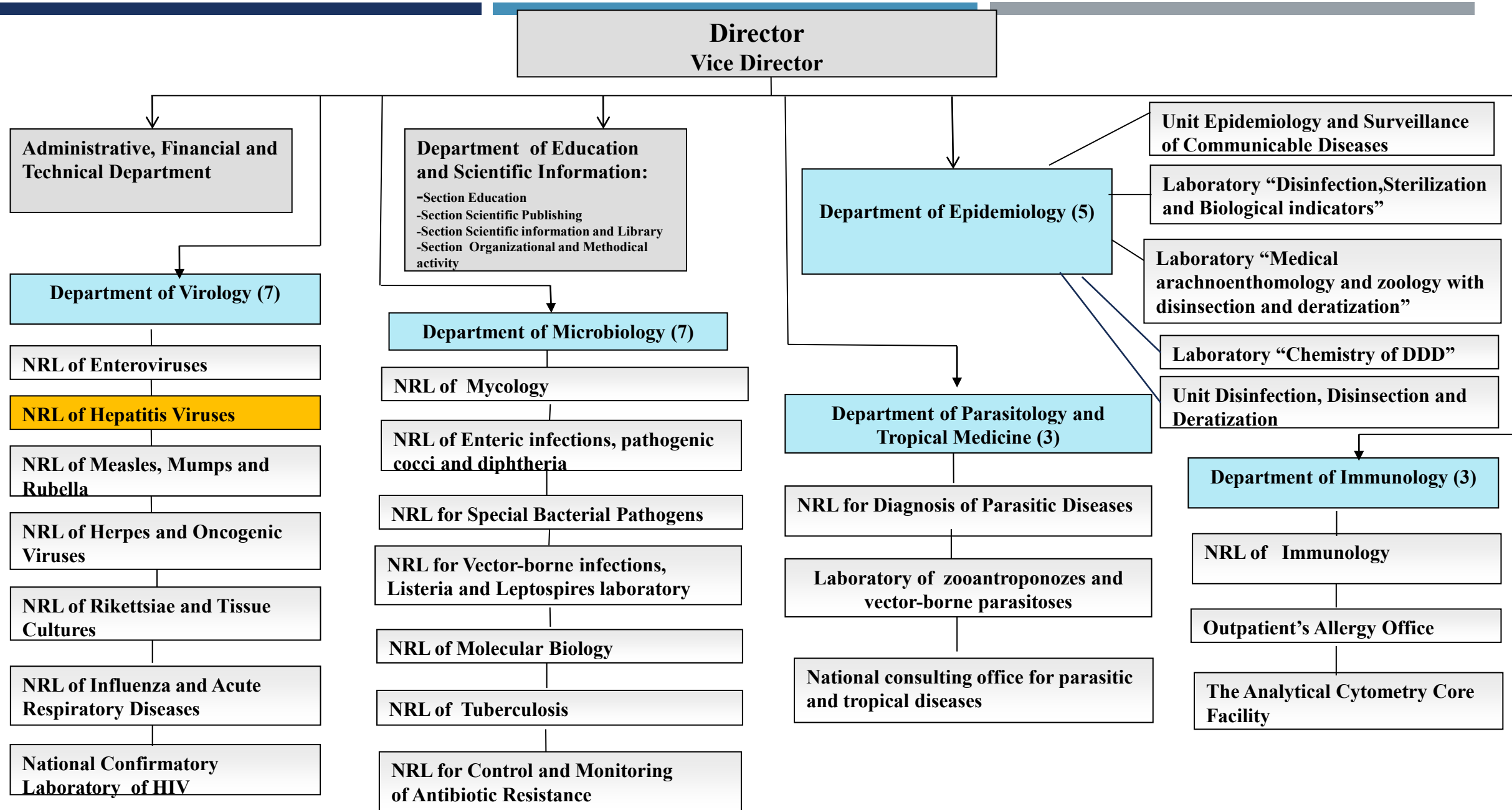
THE BULGARIAN HEALTH SYSTEM

- Based on a compulsory Social Health Insurance (SHI) scheme with a small role for voluntary health insurance;
- The National Health Insurance Fund (NHIF), through its branches of 28 regional health insurance funds, is the sole purchaser of health services;
- **State health policy is steered by the Council of Ministers and the Ministry of Health is responsible for the overall governance of the health system:**
 - drafting health legislation,
 - coordinating and supervising the various subordinated bodies,
 - planning and regulating health care providers.
- **At the district level, public health policy is organized by the regional health inspectorates (RHIs), which are the local bodies of the Ministry of Health.**
- The SHI system in Bulgaria is based on universality. The significant proportion of the Bulgarian population is uninsured (NHIF showed that just over 1 million people (14.8 %) are uninsured).

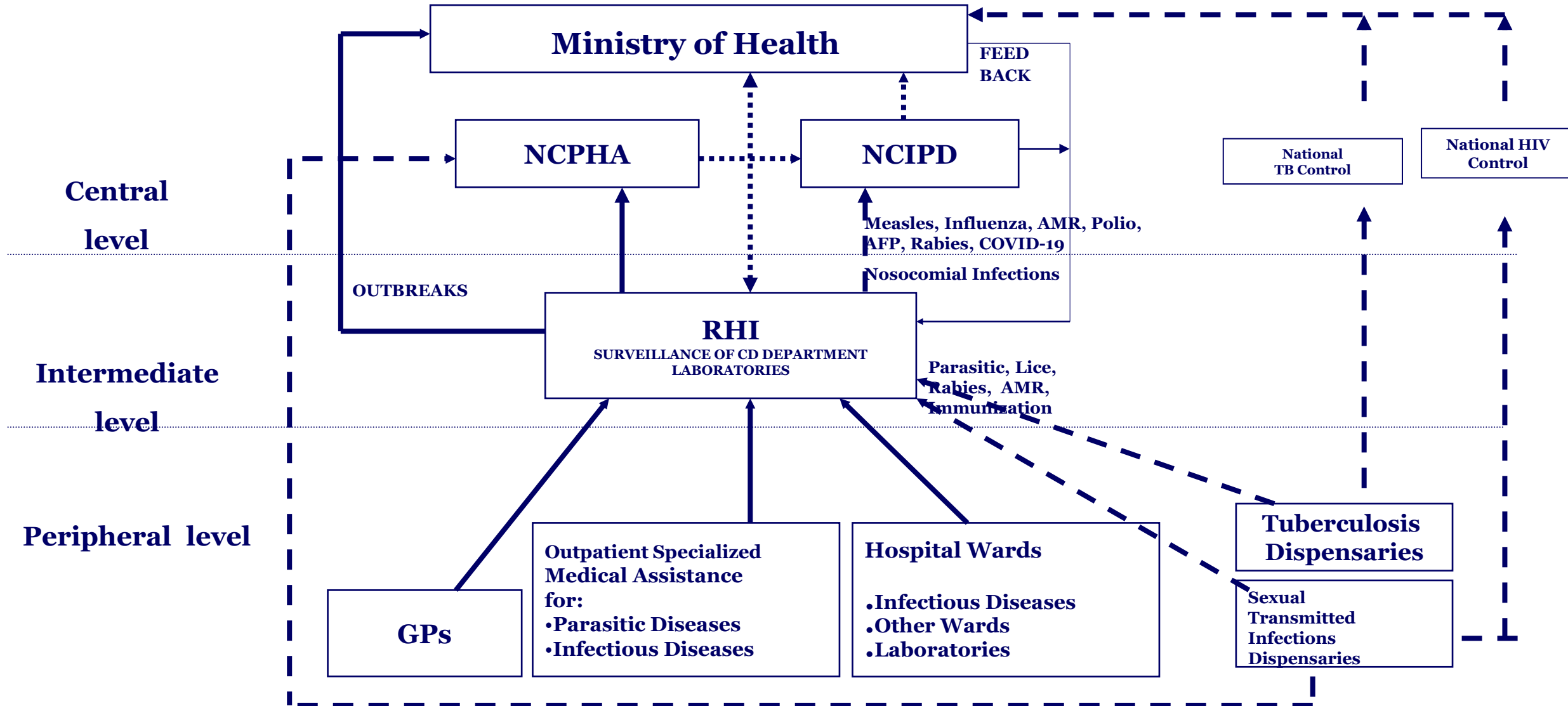
REGIONAL HEALTH INSPECTORATE (STRUCTURE)



ORGANIZATIONAL CHART OF THE NATIONAL CENTER OF INFECTIOUS AND PARASITIC DISEASES (NCIPD)



NATIONAL COMMUNICABLE DISEASE SURVEILLANCE SYSTEM (FLOW OF INFORMATION)



LIST OF COMMUNICABLE DISEASES FOR COMPULSORY REPORTING

(ORDINANCE NO 21 OF 18 JULY 2005 ON THE PROCEDURE FOR REGISTRATION, NOTIFICATION AND REPORTING OF CD (STATE GAZETTE, NO 62,29.07.2005, LAST UPDATE 31.05.2022)

1. Anthrax
2. Ascariasis
3. Bacterial Meningitis and Meningoencephalitis:
 - 3.1. H. influenzae type B
 - 3.2. Pneumococcal (S. pneumoniae)
 - 3.3. Streptococcal (Streptococcus group B)
 - 3.4. Other
4. Zika virus disease
 - 4.1. Zika virus congenital disease
5. Creutzfeldt-Jakob's disease
6. Chikungunya
7. Botulism
8. Brucellosis
9. Rabies
10. Smallpox
11. Varicella
12. Viral Meningitis and Meningoencephalitis
13. Viral Haemorrhagic fevers:
 - 13.1. Crimean-Congo Hemorrhagic Fever
 - 13.2. Hemorrhagic Fever with Renal Syndrome
- 14. Hepatitis, viral:**
 - 14.1. Hepatitis A, acute**
 - 14.2. Hepatitis B**
 - 14.3. Hepatitis C**
 - 14.4. Hepatitis D, acute**
 - 14.5. Hepatitis E, acute**
 - 14.6. Acute viral hepatitis, unspecified**
15. Gastroenteritis, enterocolitis
16. Gonorrhoea

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(ORDINANCE NO 21 OF 18 JULY 2005 ON THE PROCEDURE

E FOR REGISTRATION, NOTIFICATION AND REPORTING OF CD (STATE GAZETTE, NO 62,29.07.2005, LAST UPDATE 31.05.2022)

17. Influenza and Acute respiratory infections (ARI)

17.1. Influenza

17.2. Influenza A (H5N1)

17.3. Acute respiratory infections (ARI)

18. Dengue

19. Shigellosis

20. Diphtheria

21. Mumps

22. Echinococcosis

23 Giardiasis (Lambliasis)

24. Yellow Fever

25. West Nile virus infection

26. Pneumococcal, invasive infection

27. Haemophilus influenzae, invasive infection

28. Yersiniosis (Y. enterocolitica/Y. pseudotuberculosis Enteritis)

29. Campylobacter infection

30. Pertussis

31. Colienteritis

31.1. Shiga/Vero toxin-producing Escherichia coli infection (STEC/VTEC) including Hemolytic Uremic Syndrome (HUS)

32. Typhoid / Paratyphoid Fever

33. Cryptosporidiosis

34. Q-Fever

35. Tick-borne encephalitis

36. Lyme Disease

36.1. Lyme Neuroborreliosis

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37. Leishmaniasis, visceral
38. Legionellosis
39. Leptospirosis
40. Listeriosis
41. Malaria
42. Mediterranean Spotted Fever
43. Meningococcal infection, invasive (meningococcal meningitis and sepsis)
44. Measles
45. Psittacosis (Ornithosis)
46. Typhus exanthematicus (Epidemic louseborne typhus fever)
47. Poliomyelitis
- 47.1. Acute Flaccid Paralysis (in children under 15 years of age)
48. Rotavirus gastroenteritis
49. Rubella
- 49.1. Congenital Rubella (including congenital rubella syndrome)
50. Salmonellosis (Salmonella enteritis)
51. Acquired Immune Deficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) Infection
52. Syphilis
- 52.1. Syphilis, congenital and in neonates
53. Scarlet Fever
54. Severe Acute Respiratory Syndrome (SARS)
55. Taeniarhynchiosis
56. Tetanus
57. Toxoplasmosis, congenital
58. Trichinellosis
59. Trichocephalosis
60. Tuberculosis
61. Tularemia
62. Hymenolepiasis
63. Urogenital chlamydial infection
64. Cholera
65. Plague
66. COVID-19
67. Monkeypox

CASE DEFINITIONS OF COMMUNICABLE DISEASES

Possible case is a case with a supportive clinical picture, which is neither confirmed, nor probable.

Probable case is a case with a compatible clinical picture or an epidemically linked case.

Confirmed case is a case confirmed by a laboratory examination.

ORDINANCE № 21 of 18 July 2005) on the procedure for registration, notification and reporting of communicable diseases promulgated in State Gazette, № 62 of 29.07.2005, Last update 31.05.2022)

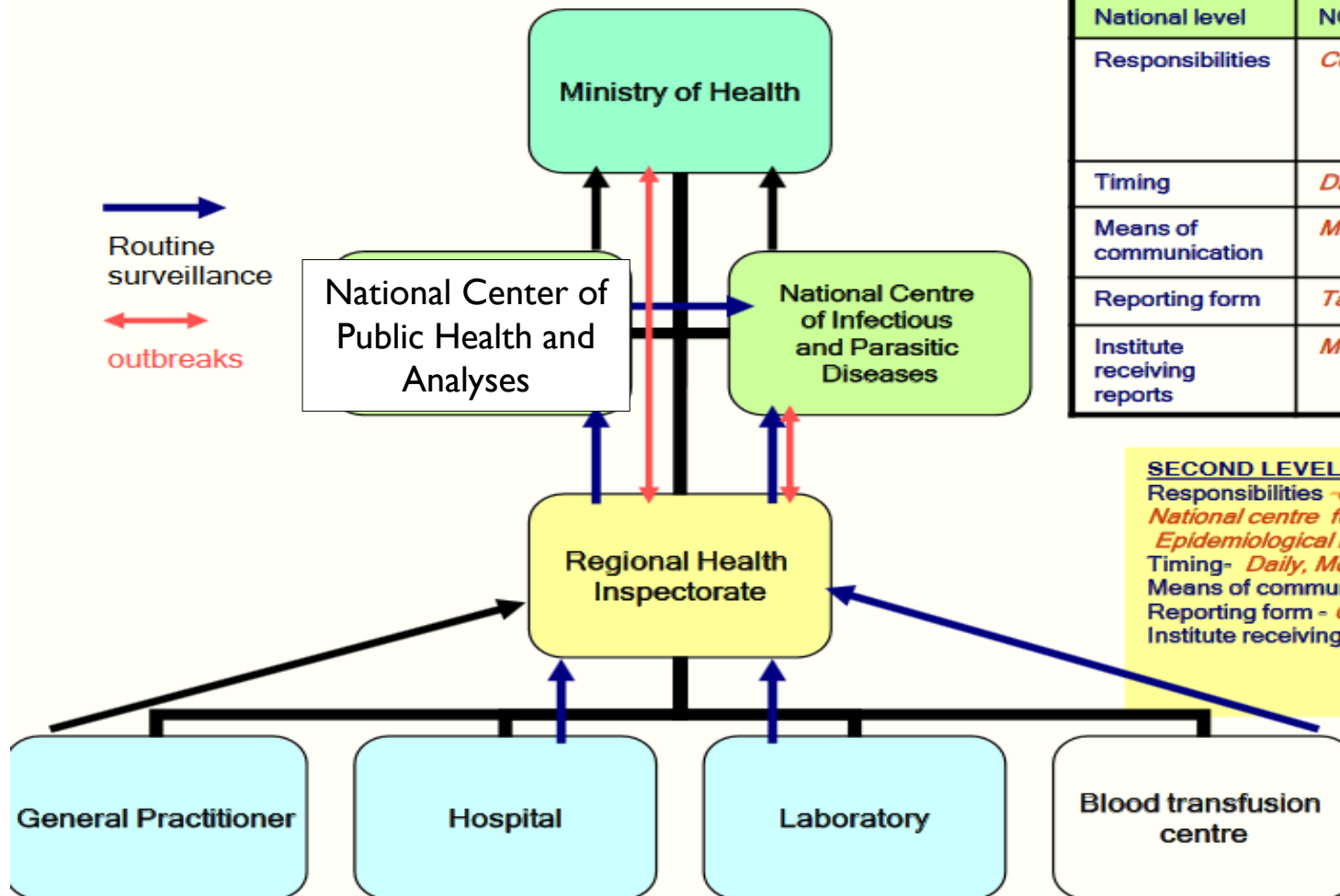
REPORTING FORMS FOR CD

- **Rapid notification form**
- **Case investigation form**
- **Communicable diseases report form (for reporting the aggregated number of CD from regional to national level)**
- **Special guidelines for investigation and management of case/contact of CD**

SEPARATE REGISTRATION OF VIRAL HEPATITIS IN BULGARIA

- 1983 – Viral Hepatitis A and Viral hepatitis B
- 1997 – Viral Hepatitis C
- 2019 - Viral hepatitis E (the first case was reported in 1995, Teoharov P. et al.)

Surveillance of Viral Hepatitis (VH)



National level	NCHI	NCIPD
Responsibilities	<i>Computerized data processing</i>	<i>Data analysis and interpretation Exchange of surveillance data Investigation of large-scale outbreaks and epidemics ; Feedback</i>
Timing	<i>Daily, Weekly, Monthly, Annually</i>	<i>Weekly, Annually</i>
Means of communication	<i>Mail</i>	<i>WEB bulletin</i>
Reporting form	<i>Tabular</i>	<i>Annual CD Report</i>
Institute receiving reports	<i>MoH, NCIPD, RHI</i>	National: MoH, RHI; International: WHO; ECDC

SECOND LEVEL - INTERMEDIATE Regional Health Inspectorate (RHI)
 Responsibilities - *collect reports, send aggregated data of suspected/ confirmed cases to National centre for health information (NCHI)
 Epidemiological investigation of cases/contacts and outbreaks*
 Timing- *Daily, Monthly, Annually*
 Means of communication- *Fax, mail, e-mail*
 Reporting form - *Case investigation form; Tabular, CD Report form;*
 Institute receiving reports - *NCHI, MoH (reports for outbreaks),*

FIRST LEVEL – NOTIFIER: HEALTH CENTERS, GPS, HOSPITALS,
 Responsibilities - *Identify cases, complete and send reporting form*
 Timing - *Within 24 hours*
 Means of communication - *Mail, telephone, e-mail, fax*
 Reporting form - *Rapid notification form*
 Institute receiving reports- *RHI*

CASE DEFINITION OF VIRAL HEPATITIS A

Clinical, Epidemiological and Laboratory criteria are based on ORDINANCE No 21 of 18 July 2005 on the procedure for registration, notification and reporting of CD (State Gazette, No62, 29.07.2005, Last update 31.05.2022)

Possible case: Not applicable

Probable case is a case with a compatible clinical picture and an epidemic link with a confirmed case

Confirmed case is a case confirmed by a laboratory examination- at least one of the following three criteria:

- detection of hepatitis A virus nucleic acid in serum or stool;
- presence of a specific antibody-response against the hepatitis A virus;
- presence of hepatitis A virus antigen in stool.

CASE DEFINITION OF VIRAL HEPATITIS B

Possible case: Not applicable

Probable case: Not applicable

Confirmed case is a case confirmed by a laboratory examination - positive results from at least one (or more) of the following tests or combinations of tests:

- IgM antibody to hepatitis B core antigen (anti-HBc IgM);
- HBsAg;
- HBeAg;
- hepatitis B nucleic acid (HVB DNA).

CASE DEFINITION OF VIRAL HEPATITIS C

Possible case: Not applicable

Probable case: Not applicable

Confirmed case is a case confirmed by a laboratory examination - at least one of the following three criteria:

- detection of hepatitis C virus nucleic acid (HCV RNA);
- detection of hepatitis C virus core antigen (HCV core);
- specific antibody response against hepatitis C virus (anti-HCV) confirmed by an antibody confirmatory test (eg, immunoblot) in individuals older than 18 months without evidence of passed infection.

CASE DEFINITION OF VIRAL HEPATITIS D

Possible case: Not applicable

Probable case: Not applicable

Confirmed case is a case confirmed by a laboratory examination:

- IgM/IgG antibodies against the hepatitis D virus (anti-HDV) and presence of the surface antigen of the hepatitis B virus (HBsAg-positive);
- detection of hepatitis D antigen (HDAg) in clinical samples;
- nucleic acid detection in clinical samples.

CASE DEFINITION OF VIRAL HEPATITIS E

Clinical, Epidemiological and Laboratory criteria are based on ORDINANCE No 21 of 18 July 2005 on the procedure for registration, notification and reporting of CD (State Gazette, No62, 29.07.2005, Last update 31.05.2022)

Possible case: Not applicable

Probable case: a case with a compatible clinical picture and an epidemic link with a confirmed case

Confirmed case: a person who meets the clinical, laboratory and epidemiological criteria.

Laboratory criteria: at least one of the following two criteria:

- detection of IgM antibodies in serum or plasma, in combination with rising values of IgG antibodies against the hepatitis E virus;
- detection of hepatitis E virus nucleic acid in serum/plasma or feces.

SURVEILLANCE, PREVENTION AND CONTROL OF VIRAL HEPATITIS IN BULGARIA (LEGAL FRAMEWORK)

- *ORDINANCE No 21 of 18 July 2005 on the procedure for registration, notification and reporting of CD (State Gazette, No 62, 29.07.2005, Last update 31.05.2022)*
- *ORDINANCE No 8 of 2016 on the procedure for prophylactic examinations and dispensary monitoring (State Gazette, No 92 , 2016 , Last update State Gazette No.48, 28.06.2022)*
 - *People 20-65 years ASAT and ALAT should be tested once every 5 years;*
 - *People aged 40, 45, 50, 55 and 60 should be tested via rapid test for HBsAg and rapid test for anti-HCV*
 - *Screening for anti-HCV for pregnant women*
 - *Children up to 18 years of age with chronic viral hepatitis are subject to dispensary surveillance*:*
 - *B18.1 Chronic viral hepatitis B without delta-agent*
 - *B18.8 Other chronic viral hepatitis, as the activities of dispensary surveillance are taken over by the National Health Service;*
 - *People over 18 years of age with chronic viral hepatitis are subject to dispensary monitoring *:*
 - *B18.1 Chronic viral hepatitis B without delta-agent,*
 - *B18.2 Chronic viral hepatitis C*
 - *B18.8 Other chronic viral hepatitis, as the activities of dispensary surveillance are taken over by the National Health Service;*

**During the first 6 months, dispensary monitoring is carried out by a specialist in infectious diseases, and after the 6th month by a gastroenterologist*



SURVEILLANCE, PREVENTION AND CONTROL OF VIRAL HEPATITIS IN BULGARIA (LEGAL FRAMEWORK)

- ***ORDINANCE № 26 of 14 June 2007 ON PROVIDING OBSTETRICAL AID TO WOMEN WITHOUT HEALTH INSURANCE AND FOR CARRYING OUT RESEARCH OUTSIDE THE SCOPE OF COMPULSORY HEALTH INSURANCE FOR CHILDREN AND PREGNANT WOMEN (State Gazette №51/ 26 June 2007; Last update State Gazette №69/ 26 August 2022):***
 - *Prophylactic examinations and tests for uninsured pregnant women include:*
 - *test for syphilis,*
 - *hepatitis B (HBsAg) tests*
 - *with the patient's consent - for HIV;*
- ***ORDINANCE No 15/12 May 2005 of the MoH on Immunizations in Republic of Bulgaria (State gazette №45/31.05.2005; Last update State Gazette № 108/ 22 December 2020):***
 - Universal newborn hepatitis B immunization since August 1991:***
 - *At birth (within 24 hours) → 1 month of age → 6 months of age (Hepatitis B Recombinant DNA)*
 - *At birth (within 24 hours) (Hepatitis B Recombinant DNA) - 2 month of age - 3 month of age - 4 month of age (DTaP/Hib/HepB/IPV)*
 - Recommended hepatitis B immunizations:***
 - *All adults at higher risk for infection (monovalent formulations): persons borne before 1992; HCWs; persons with HIV infection; patients who frequently require blood or blood products; dialysis patients; persons with chronic liver disease including those with hepatitis C; Military /police officers; injecting drug users, household and sexual contacts of persons with chronic HBV infection,; men who have sex with men; persons with multiple sexual partners; travelers to high endemic for hepatitis B countries.*