

# Provision of TB services during the COVID-19 pandemic

Elena Nikishova, Andrey Maryandishev,

Nina Nizovtseva

Northern State Medical University, Arkhangelsk,

“Easy Breathing” Charity Foundation

# Key tasks/challengers during COVID-19 pandemic

To provide the necessary medical care for:

- patients with suspected TB
- patients with confirmed TB
- People at high risk of developing TB

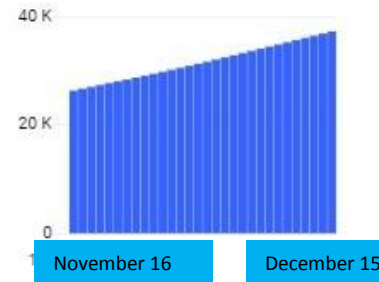
- To minimize, at the same time, the risk of contracting COVID-19 - both for patients and healthcare personnel

# COVID-19 in the Arkhangelsk Region

- May-June, 2020 - an “outbreak” of COVID-19 infection in one of the major cities of the region
- November-December, 2020 – **about 400 cases** are registered **daily** (mostly in cities)
- In terms of incidence the region **ranked fifth in the rating of "anti-leaders"** in the country

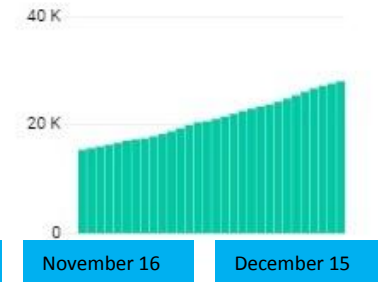
• 37 202

Diagnosed



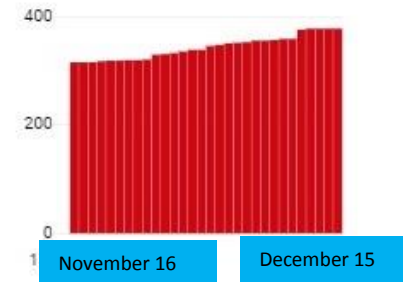
• 27 981

Recovered



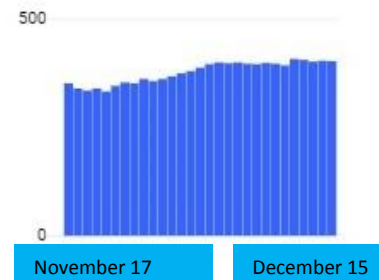
• 377

Died



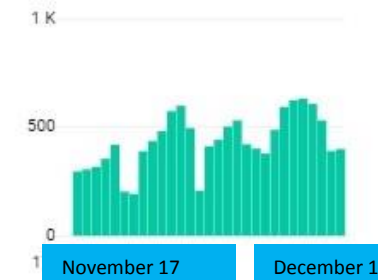
• 402

Number of cases a day



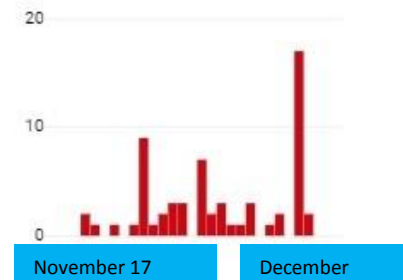
• 399

Number of recovered a day

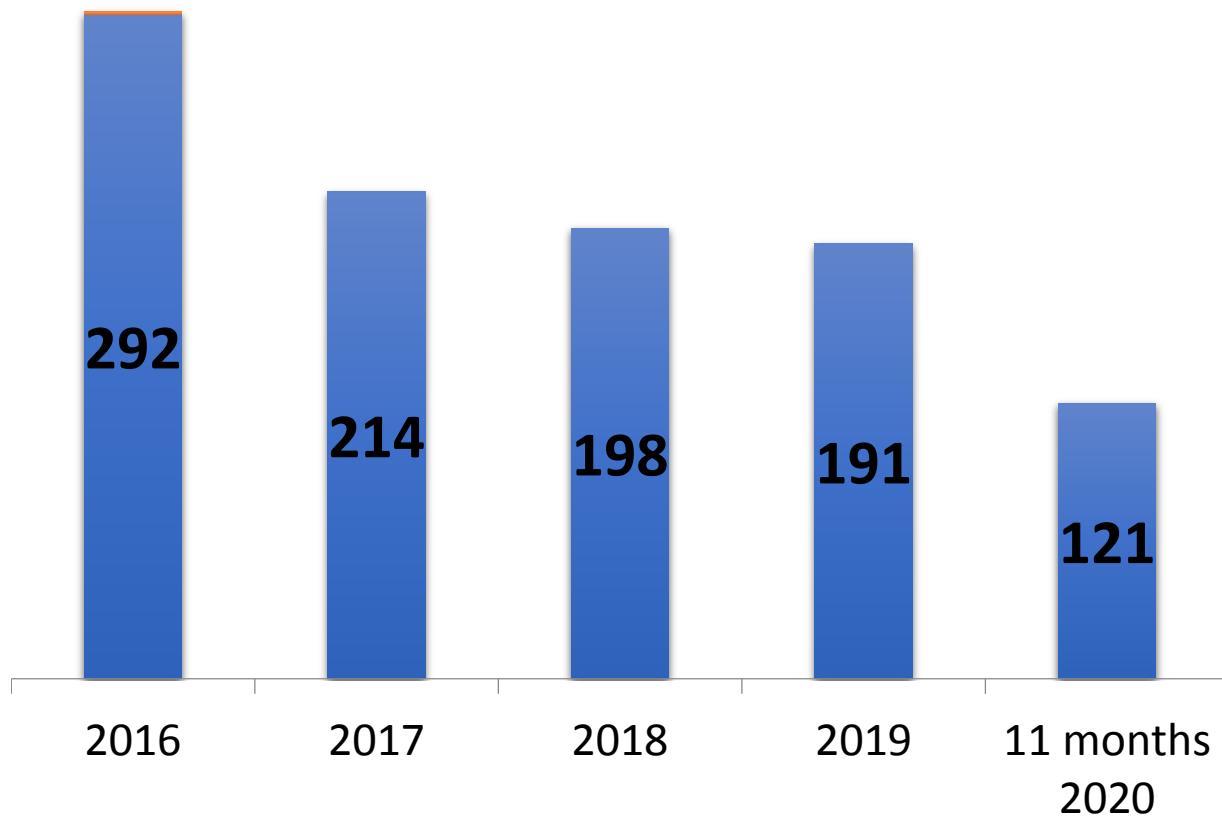


• 0

Number of deaths a day



## New TB cases in Arkhangelsk Region



TB and  
COVID-19  
coinfection -  
**6 cases**


The work is organized in accordance with the interim guidelines, as of April 2020



## Interim guidelines on provision of TB care in the context of Covid-19 pandemic

**УТВЕРЖДАЮ**

Президент Российского общества  
фтизиатров/Ассоциации фтизиатров,  
главный внештатный специалист фтизиатр  
Минздрава России,  
Директор ФГБУ «НМИЦ ФПИ»  
Минздрава России,  
профессор, д.м.н.

 /И.А. Васильева

APPROVED BY  
President of the Russian Society of Phthisiologists/Association  
of Phthisiologists, Senior External Expert of the Ministry of  
Health of the Russian Federation,  
Director of the National Medical Research Center of  
Phthisiopulmonology and Infectious Diseases subordinated to  
the Ministry of health of the Russian Federation,  
Professor, Habilitation degree in Medicine.

I.Vasilyeva

## Indications for hospitalization of TB patients:

- Moderate and severe clinical condition
- TB drugs adverse side effects of the 3<sup>rd</sup> and 4<sup>th</sup> severity level
- Sputum smear-positive TB patient lives in a dormitory or in a 'communal' (shared living facility), or is sharing living facilities with young children
- Homeless patients

## Preventing the spread of COVID-19 in the TB in-patient facility

- **Before admission to any in-patient facility:** testing for COVID-19 to be done
- **At admission:** isolation for 14 days or until two negative tests for COVID-19 are acquired
- **During staying in the in-patient facility** (same measures used to be taken before COVID-19 pandemic) it is necessary:
  - ✓ to restrict patient's movement inside the facility
  - ✓ personal protective equipment should be used: **masks – for patients and aerosol masks – for healthcare personnel**
  - ✓ disinfectants and bactericidal lamps for air disinfection should be used as well

# The main burden falls on the outpatient care providers

- They provide telemedicine counseling to patients with suspected tuberculosis
- They provide preventive tuberculosis treatment to people from high-risk groups
- They provide social and psychological support to patients
- **Strict adherence to anti-epidemic measures is obligatory (!)**





# TB service in the city of Severodvinsk

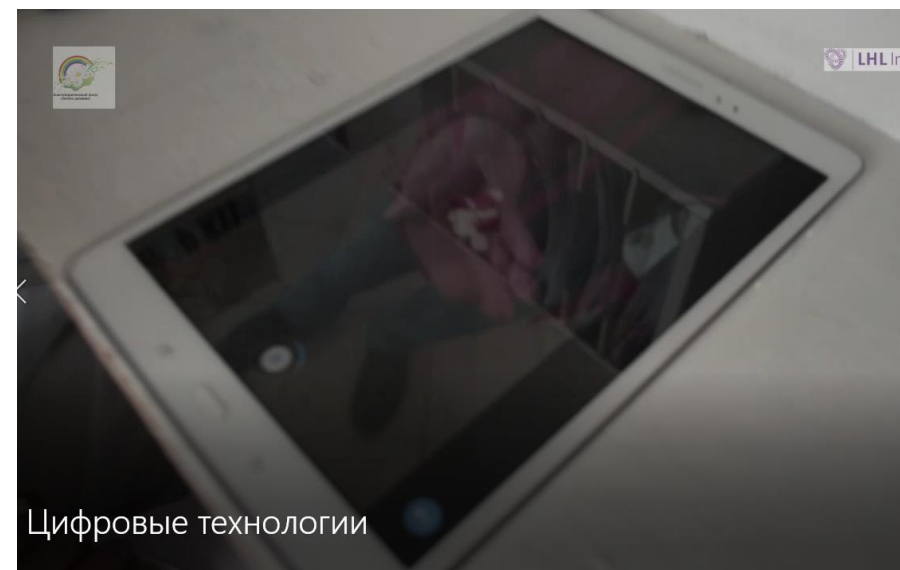
- **Number of inhabitants:** 182,200 people
- **Primary TB care:** outpatient  
TB unit at the city clinical hospital
- **TB in 2020:** 16 new cases and 3 recurrences
  - ✓ TB and HIV coinfection: 2 cases
  - ✓ MTB (+) (mycobacteria tuberculosis) : 16 cases
  - ✓ Drug susceptible MTB: 12 cases
  - ✓ MBT (+) in prisons: 1 case
  - ✓ MDR MBT: 3 cases
  - ✓ **Coinfection of TB and COVID-19:** 1 case



## Directly observed TB therapy

- **Three patients were hospitalized**
- **All other patients keep getting treatment in the settings that adequately substitute in-patient facilities**
- **“Home care”**: daily home visits by healthcare providers (no interruptions on weekends and holidays!)
- **Follow-up home checkup**: as part of chemotherapy effectiveness and adverse side effects monitoring (sputum and blood collection, ECG)

# Video controlled drug taking



# Preventive TB treatment

## **Key risk groups:**

- People, who were exposed to MBT coming in contact with positive individuals
- HIV infection
- Confirmed latent TB infection

## **Preventive treatment:**

- Video controlled drug taking
- “Home care” services

## Preventive TB treatment regimens (as part of a research program)

Data on MBT drug susceptibility in TB patients	Preventive treatment regimens for exposed people
MBT is susceptible to H R	H Rp
MBT resistance to H R	Bdq Lfx/ Mfx
MBT resistance to H R Ofx	Bdq
MBT resistant to H R Ofx Bdq	Dlm

# Social Support

- Food packages for socially vulnerable patients, if they take TB drugs regularly
  - ✓ “Easy Breathing” charity foundation
  - ✓ “Doctors Without Borders”
- Reimbursement of procurement of medicinal drugs for the relief of adverse side effects
  - ✓ “Easy Breathing” charity foundation



Thank you for your attention!

