WATER

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Drinking water

There are 99,9% people supplied with drinking water from public water supply in Moravian-Silesian Region.

The most important production and distribution water supply system in the region is the Ostrava Regional Water Supply – Ostravský oblastní vodovod (OOV), which supplies more than one million inhabitants in Moravian-Silesian Region, inhabitants in Olomouc Region and border areas in Poland. Drinking water for OOV is made from surface sources, water tanks Šance, Morávka (Beskydy mountains) and Kružberk (Jeseníky mountains).

Water Treatment Vyšní Lhoty

OOV schema (source: SmVaK Ostrava)

Water Treatment Podhradí

Water Treatment Nová Ves

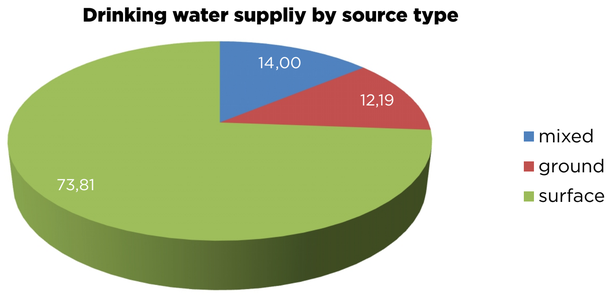
Other important water systems include group waterworks in the district of the town Bruntál.

Waterworks Slezská Harta and springfield Karlov – sources for group water system Bruntál (source: VaK Bruntál a.s.)

There are 21 large waterworks currently in the Moravian-Silesian Region (supplying more than 5 000 inhabitants) and 170 small waterworks (supplying less than 5 000 inhabitants). Inhabitants are predominantly supplied by drinking water made from the surface sources.

About 300 wells are used to supply drinking water to the public in the Moravian-Silesian Region.
Water quality is assessed by Act No. 252/20114Coll.

Drinking water suppliy by source type



Examples of publications of our staff on water issues in professional journals

14 BAZÉN & SAUNA 3–4 2017 KVALITA VODY

Cerkáriová dermatitida v nádrži Brušperk

kolektiv autorů

Onemocnění cerkáriovou dermatitidou je v českých zemích popisováno od 80. let dvacátého sto kůže, vyrážkou a intenzivním svěděním. Vznik pupínků je výrazem imunitní reakce organismu. otoky napadených částí těla, zvýšenou teplotu, nevolnost a průjem. Léčba onemocnění je pouze užívaných po bodnutí hmyzem či přípravků zklidňujících kůži – např. gel po holení. U těžších pr

DOTAZNÍK

V roce 200 kách Státní Praha a všec v republice problémy nebo kontak je určen osc u nich vysky bené koupá vodní sporty ve veřejném lice nedoch onemocnění nelze vylou Takto vznik povinnému ternetový d pomáhá pře se snahou o

PŮVODNÍ PRÁCE

PROBLEMATIKA HYDROMASÁŽNÍCH VAN V REHABILITAČNÍCH PROVOZECH

THE PROBLEMS OF HYDROMASSAGE BATH TUBS IN REHABILITATION OPERATIONS

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SOUHRN

V rámci projektu byla ověřena účinnost chemické dezinfekce cirkulačních okruhů hydromasážních van. Jednalo se o vany ve zdravotnickém zařízení, provozované v režimu napouštění jak teplou vodou vyrobenou z vody pitné, tak vodou jodobromovou. V důsledku dlouhodobého nedostatečného zabezpečení hydromasážních systémů van došlo ke kolonizaci a významným denzi- napuštění van před vstupem pacienta. Na nevyhovujících výsledcích se masážních systémů a kvalita použitých materiálů (stagnace vody ve ved- masážních trysek, pořézност povrchu materiálů).

vany byl vypracován harmonogram provádění očisty a dezinfekce dvou aplikací různých biocidů. V rámci úkolu byla potvrzena teorie tvorby dlejších okruzích hydromasážních van; tedy nutnost soustavné aplikace le i rozpouštění a odstraňování tvořících se inkrustů a biofilmů.

habilitační vany, *Pseudomonas aeruginosa*, hydromasážní trysky, biofilmy,

LEGIONELA ANEB ČERT NIKD

LEGIONELLA – THE DEVIL NEVER S

RADIM MUDRA, IRENA MARTINKOVÁ, MARIE FIEDOROVÁ, DA

Krajská hygienická stanice Moravskoslezského kraje se sídlem v Ostr

SOUHRN

Kolektiv autorů se zamýšlí nad významem státního zdravotního dozoru ve zdravotnických ti legionel v teplovodních systémech. Je popisován systém výkonu státního zdravotního doz v Moravskoslezském kraji včetně odborných závěrů. Na základě zjištěných výsledků lze vyslovit názor, že v průběhu sedmiletého sledování i nadále dochází k překračování limitu pro legionely v teplé vodě. Tam, kde se soustavně realizují opatření k eliminaci legionel, ovšem klesají zjišťované hodnoty z řádů desetitisíců a tisíců na stovky či desítky kolonie tvořících jednotek (KTJ).

Klíčová slova: legionářská nemoc, voda teplá – kvalita, hygienický dozor

SUMMARY

A team of authors examines the significance of public health surveillance in medical institutions in relation to the presence of Legionella in hot water systems. The system of public health surveillance in health facilities of the Moravian-Silesian region is described, including a professional conclusion. In the opinion of the authors, based on observation the legionella limits in hot water are still exceeded over a seven year monitoring period. Nonetheless, the surveyed values have declined in the order of tens of thousands and thousands to hundreds or tens of CFU where measures to eliminate Legionella are consistently implemented.

Key words: Legionnaires' disease, warm water – quality, public health surveillance

idence of nontuberculous mycobacteria in four water systems using various types of infection

a Sebakova, Frantisek Kozisek, Radim Mudra, Jarmila Kaustova, Fiedorova, Danuse Hanslikova, Hana Nachtmannova, Jaroslav Kubina, Pavel Vraspir, and Jaroslav Sasek

Abstract: The objective of this study was to determine the incidence of nontuberculous mycobacteria (NTM) in hot water systems of 4 selected hospital settings. The hospitals provided the following types of disinfection for their hot water systems: hydrogen peroxide and silver, thermal disinfection, chlorine dioxide, and no treatment (control). In each building, 6 samples were collected from 5 sites during a 3 month period. NTM were detected in 56 (46.7%) of 120 samples; the CFU counts ranged from 10 to 1625 CFU/L. The detected NTM species were the pathogens *Mycobacterium kansasii*, *Mycobacterium xenopi*, and *Mycobacterium fortuitum* and the saprophyte *Mycobacterium gordonae*. The most common to be isolated was *M. xenopi*, which was present in 51 samples. The hot water systems differed significantly in the incidence of NTM. NTM were not detected in the system treated by thermal disinfection, and a relatively low incidence (20% positive samples) was found in the system disinfected with chlorine dioxide. However, a high incidence was found in the control system with no additional disinfection (70% positives) and in the system using hydrogen peroxide and silver (97% positives). Water temperatures above 50 °C significantly limited the occurrence of NTM.

Bathing water

There are 286 artificial (94 seasonal and 192 permanent) and 11 natural swimming pools in the Moravian-Silesian Region. Surface water sources that do not have an operator are also used for bathing. The Regional Public Health Authority (RPHA) provides supervision only on water surfaces that are on the list of bathing water – so called „bathing areas".

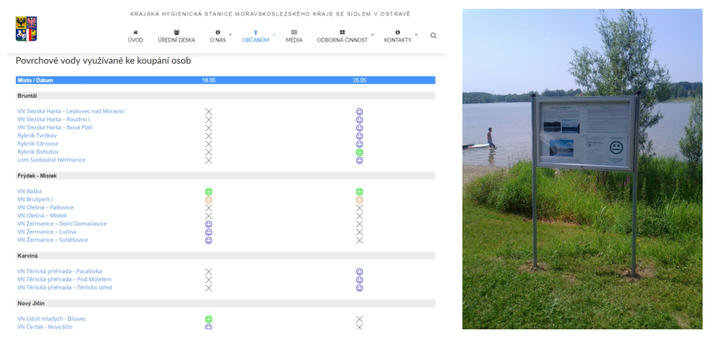
There are 23 bathing water places in the region in 2017. Water quality assessment is carried out according to the Act No. 238/2011 Coll. and Methodical guidance for directing a uniform procedure for monitoring the bathing water quality and administer a state health surveillance over natural swimming pools.

The final evaluation takes into account both sensible water quality indicators such as waste pollution and natural pollution, as well as the results of microbiological, biological and chemical laboratory analysis.

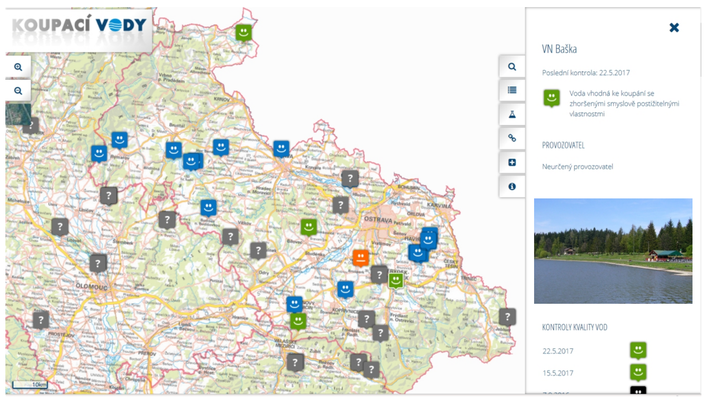
Based on these results, water is classified into one of 5 quality categories and marked with the appropriate symbol.

- Water suitable for bathing
- Water suitable for bathing, with degraded sensory properties
- Impaired water quality
- Water unsuitable for bathing
- Water hazardous to bathing
- Measurement was not performed

Current water quality information is continuously published on the RPHA website as well as on information boards located near each bathing area.



Water quality for the whole country is available on www.koupacivody.cz.



One of the problems with the bathing water quality in the wild in the Czech Republic is not its microbiological quality, but the occurrence of toxic cyanobacteria in the water. In the event of a massive occurrence, a ban on bathing is issued.

Cyanobacteria can be visually recognized in the water by performing a simple test (Maršálek's test)

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